

Research Reports

Social Desirability and Self-Reports: Testing a Content and Response-Style Model of Socially Desirable Responding

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Abstract

Personality assessment as a pre-employment screening procedure receives great interest from both researchers and practitioners. One key concern for selection specialists is represented by the response distortion among job applicants completing personality inventories. There are different operationalizations of socially desirable responding. One of the most accepted operationalizations was provided by Paulhus who distinguished between two social desirability factors (the egoistic and moralistic bias) as well as their conscious and unconscious aspects (management and enhancement). The aim of the study reported here is to test the basic assumption of the Paulhus model of socially desirable responding. A convenience sample of 200 students ($N = 21.61$; $SD = 1.46$) completed the Comprehensive Inventory of Desirable Responding (Paulhus, 2006) and the International Personality Item Pool Questionnaire (Goldberg, 1999; by Goldberg et al., 2006). Questionnaires were applied in three conditions: honest responding, responding as an ideal manager job applicant, and as an ideal teacher applicant. Results give partial support to the existence of egoistic and moralistic bias. However, conscious and unconscious aspects of distortion were not found. In conclusion it could be said that Paulhus' model doesn't provide a full answer to the problem of the nature of socially desirable responding.

Keywords: impression management, self-deception, egoistic bias, moralistic bias, personality

Europe's Journal of Psychology, 2012, Vol. 8(4), 651–666, doi:10.5964/ejop.v8i4.462

Received: 2012-05-15. Accepted: 2012-10-26. Published: 2012-11-30.

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Introduction

Most hiring psychologists realize that creating a good match between a job and a job candidate involves not only determining the candidate's knowledge and skill related to the job, but also whether he/she has a good personal "fit" with the job and the company. Therefore, many industrial and organizational psychologists during personnel selection consider identifying job candidates who have the "right" personality characteristics. Results of empirical investigation support the importance of personality traits in predicting various aspects of organizational behavior, including job performance, work motivation, leadership and team effectiveness, as well as counterproductive/deviant workplace behaviors (such as absence, theft, abuse against others, and sabotage) (Judge, Klinger, Simon, & Yang, 2008; Tett, Jackson, & Rothstein, 1991). However, despite the fact that personality traits predict various aspects of work behavior, there is some skepticism about their validity and applicability in selection due to observed low correlations between personality traits and job performance (see Morgeson et al., 2007).

One of the sources of low correlations is represented by the low validity of personality measures and weak job performance criteria (Judge et al., 2008). Moreover, the ability of participants to distort their responses in personality

questionnaires is considered to be the main cause of low correlations between personality traits and job performance (Goffin & Christiansen, 2003; Luther & Thornton, 1999; Morgeson et al., 2007). However, this conclusion contradicts other researches on the topic of socially desirability. Ones, Viswesvaran, and Reiss (1995) analyzed the cumulative literature on response bias to assess the impact of faking on the criterion-related validity of the Big Five personality factors. Their analyses presented evidence that correcting for faking with social desirability scales does not improve the criterion-related validity of personality scales. Peterson and Griffith (2006) went further and asserted that faking might provide superior results. In their review, they acknowledge that the ability to fake on personality questionnaires is indicative of approval motivation which could contribute to a better job performance.

One of the research strategies to reduce response distortion on personality questionnaires relies on the use of scales of socially desirable responding. These scales include a number of either desirable but false statements (e.g., "I will always tell the truth"), or undesirable but true statements (e.g., "Sometimes I talk about things which I know little or nothing about"). Total scores on these scales are an indicator of deliberate response distortion. Consequently, results serve to identify candidates who give excessively positive self-descriptions. It is assumed that identification of fakers will improve the predictive power of the instruments used (Salgado, 2005).

However, the concept of socially desirable responses as a measurement error which is to be controlled or eliminated during the assessment of personality is faulty. Even some earlier studies showed that this response distortion does not occur only in selection situations, but also in the situation of anonymous responding (Paulhus, 1991; Paulhus & John, 1998), and it is associated in fact with certain personality traits such as extraversion, emotional stability, intellect, agreeableness (Paulhus, 2002; Stöber, Dette, & Musch, 2002). These findings suggest that the scales of socially desirable responding, except in cases of deliberate positive self-presentation, partly involve some permanent personality traits.

Paulhus' Model of Socially Desirable Responding

One of the most accepted definitions of socially desirable responding is Paulhus' (1984) formulation. Paulhus (1984) split socially desirable responding into a dimension of self-deception, which is the unconscious tendency of a person to see him or herself in a favorable light, and a dimension of impression management, which is a deliberate distortion of self-presentation. According to this model, self-deception does not include socially desirable responding because it is a distortion that is both honest and unconsciously motivated. Self-deception refers to any positively biased response that participants actually believe to be true, thus giving additional information about the candidate's personality. On the other hand, impression management refers to the proportion of variance which reduces our objective assessment of the candidate's personality traits in situations with strong motivation to give socially desirable answers, and therefore it must be controlled in research. From this perspective it can be concluded that the function of self-deception is the enhancement of a subject's personality, while impression management is a conscious attempt to create a favorable impression of self for some audience.

However, the results of numerous studies have not provided support for this model. It has been found that self-deception increases gradually with the motivation for positive self-presentation (Galić & Jernei, 2006), and impression management shows a consistent pattern of correlations with personality traits even in the situation of anonymous responding (Paulhus, 2002; Paulhus & John, 1998; Pauls & Stemmler, 2003). Respectively, a positive relationship between self-deception and dimensions of extraversion, emotional stability and intellect was noticed. Also, a positive relationship was found between impression management and the dimensions of agreeableness

and conscientiousness. These results suggest that, at least in a situation of anonymous responding, both self-deception and impression management include some permanent characteristic of the individuals: self-deception is associated with emphasizing one's own adaptation and competence, and impression management with the need for social approval (Galić & Jerneić, 2006).

Further research has shown that self-deception is not a homogenous construct, and it actually consists of self-deceptive enhancement and self-deceptive denial (Paulhus & Reid, 1991). Self-deceptive enhancement refers to the unconscious promotion of one's own positive qualities, while self-deceptive denial represents the unconscious denial of negative characteristics. Paulhus and Reid (1991) found that self-deceptive denial highly correlates with impression management. In addition, it was found that both components of self-deception (self-deceptive enhancement and denial) and impression management (agency and communion management) correlate with substantially different personality traits (Pauls & Stemmler, 2003). Self-deception positively correlates with scores on emotional stability, extraversion, and openness, while impression management is positively related to scores of agreeableness and conscientiousness. These results point to the conclusion that both scales measure unconscious and conscious aspects of socially desirable responding.

Results such as the above have led Paulhus (2002) to revise his model of socially desirable responding (Figure 1). According to this revised model, there are two content components of socially desirable responses – the egoistical and moralistic bias – and each of these involves both a self-deceptive style and an impression management style. The first content component, egoistical bias, is a tendency to exaggerate one's social and intellectual status, the "superhero" quality. This tendency leads to unrealistically positive self-perceptions on agentic traits such as dominance, fearlessness, emotional stability, intellect, and creativity. On the other hand, the moralistic bias is a tendency to deny socially-deviant impulses and claim sanctimonious, "saint-like" attributes. This tendency is played out in overly positive self-perceptions on traits such as agreeableness, dutifulness, and restraint.

Egoistic and moralistic biases can be determined by the constellations of traits and biases that have their origins in two fundamental values: agency and communion (Paulhus & John, 1998). Agency is a social value that is based on individuality, success, fight and development, while communion is characterized by interpersonal relationships, intimacy and helping others (Paulhus & John, 1998). These values are related to two main motives: power and approval. Agency is associated with the prominence of the need for power which is connected to a tendency towards egoistic distortion. On the other hand, communion is associated with the prominence of the need for approval which is related to the moralistic bias. If a person appreciates reputation and status (i.e., agency), this will facilitate the need for power and the tendency of egoistic response distortion leading to an overly positive perception of one own's intellectual and social status. This will also be reflected in higher scores on scales of extraversion, intellect and emotional stability. If a person appreciates cooperation and obedience (i.e. communion), this will activate the need for approval and a tendency towards moralistic distortion, to the excessive denial of socially undesirable impulses. This will be reflected in higher scores on conscientiousness and agreeableness. Individual motives are the results of situational demands, i.e. motivational context such as a selection situation, which determine what value is activated. However, apart from the content level, as noted above, the model includes a process level as well, at which one can distinguish between unconscious self-deception and conscious impression management (Figure 1). So, egoistic bias is further divided into unconscious self-deceptive enhancement and conscious agency management. Moralistic bias includes unconscious self-deceptive denial and conscious communion management.

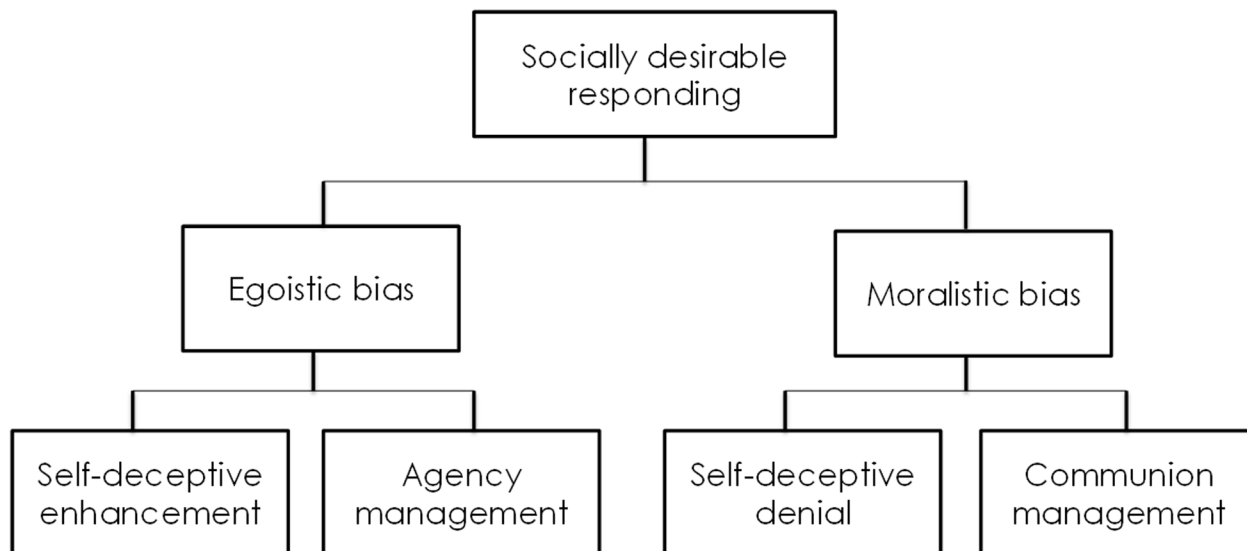


Figure 1. Paulhus' model of socially desirable responding (2002).

Recently, [Galić, JerneiĆ, and Belavić \(2009\)](#) have tested [Paulhus' \(2002\)](#) new two-level model for the first time. Three different motivational situations were involved: anonymous responding, egoistic response distortion and moralistic response distortion. A dependent groups design was used, in which one group was induced to egoistic and another group to moralistic distortion. The authors tried to induce egoistic and moralistic distortion by instructing participants to represent themselves as either the best candidate for a business manager (egoistic distortion) or a class teacher job (moralistic distortion). These occupations were selected in accordance with previous studies ([Pauls & Crost, 2005](#)) and with the assumption that the requirement of efficacy for manager professions is related to egoistic distortion, while the competencies required for the class teachers are associated with moralistic distortion. Both groups completed the Comprehensive Inventory of Desirable Responding (CIDR, [Paulhus, 2006](#)) and the Goldberg's Personality Questionnaire (1999; by [Goldberg et al., 2006](#)) based on the five-factor model of personality.

The results of this study gave partially support to the model. In both situations of response distortion, similar changes in scales of self-deception and impression management were found. Contrary to expectations, in the situation of anonymous responding, a correlation between scales designed to measure deliberate distortion and personality traits was found. Also, in the situation of induced distortion, an equal increase in correlations between scales of impression management as well as in scales of self-deception and personality traits was noticed. The authors concluded that their results confirm the existence of different forms of socially desirable responses at the content level but not at a process level since it was not possible to separate intentional from unintentional socially desirable responses.

However, one of the limitations of this study is that it was conducted on independent samples making it not possible to conclude with certainty that the obtained differences are solely resulting from the characteristic of the situation, and not from differences in subjects' characteristics. Also, the dichotomous scoring system of items, offering assignment points only for the most extremely desirable types of responding, resulted in a relatively low coefficient of reliability – especially considering that it is a scale with a relatively large number of items – which again could affect the results. Paulhus recommends a dichotomous scoring procedure because it eliminates the distinction

between low and moderate range responses and emphasizes instead the distinction between typical responses and the ones indicating extreme claims of confidence. According to him, this scoring provides some assurance that over-confidence rather than confidence is being tapped into.

Stöber et al. (2002) highlight that continuous scoring generates higher Cronbach's alpha coefficients, higher correlations with other measures of socially desirable responses and higher correlations with personality traits expected to be associated with socially desirable responding. Thus, continuous scoring gives better reliability and convergent validity for measures of socially desirable responses, as well as results that are largely consistent with assumptions about the relationship between socially desirable responses and personality traits. Therefore, Stöber et al. (2002) proposed the use of continuous rather than dichotomous scoring. It is quite logical that increased reliability and convergent validity using continuous scoring may result from the fact that more variance associated with personality traits (rather than purely overconfidence respectively social desirability) is captured following this procedure than in the case of dichotomous scoring. Following these recommendations, in the present study continuous scoring was employed.

The aim of the following study is to test Paulhus' model of social desirability. It is assumed that, if Paulhus' model is accurate, the prominence of a particular form of impression management should depend on the motivation of respondents for self-presentation, while both types of self-deception, self-deceptive enhancement and denial, should show stability between different test situations. These assumptions should be reflected in the relationship between components of social desirability and personality traits. Specifically, the scales of egoistic distortion should be in relationship with agnetic traits such as extraversion, emotional stability and intellect, while the scales of moralistic distortion should relate to personality traits that indicate a value of communion such as conscientiousness and agreeableness (Paulhus & John, 1998).

Methods

Participants

The study involved a sample of 200 students from different departments of the Faculty of Philosophy in Mostar, Bosnia & Herzegovina and was conducted in the Croatian language. Students of psychology were excluded from the research because they are familiar with measuring instruments which could have an influence on the results of the study. The total sample included 166 female and 34 male participants, 19 to 26 years of age. Mean age was 21.61 with a SD of 1.46. Quite large differences in the gender composition of the sample are taken into account in data analysis by using gender as a covariate.

Since the study included a within subject design, the structure of the subgroups regarding gender, age and type of study units was the same in all situations of completing the questionnaires (anonymous / honest responding and the situations of instruction-induced distortions).

Instruments

Social desirable responding was examined using the Comprehensive Inventory of Desirable Responding (CIDR, Paulhus, 2006). Its use in this study was approved by the authors of the questionnaire. CIDR was translated into the Croatian language using the back-translation technique and was reviewed by three experts in the field of social desirable responding (JerneiĆ, Galić, & Parmač, 2007). The final version of the translated scale was adopted

after the experts had achieved consensus about the applicability and appropriateness of the tool within a Croatian sample.

The questionnaire has four subscales: Self-deceptive enhancement, Agency management, Self-deceptive denial and Communion management. Each of the scales consists of 20 items. Respondents were asked to rate their agreement with the items on a 7-point scale (from 1 = "not true" to 7 = "completely true"). Paulhus (2002) recommends dichotomous scoring as the optimal strategy for evaluating the participant's responses. However, as noted earlier, Stöber, Dette, and Musch (2002) found that continuous scoring results in a higher Cronbach coefficients, higher correlations with the other measures of socially desirable responses and higher correlations with personality traits that are expected to be associated with socially desirable responding. So, in light of this, it was decided to use a continuous instead of dichotomous scoring of the results. The total score on each of the subscales is represented by the sum of recoded answers on all 20 items of the subscale.

Alpha coefficients of internal consistency obtained in this study showed a reliability ranging from 0.64 to 0.90 (Table 1). The size of the coefficients is considered acceptable because it exceeds the minimum level for research purposes of .60 (Carmines & Zeller, 1979). Similar results were obtained in other studies (Galić, JerneiĆ, & Belavić, 2009; Stöber, Dette, & Musch, 2002).

Table 1

Coefficients of Internal Consistency (Cronbach's Alpha) for Four Subscales of Comprehensive Inventory of Desirable Responding in Three Situations

| Subscales of social desirable responding | Honest | "Manager" | "Teacher" |
|--|--------|-----------|-----------|
| Agency management | .70 | .90 | .81 |
| Self-deceptive enhancement | .64 | .83 | .78 |
| Communion management | .80 | .82 | .86 |
| Self-deceptive denial | .66 | .72 | .78 |

Personality dimensions were explored with the International Personality Item Pool Questionnaire (IPIP, Goldberg, 1999; by Goldberg et al., 2006), which assesses extraversion, emotional stability, conscientiousness, agreeableness and intellect. The questionnaire consists of 50 items, and respondents rate their agreement with the items on the 7-point scale (from 1 = "not true" to 7 = "completely true"). The total score on each dimension is calculated by adding up all the items that belong to a particular dimension. The range of possible results for each dimension ranges from 10 to 70. Alpha coefficients of internal consistency for the subscales of Goldberg's personality questionnaire range from .79 to .87 (Goldberg et al., 2006). In this study, the reliability of subscales and alpha coefficients of internal consistency in all three situations were also examined and showed an acceptable reliability with values between 0.62 and 0.85 (Table 2).

Finally, for the purpose of this study a short questionnaire to collect demographic data was constructed. It included questions regarding the student's sex, age, year of study and field of study.

Procedure

Data were collected in the summer semester of 2011 during the lectures. Questionnaires were applied to groups of participants and their completion was not timed. All questionnaires were filled in during one session; considering that, on average, completing the instruments lasts approximately one hour, the respondents were given breaks between each questionnaire. Each participant was asked to complete a scale of socially desirable responding

Table 2

Coefficients of Internal Consistency (Cronbach's Alpha) for Five Subscales of the International Personality Item Pool Questionnaire in Three Situations

| Personality traits | Honest | "Manager" | "Teacher" |
|---------------------|--------|-----------|-----------|
| Extraversion | .79 | .79 | .71 |
| Agreeableness | .62 | .76 | .85 |
| Conscientiousness | .73 | .85 | .85 |
| Emotional stability | .75 | .75 | .74 |
| Intellect | .69 | .79 | .76 |

and personality questionnaire under three different conditions: (1) as honestly-as-possible, (2) as a manager job applicant and (3) as a teacher job applicant¹. Items of the personality questionnaire and scale of socially desirable responding were randomly mixed into a single questionnaire for simplicity and for preventing participants from noticing that questionnaires have scales that measure distorted responses. After completing this newly generated instrument under three different conditions, participants filled out the questionnaire regarding demographic data.

The instructions for honest responding were as follows: *"The aim of the research you are participating in is to test the quality of a personality questionnaire. Validation of a questionnaire is central for considering it for future uses and for a variety of practical purposes such as careers consulting, classification procedures for admission to colleges and selection of employees within work organizations. In order to obtain valid questionnaire scores, your cooperation is very important. Please fill out the entire questionnaire as honestly as possible. Responding to this questionnaire is anonymous and your answers cannot be connected with you. In this questionnaire there are statements that describe some usual behaviors of people. Describe yourself in terms of how you consider yourself to be now, not what you would like to be in the future. Describe yourself as sincerely as you can in relation to other people you know, people who are the same gender and approximately the same age as you"*.

In a situation of induced egoistic distortion, participants were asked to represent themselves as ideal candidates for a management job. Instructions offered in this situation were as following: *"The aim of the research in which you are participating is to learn to what extent people can identify personality traits that are necessary for success in different professions. Therefore, please fill out the entire questionnaire in a way that shows yourself as an ideal candidate for a job as the manager of a large enterprise. In order to make this task easier for you, you can imagine that the selection for this position you really want depends on the results of this study. This means that you will not answer questions completely honestly, but in a way which shows yourself as the most suitable candidate for your employer. In this questionnaire there are statements that describe some usual behaviors of people. Describe yourself in relation to other people you know, people who are the same gender and approximately the same age as you."*

The second situation of induced distortion was one of moralistic distortion where participants were asked to represent themselves as ideal candidates for classroom teaching. The instruction for this situation was the same as the instruction for egoistic distortion except for differences in the sentences that were specifically related to the teaching position: *"... please fill out the entire questionnaire in a way which shows you as an ideal candidate for classroom teaching. (...) this means that you will not answer questions completely honestly, but in a way in which you will show yourself as the most suitable candidate for teaching."*

After completing the questionnaires, respondents were offered contact information in case they had questions regarding the study or the results. During the entire procedure of filling the questionnaire, the researcher was present to ensure that the participants follow the order of the questions and do not consult with others, as well as to provide answers for any questions.

Data analysis

The analysis of the results included testing the difference between components of socially desirable responding in the three situations of questionnaires application. Also, it included a correlation analysis for determining any significant relationships between the components of socially desirable responding, as well as between these components and personality traits. Statistical analyses were performed using Statistica 7.0 (StatSoft, Inc., Tulsa, OK, USA).

Results

In order to compare and interpret results obtained in different motivational contexts, the relationship between the components of socially desirable responding was studied first. This relationship is defined by intercorrelations between test scores on the CIDR. Pearson correlation coefficients obtained for the examined variables in the neutral situation and in the situations of both "ideal teacher" and "ideal manager" are shown in Table 3.

Table 3

Pearson Correlation Coefficients Between Components of Social Desirable Responding in the Three Situations

| | Honest | | | | "Manager" | | | | "Teacher" | | | |
|----------------------------|--------|------|------|------|-----------|------|------|------|-----------|------|------|------|
| | AM | SE | CM | SD | AM | SE | CM | SD | AM | SE | CM | SD |
| Agency management | | .53* | .04 | -.04 | | .75* | .55* | .30* | | .74* | .59* | .43* |
| Self-deceptive enhancement | .53* | | .29* | .18* | .75* | | .62* | .40* | .74* | | .67* | .50* |
| Communion management | .04 | .29* | | .63* | .55* | .62* | | .72* | .59* | .67* | | .75* |
| Self-deceptive denial | -.04 | .18* | .63* | | .30* | .40* | .72* | | .43* | .50* | .75* | |

Note. AM = agency management; SE = self-deceptive enhancement; CM = communion management; SD = self-deceptive denial.

* $p < .05$. ** $p < .01$. *** $p < .001$.

The neutral situation scores showed significant correlations between the management agency subscale and the self-deceptive enhancement subscale, but not between the agency management and moralistic bias (communion management and self-deceptive denial). These correlations suggest directional effects of instructions on socially desirable responding. Furthermore, in situations of responding as a manager and as a teacher, all components of socially desirable responding were in significant correlation with each other, which suggests a socially desirable distortion of responses in all the four components. In all three situations, the highest correlations were found between components referring to the same content domain – i.e. among the scales that measure egoistic bias (agency management and self-deceptive enhancement) as well as among the scales that measure moralistic bias (communion management and self-deceptive denial).

In order to test the differences between socially desirable responses in the three different situations, a multivariate analysis of covariance was used. Insertion of a covariate was done to gain control over an eventual influence of gender on differences in socially desirable responding in the three situations. The results showed that, despite controlling for gender, significant differences were found between scores of the subscales of social desirability

among the three motivational contexts (Pillai Trace $F = 31.21$, $df = 6 / 1791$, $p < .001$). The results of univariate analysis of covariance, partial eta-squared, as well as the mean and standard deviation for each component of socially desirable responding in the three situations of applying the questionnaires are shown in Table 4. The univariate analysis of covariance indicates that differences in subscales scores between situations are statistically significant for each of the four components of social desirability. The Tukey HSD test showed that all comparisons between situations were statistically significant ($p < .001$), except for self-deceptive enhancement subscales between situations of induced distortion "management" and "teacher" ($p = 0.17$). Furthermore, partial eta-squared values, calculated as a measure of effect sizes for mean differences in socially desirable responding, indicated a mainly large effect.

Table 4

Mean Scores on the Comprehensive Inventory of Desirable Responding and F Ratios for Each of the Subscales of Socially Desirable Responding in the Three Situations

| | Honest | "Manager" | "Teacher" | F | df | Partial Eta squared |
|----------------------------|-------------------------|-------------------------|-------------------------|-----------|-------|---------------------|
| | Mean±standard deviation | Mean±standard deviation | Mean±standard deviation | | | |
| Agency management | 3.62±0.68 | 5.01±1.15 | 4.55±0.85 | 171.45*** | 2/398 | 0.29 |
| Self-deceptive enhancement | 4.01±0.68 | 4.89±0.96 | 4.68±0.81 | 94.76*** | 2/398 | 0.17 |
| Communion management | 3.97±0.97 | 4.75±0.98 | 5.03±1.08 | 87.30*** | 2/398 | 0.16 |
| Self-deceptive denial | 4.07±0.75 | 4.42±0.82 | 4.84±0.92 | 68.92*** | 2/398 | 0.12 |

* $p < .05$. ** $p < .01$. *** $p < .001$.

Results showed that in situations of induced distortions, respondents achieved higher scores on scales of impression management compared to their results on the same scales in a situation of honest responding. Specifically, the highest score on the agency management subscale was in the situation of intended manager selection and, respectively, the highest score on the communion management subscale, in a situation of intended selection for a teacher. Furthermore, significant changes were also observed on the scales of self-deception (self-deceptive enhancement and denial), which suggest the same pattern of results as the impression management scales. These results are not in agreement with our initial expectations because the scales of self-deception are unconscious components of Paulhus' model that should be "resistant" to manipulation through instruction.

For a more precise comparison of differences and consideration of their implications in real selection situations, effect sizes have also been calculated. Effect sizes expressed by the Cohen d-index are shown in Table 5.

Table 5

Effect Sizes (Cohen d-index) on Subscales of Socially Desirable Responding Between the Three Situations

| | "Manager" vs. honest | "Teacher" vs. honest | "Manager" vs. "Teacher" |
|----------------------------|----------------------|----------------------|-------------------------|
| Agency management | 1.20 | 1.09 | -0.41 |
| Self-deceptive enhancement | 0.91 | 0.82 | -0.20 |
| Communion management | 0.79 | 0.98 | 0.28 |
| Self-deceptive denial | 0.42 | 0.83 | 0.51 |

Moderate/large effect sizes have been noticed between the situation of honest responding and the situation of intended dissimulation as a manager job applicant (Table 5), while in the situation of responding as a teacher

applicant, large effect sizes were found. Differences between the two situations of "faking good" (situations of responding as a manager and as a teacher) on subscales of socially desirable responding have in turn low to medium effect sizes. Furthermore, the effect sizes for the scales of egoistic bias (agency management and self-deceptive enhancement) are the largest when comparing the neutral situation and responding as a manager job applicant. However, for the scales of moralistic bias (communion management and self-deceptive denial), the largest effects have been noticed in comparisons between the neutral situation and responding as a classroom teacher.

The large differences between honest responding and responding as a manager job applicant on the scales of egoistic bias compared also to the differences between honest and as manager job applicant responding on the scales of moralistic bias, and indicate that the scales of moralistic bias are more sensitive than those of egoistic bias to the instruction for pretending to be a manager job applicant. However, observing the differences in socially desirable responding between the situation of honest responding and the situation of responding as a teacher applicant, it is evident that larger differences exist in components of moralistic bias (communion management and self-deceptive denial), as well as in components of egoistic bias. This suggests that, on the basis of an induced selection situation, we cannot clearly distinguish between egoistic and moralistic bias.

Nevertheless, a comparison of the results on subscales of social desirability in the situation of responding as a manager and as a teacher job applicant shows that, in accordance with our expectations, in the situation of responding as manager, participants exaggerated their own effectiveness and, in the second situation of responding as a teacher, they emphasized communion.

Overall, effect sizes on subscales of socially desirable responding between the three situations supported the model assumptions according to which the components of social desirable responding may differ on the content level of self-presentation, egoistic vs. moralistic bias. However, a distinction on the process level was not found. These results could be partially attributed to the research methodology explained in detail above.

Multivariate analysis of covariance, controlling the variable gender, showed statistically significant differences in responses on personality dimensions between the three situations (Pillai Trace $F = 16.41$, $df = 8 / 2388$, $p < .001$). Univariate analysis of covariance showed significant differences on all personality traits between the three conditions of responding (Table 6). Partial eta-squared values, calculated as a measure of effect sizes, showed mostly moderate to large effect, except for the agreeableness where a small effect size was found (Table 6).

Tukey's HSD test showed that, in a situation of fictive selection for a manager compared with the situation of honest responding, participants showed themselves as being more extroverts, emotionally stable, conscientious, as well as displaying broader intellect. However, in this distortion situation, no statistically significant increases in the results for the dimension agreeableness were found. According to these results, within the ideal manager situation, respondents changed their answers mostly towards an egoistic distortion mode, but there was also a small part of moralistic distortion in scores of conscientiousness.

On the other hand, in the ideal teacher situation, compared to the neutral situation, participants represented themselves more positively on all five personality dimensions. Specifically, they showed themselves as more extrovert, emotionally stable, agreeable, conscientious and as having a broader intellect.

Table 6

Mean Scores on the International Personality Item Pool Questionnaire and F Ratios for Each of the Dimension of Personality Trait in the Three Situations

| | Honest | "Manager" | "Teacher" | F | df | Partial Eta squared |
|---------------------|-------------------------|-------------------------|-------------------------|----------|-------|---------------------|
| | Mean±standard deviation | Mean±standard deviation | Mean±standard deviation | | | |
| Extraversion | 4.43±1.11 | 5.30±1.10 | 4.91±0.96 | 53.96*** | 2/398 | 0.11 |
| Agreeableness | 5.25±0.80 | 5.30±1.01 | 5.57±1.19 | 9.79*** | 2/398 | 0.02 |
| Conscientiousness | 4.64±1.04 | 5.73±1.14 | 5.48±1.19 | 99.37*** | 2/398 | 0.15 |
| Emotional stability | 4.07±1.06 | 4.97±1.05 | 4.91±1.05 | 75.11*** | 2/398 | 0.13 |
| Intellect | 4.63±0.88 | 5.40±1.06 | 5.08±1.06 | 51.54*** | 2/398 | 0.09 |

*p < .05. **p < .01. ***p < .001.

The effect size on a personality questionnaire between situations of responding as a manager job applicant and honest responding are similar to the results of the analysis of covariance where the largest effect sizes were found for dimensions of extraversion, conscientious, emotional stability and intellect (Table 7). The larger differences between the situations of honest responding and responding as a teacher job applicant were found on dimensions conscientiousness and emotional stability (Table 7).

Table 7

Effect Sizes (Cohen d-index) on the Personality Questionnaire Between the Three Situations

| | "Manager" vs. honest | "Teacher" vs. honest | "Manager" vs. "Teacher" |
|---------------------|----------------------|----------------------|-------------------------|
| Extraversion | 0.79 | 0.50 | 0.35 |
| Agreeableness | 0.04 | 0.26 | -0.22 |
| Conscientious | 0.95 | 0.70 | 0.21 |
| Emotional stability | 0.85 | 0.80 | 0.05 |
| Intellect | 0.72 | 0.42 | 0.30 |

A Pearson correlation was also performed between personality dimensions and the components of socially desirable responding. From Table 8 it can be seen that the correlation analysis showed significant results between the scales of social desirability, in all three situations of responding, and multiple dimensions of personality. In situations of "faking good", correlations between components of socially desirable responding and personality dimensions were higher than in the situation of honest responding. However, all correlations followed generally the same pattern - higher results on scales of socially desirable responding were associated with higher results on extraversion, agreeableness, conscientiousness, emotional stability and intellect.

A comparison of egoistic distortion in a situation of responding as manager and teacher job applicant indicates that there are larger correlations between personality traits and scales of egoistic distortion in the former (except for the dimension of agreeableness). On the other hand, comparing correlation coefficients on the scales of moralistic distortion in these two situations of responding, larger correlations between personality traits and scales of moralistic bias were found in a situation of responding as a teacher. These results are consistent with our assumptions.

Table 8

Pearson Correlation Coefficients Between Components of Socially Desirable Responding and Five Personality Dimensions in the Three Situations

| | Honest | | | | "Manager" | | | | "Teacher" | | | |
|---------------------|--------|------|-------|-------|-----------|------|------|------|-----------|------|------|------|
| | AM | SE | CM | SD | AM | SE | CM | SD | AM | SE | CM | SD |
| Extraversion | .39* | .30* | -.25* | -.28* | .73* | .68* | .44* | .34* | .55* | .64* | .58* | .46* |
| Agreeableness | -.16* | .00 | .09 | .16* | .17* | .31* | .28* | .34* | .35* | .56* | .59* | .57* |
| Conscientiousness | .12 | .29* | .32* | .26* | .70* | .75* | .57* | .46* | .59* | .71* | .75* | .63* |
| Emotional stability | .03 | .37* | .25* | .22* | .65* | .73* | .59* | .45* | .54* | .63* | .68* | .57* |
| Intellect | .48* | .32* | -.09 | -.22* | .68* | .67* | .50* | .38* | .58* | .62* | .62* | .53* |

AM = agency management; SE = self-deceptive enhancement; CM = communion management; SD = self-deceptive denial.

* $p < .05$. ** $p < .01$. *** $p < .001$.

Discussion

Socially desirable responding is typically defined as the tendency to give positive self-descriptions that match with current social norms and standards (Paulhus, 2002). One of the most influential models of socially desirable responses is Paulhus' model of social desirability (1984, 2002, see Morgeson et al., 2007). According to Paulhus (2002), socially desirable responses occur at both content and process level. On the content level we can distinguish between an egoistic bias (which refers to the exaggeration of one's social and intellectual status) and a moralistic bias (which refers to the denial of socially-deviant attributes). Each of these content components is further divided into conscious and unconscious distortion when we add a process element. Thus egoistic bias is divided into unconscious self-deceptive enhancement and conscious agency management, since it is a component that results out of the value of agency. On the other hand, moralistic bias is a kind of distortion motivated by the evaluation of community, and hence has an unconscious component of self-deceptive denial, and a conscious component of communion management.

If Paulhus' model is accurate, the prominence of a particular form of impression management should depend on the motivation of respondents for self-presentation, while both types of self-deception, self-deceptive enhancement and denial, should show stability between different test situations. However, data analysis showed that scores on scales of impression management, but also on scales of self-deception, increased with the increase of motivation for favorable self-presentation. This means that changes in the motivational context had an influence not only on the results of the scales that measure conscious distortion of responses, but also on the results of the scales that measure unconscious distortion of responses and that should be in fact insensitive to the manipulation through instruction.

Motivation situations differed with regard to the content of instruction in which participants were asked to represent themselves as an ideal manager job applicant or teacher job applicant. Therefore, response distortion was adapted to situation requirements. In a situation of intended selection for a manager, respondents offered a high assessment of their social and intellectual status and therefore increased the results on scales of egoistic distortion. In a situation of intended selection for a classroom teacher, participants were more likely to assert their social attributes and denial deviant impulses by which they increased the results on the scale of moralistic distortion. This is also supported by the effect sizes shown as d -index, where sizes of the difference for the scales of egoistic distortion were larger when comparing the situation of honest responding to a situation of responding as manager applicant

in relation to the comparison of honest and teacher applicant responding. For the scales of moralistic distortion, effects were larger in honest responding by comparison to a situation of responding as a teacher applicant. Correlations between components of social desirability and the five dimensions of personality are in accordance with the above.

Specifically, comparing the scales of egoistic distortion in a situation of responding as a manager and a teacher applicant, it was found that larger correlations between personality traits and scales of egoistic distortion were present in a situation of responding as a manager applicant. On the other hand, comparing the correlation coefficients on the scales of moralistic distortion in these two situations, larger correlations between personality traits and scales of moralistic bias were found in the situation of responding as a teacher applicant. These results are consistent with existing assumptions. They suggest that socially desirable responses can be distinguished at a content level into two types, egoistic and moralistic distortion, and occur in the case of motivation for positive self-presentation, which is consistent with the results of numerous studies (Pauls & Crost, 2004; Stöber et al., 2002).

However, the comparison between neutral and ideal teacher situations on the components of socially desirable responding indicates that, in addition to the large effect size for moralistic distortion, a strong effect size on the scale of agency management is also found. Also, the results for personality traits suggest that the scale of moralistic distortion could measure egoistic distortion because, beside the dimensions conscientiousness and agreeableness, it also includes features characteristic for egoistic distortion (extraversion, emotional stability and conscientiousness). Therefore, with a predominantly moralistic response distortion in a situation of responding as teacher applicant, participants also resort to egoistic distortion. In a situation of egoistic distortion it was found that respondents showed themselves as more extravert, emotionally stable, having a broader intellect and being more conscientious. The differences obtained in the multivariate analysis of variance and the effect size on the dimension of conscientiousness in a situation of responding as a manager suggest that scales of egoistic distortion measure also some aspects of the moralistic bias. These results are in agreement with findings from numerous other studies (e.g., Pauls & Crost, 2004; Galić & Jerneić, 2006; Galić et al., 2009). The possible explanation is that conscientiousness includes two content facets. According to Wiggins and Trapnell (1996), facets of striving for achievement, competence and self-discipline theoretically should be associated with value of agency, and facets of orderliness, dutifulness and cautiousness with value of communion.

In conclusion, our results provide little support for the Paulhus model of socially desirable responding. The scales of self-deception, unconscious components of social desirability have been shown to be sensitive to changes in the motivational context and this does not provide support for the model on the level of consciousness. Numerous studies did not lend support to the separation between conscious and unconscious socially desirable responses (Galić & Jerneić, 2006; Lönnqvist, Paunonen, Tulio-Henriksson, Lönnqvist, & Verksalo, 2007; Pauls & Crost, 2004). The main reason for the failure of differentiation between conscious and unconscious distortions of responses is the fact that scales of social desirability, beside the measurement of conscious dissimulation, measure also some personality traits. This is why the two types of socially desirable responses also appear in the anonymous condition, the situation of honest responding, which therefore implies that scales of socially desirable responding do not measure only forms of distortion, but also some personality characteristics. Also, the instruction related to realistically imagining the situation of applying for a teacher or manager position could activate both conscious and unconscious biases. More precisely, it could be postulated that a conscious induction procedure influenced unconscious processes. In the reverse case, when unconscious priming is used, there is no reason to assume

that conscious processes influenced. In order to establish discriminant validity of the conscious vs. unconscious components of model, it would be important to experimentally manipulate conscious vs unconscious priming as an independent variable².

Moreover, assumed content differences in the model are partially supported since the scales of moralistic distortion also include concepts of egoistic distortion. However, when we imagine the ideal candidate for a certain position we expect that the person characterizes him or herself as having high skills. We have learned from experience that intelligent, resourceful and socially dominant individuals are also very successful. Therefore, when we are motivated to show ourselves as the best applicant, regardless of the position that we compete for, we will always try to emphasize our own high abilities. On the other hand, we will not always try to give the impression that, like Paulhus (2002) says, we are "saints" because to be "good" and to blindly follow a social norm is not in the Western culture universally desirable. Thus, if the respondents "embellish" the responses in the direction of egoistic distortion, this raises the question of whether we can even induce a moralistic distortion in the selection situation. It is also possible that, in the present study, the instruction was inappropriate for inducing different motivational contexts, and possibly unadjusted to the student population.

Therefore, it could be said that the "fake good" instruction encourages the presentation of respondents in the best light in terms of exaggeration of own intellectual and social competence. In addition, the model was tested on a sample that was not balanced by gender. Given the fact that egoistic and moralistic distortions are consistent with traditional gender roles (Paulhus and John, 1998), the dominant presence of female participants in the study could influence the difference in the components of social desirability between different motivations situations of responding. One of the limitations of the study is also that the questionnaires were not used in naturalistic conditions of increased motivation for socially desirable responding i.e. in situations of actual selection for the job of managers or teachers respectively. That is why it is possible that results are distorted more than they would be under normal circumstances. In fact, in the actual job selection situation, respondents are asked to describe themselves in a credible way, but in this study they were asked to describe themselves in an ideal way.

In short, social desirability scales that differ in process as well as content levels, are correlated with each other in a situation of honest responding, as well as in situations of induced distortion i.e. they share a part of their variance which implies the relative similarity of items or, better said, of the general social desirability of the items. Therefore, it is obvious that these scales do not measure distinct constructs and do not provide a clear distinction between components of social desirability, which is why it can be concluded that the CIDR is not a valid operationalization of Paulhus' model, and not that this model of social desirability is necessarily wrong. A major contribution of Paulhus is that he recognizes that there are various domains in which participants can distort their self-presentation. Our results suggest that, when motivated, participants may recognize the social desirability of items and change their response in a socially desirable direction, regardless of what type of items we are talking about.

In general, the results of this study indicate the need to find new solutions in order to maximize the criterion validity of personality questionnaires in situations of selection. One possible suggestion is to use some "subtle" social desirability scales that can contribute to a better assessment of "sincerity" of respondents, but also to refer back to the model when it comes to content aspects of socially desirable responding in different domains (e. g., exaggeration in communion, an increase in agency etc.). In job selection, using "subtle" social desirability scales could represent an ad-hoc control applied to moderate or at least detect the negative effects of motivated responding. An alternative solution for job selection, and for all other situations where demand characteristics and

social desirability in responding are anticipated, is to abandon self-report scales and use performance-based measures of personality. Performance-based personality measures are assessment techniques that require the respondent to perform a task and are designed to uncover or elicit information or insight into the personality "in action". This alternate method of assessing personality could be more resistant to faking because it represents indirect assessment that reveals personality traits and motives which are unconscious. Future research should determine the validity and reliability of alternate methods in different selection situations².

Notes

- 1) McFarland and Ryan (2000) reported that order effects on the level of faking is not a concern, which suggests that there is not need to control which situation of responding (honest responding or included response distortion) is given first.
- 2) The author would like to thank an anonymous reviewer for raising this issue.

References

- Carmines, E. G., & Zeller, R. A. (1979). *Reliability and validity of assessment*. Beverly Hills, CA: Sage.
- Galić, Z., & Jerneiĉ, Ź. (2006). Socially desirable responding in various motivational contexts: A test of Paulhus' model of social desirability. *Suvremena Psihologija*, 9, 155-170.
- Galić, Z., Jerneiĉ, Ź., & Belavić, M. (2009). On saints and superheroes: Testing Paulhus' model of social desirability. *Društvena istraživanja*, 6, 977-997.
- Goffin, R. D., & Christiansen, N. D. (2003). Correcting personality tests for faking: A review of popular personality tests and an initial survey of researchers. *International Journal of Selection and Assessment*, 11, 340-344.
doi:10.1111/j.0965-075X.2003.00256.x
- Goldberg, L. R., Johnson, J. A., Eber, H. W., Hogan, R., Ashton, M. C., Cloninger, C. R., & Gough, H. G. (2006). The international personality item pool and the future of public-domain personality measures. *Journal of Research in Personality*, 40, 84-96.
doi:10.1016/j.jrp.2005.08.007
- Jerneiĉ, Ź., Galić, Z., & Parmaĉ, M. (2007). *Translation and adaptation of Paulhus' "Comprehensive Inventory of Desirable Responding"*. Zagreb: Department of Psychology, Faculty of Philosophy.
- Judge, T. A., Klinger, R., Simon, L. S., & Yang, I. W. F. (2008). The contributions of personality to organizational behavior and psychology: Findings, criticisms, and future research directions. *Social and Personality Psychology Compass*, 2, 1982-2000.
doi:10.1111/j.1751-9004.2008.00136.x
- Luther, N. J., & Thornton, G. C., III. (1999). Does faking on employment tests matter? *Employment Testing Law and Policy Reporter*, 8, 129-136.
- Lönnqvist, J. E., Paunonen, S., Tulio-Henriksson, A., Lönnqvist, J., & Verksalo, M. (2007). Substance and style in socially desirable responding. *Journal of Personality*, 75, 291-322. doi:10.1111/j.1467-6494.2006.00440.x
- McFarland, L. A., & Ryan, A. M. (2000). Variance in faking across noncognitive measures. *The Journal of Applied Psychology*, 85, 812-821. doi:10.1037/0021-9010.85.5.812
- Morgeson, F. P., Campion, M. A., Dipboye, R. L., Hollenbeck, J. R., Murphy, K., & Schmitt, N. (2007). Reconsidering the use of personality tests in personnel selection contexts. *Personnel Psychology*, 60, 683-729.
doi:10.1111/j.1744-6570.2007.00089.x

- Ones, D. S., Viswesvaran, C., & Reiss, A. D. (1995, May). *Social desirability in personality testing: The red herring*. Paper presented at the Tenth Annual Meeting of the Society of Industrial and Organizational Psychology, Orlando, FL.
- Pauls, C. A., & Crost, N. W. (2004). Effects of faking on self-deception and impression management scales. *Personality and Individual Differences*, *37*, 1137-1151. doi:10.1016/j.paid.2003.11.018
- Pauls, C. A., & Crost, N. W. (2005). Effects of different instructional sets on the construct validity of the NEO-PI-R. *Personality and Individual Differences*, *39*, 297-308. doi:10.1016/j.paid.2005.01.003
- Pauls, C. A., & Stemmler, G. (2003). Substance and bias in social desirability responding. *Personality and Individual Differences*, *35*, 263-275. doi:10.1016/S0191-8869(02)00187-3
- Paulhus, D. L. (1984). Two-component models of socially desirable responding. *Journal of Personality and Social Psychology*, *46*, 598-609. doi:10.1037/0022-3514.46.3.598
- Paulhus, D. L. (1991). Measurement and control of response bias. In J. P. Robinson, P. R. Shaver, & L. S. Wrightsman (Eds.), *Measures of personality and social psychology attitudes* (pp. 17-59). San Diego, CA: Academic Press.
- Paulhus, D. L. (2002). Social desirable responding: The evolution of a construct. In H. I. Brown, D. N. Jackson, & D. E. Wiley (Eds.), *The role of constructs in psychological and educational measurement* (pp. 49-69). Mahwah, NJ: Erlbaum.
- Paulhus, D. L. (2006). *A Comprehensive Inventory of Desirable Responding (CIDR)*. Poster presented at the meeting of the Association for Research in Personality, New Orleans.
- Paulhus, D. L., & John, O. P. (1998). Egoistic and moralistic biases in self-perception: The interplay of self-deceptive styles with basic traits and motives. *Journal of Personality*, *66*, 1025-1060. doi:10.1111/1467-6494.00041
- Paulhus, D. L., & Reid, D. B. (1991). Enhancement and denial in socially desirable responding. *Journal of Personality and Social Psychology*, *60*, 307-317. doi:10.1037/0022-3514.60.2.307
- Peterson, M. H., & Griffith, R. L. (2006). Faking and job performance: A multifaceted issue. In R. L. Griffith & M. H. Peterson (Eds.), *A closer examination of applicant faking behavior* (pp. 233-263). Greenwich, CT: Information Age.
- Salgado, J. F. (2005). Personality and social desirability in organizational settings: Practical implications for work and organizational psychology. *Papeles del Psicologico*, *26*, 115-128.
- Stöber, J., Dette, D. E., & Musch, J. (2002). Comparing continuous and dichotomous scoring of the Balanced Inventory of Desirable Responding. *Journal of Personality Assessment*, *78*, 370-389. doi:10.1207/S15327752JPA7802_10
- Tett, R. P., Jackson, D. N., & Rothstein, M. (1991). Personality measures as predictors of job performance: A meta-analytic review. *Personnel Psychology*, *44*, 703-742. doi:10.1111/j.1744-6570.1991.tb00696.x
- Wiggins, J. S., & Trapnell, P. D. (1996). A dyadic-interactional perspective on the five-factor model. In J. S. Wiggins (Ed.), *The five-factor model of personality: Theoretical perspectives* (pp. 87-162). New York: Guilford Press.

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