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Worry and Social Desirability:

Opposite Relationships for Socio-Political and Social-Evaluation Worries

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Abstract

The present article investigates the relationship between social desirability and worry. In particular, it addresses the question of whether socio-political worries (i.e., worries about societal or environmental problems) show a different relationship with social desirability than worries related to one's social-evaluative self-concept (i.e., worries about one's own relationships, future, work, or finances). A sample of 155 students responded to self-report questionnaires on worry and social desirability, first under standard instructions and then under social-desirability provoking instructions (imaginary job-application instructions). As expected, results showed opposite relationships for socio-political and social-evaluation worries. First, socio-political worries showed positive correlations with scores from the social desirability questionnaire, whereas social-evaluation worries showed negative correlations. Second, endorsements of socio-political worries increased under social-desirability provoking instructions, whereas those of social-evaluation worries decreased. However, all correlations between self-reported worry and social-desirability scores were rather small. Moreover, in absolute terms, socio-political worries did not show any greater social-desirability bias than social-evaluation worries. Implications for self-report measures of socio-political worries (e.g., environmental worry, worry about technological risks) and directions for future research are discussed.

Keywords: Worry, social desirability, impression management, socio-political concerns, environmental concerns, risk analysis

Introduction

With the establishment of generalized anxiety disorder (GAD) in the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 1994), worry—the cardinal diagnostic criterion for GAD—became a major focus of research interest (for a review, see Borkovec, Ray, & Stöber, 1998). Whereas most of this research was directed at pathological worry as experienced by individuals diagnosed with GAD, some researchers also directed attention to nonpathological worry, that is, everyday worries as experienced by "normal" individuals (Tallis, Davey, & Capuzzo, 1994; Tallis, Eysenck, & Mathews, 1992). The most widely used and comprehensive measure of nonpathological worry is the Worry Domains Questionnaire (WDQ) constructed by Tallis et al. (1992). Participants from a community sample were asked to list their worries. From their answers, a 155-item worry questionnaire was constructed. This questionnaire was then given to a second sample of participants who indicated how often and how much they worried about each item. When these frequency and intensity ratings were subjected to cluster analysis, six coherent clusters emerged, representing worries in the domains of (a) relationships, (b) lack of confidence, (c) aimless future, (d) work, (e) financial, and (f) socio-political issues. From each cluster, the five most representative items were selected to form a first version of the WDQ. Psychometric analyses, however, indicated that socio-political worries showed no or only small correlations with worries from the other five domains. Consequently, the domain of socio-political worries was dropped from the final version of the WDQ (Tallis et al., 1992; Tallis, Davey, & Bond, 1994).

Tallis and associates suggested that social desirability may play a central role in explaining why socio-political worries did not correlate with worries from the other five domains, as it is extremely difficult for respondents to say that socio-political items are not

worrying. Thus, socio-political worries are associated with a powerful demand. Consequently, the authors assumed that, whereas worries from all domains are affected by social desirability to a greater or lesser extent, self-reports on socio-political worries show a considerable social-desirability bias (Tallis et al., 1992; Tallis, Davey, & Bond, 1994).

This assumption, however, was never put to test. Yet such a test would be of great importance: Whereas socio-political worries were dropped from the WDQ (Tallis et al., 1992), other self-report questionnaires explicitly aim to measure socio-political worries. In health psychology, for example, the measurement of environmental worry plays an important role for health-related behavioral interventions (Bowler & Schwarzer, 1991; Hoddapp, Neuhann, & Reinschmidt, 1996). Moreover, researchers in risk analysis have started to discuss if worry about technological and environmental issues may be used as an indicator of perceived risk (MacGregor, 1991; Sjöberg, 1998). If Tallis et al.'s assumption holds and self-reports of socio-political worries are considerably distorted by social desirability, the validity of these measures may be questionable (Borkenau & Ostendorf, 1992).

Empirical studies on worry and social desirability are few, but results are rather consistent. Overall, there seems to be a small *negative* correlation between self-reported worry and social desirability as measured with the Marlowe-Crowne Scale (Crowne & Marlowe, 1960). McCann, Stewin, and Short (1991), for example, found a significant correlation of $r(139) = -.20$ between social desirability and self-reported worry status as measured with a single-item scale from "nonworrier" (1) to "worrier" (9). Two further studies investigated pathological worry. Whereas Meyer, Miller, Metzger, and Borkovec (1990) found a nonsignificant correlation of $r(163) = -.09$, Stöber (1998) found a significant correlation of $r(148) = -.22$ between social desirability and self-reported pathological worry as measured with the Penn State Worry Questionnaire. Finally, two studies investigated nonpathological worry (Stöber, 1995, 1998). These found significant correlations of $r(131) = -.36$ and $r(148) = -.35$ respectively between social desirability and self-reported nonpathological worry as measured with the WDQ.

However, after exclusion of the socio-political items, the WDQ comprises only worries that Eysenck (1992) described as "worries related to one's social-evaluative self-concept" (p. 104), in short, social-evaluation worries (Eysenck & van Berkum, 1992). Besides, social-evaluation worries are unrelated to socio-political worries (Eysenck & van Berkum, 1992; Tallis et al., 1992). Consequently, it is unlikely that the above findings will also apply to socio-political worries—all the more so as Tallis and associates suggested a *positive* relationship between social desirability and self-reported socio-political worries (Tallis et al., 1992; Tallis, Davey, & Bond, 1994).

The aim of the present study was therefore to investigate the relationship of social desirability with socio-political and social-evaluation worries using a two-fold approach. First, self-reports of worry were correlated with scores from a social-desirability scale. Additionally, because the validity of social-desirability scales has been called into question (e.g., McCrae & Costa, 1983), an instructional manipulation was employed. Self-reports of worry under standard instructions were compared to those under social-desirability provoking instructions, a widely used method to test whether questionnaire responses are sensitive to social desirability (Krampen, 1993; Paulhus, 1984). In line with previous findings (Stöber, 1995, 1998), it was hypothesized that social-evaluation worries would show (a) negative correlations with social desirability and (b) reduced endorsements under social-desirability provoking instructions compared to standard instructions. In line with Tallis et al. (1992; Tallis, Davey, & Bond, 1994), it was hypothesized that socio-political worries would show (a) positive correlations with social

desirability and (b) increased endorsements under social-desirability provoking instructions. In addition, exploratory analyses were conducted to investigate the assumption that social desirability has a greater influence on socio-political worries than on social-evaluation worries.

Method

Participants

A sample of 155 (78 male, 77 female) students was recruited at the University of Halle and the University of Greifswald. Average age was 22.4 years ($SD = 2.9$). Participants were enrolled in the following fields of study: psychology (48%); educational and teaching sciences (15%); computer science (10%); medicine and pharmaceuticals (8%); natural sciences and mathematics (7%); law (5%); others (7%). Halle participants volunteered in exchange for a lottery ticket for a chance to win 50 German marks (approximately 25 US dollars). Greifswald participants, who completed a more comprehensive questionnaire, volunteered in exchange for one hour of extra course credit or a lottery ticket for a chance to win 100 German marks (approximately 50 US dollars).

Measures

Worry. To compare socio-political worries and social-evaluation worries, the first version of the Worry Domains Questionnaire (WDQ) (Tallis et al., 1992; German version: Stöber, 1995) was administered. This first version, consecutively denoted as WDQ+D6, comprises 30 items that are subsumed to six domain subscales: (D1) Relationships (e.g., "that I will lose close friends", "that I am not loved"), (D2) Lack of Confidence (e.g., "that I cannot be assertive or express my opinions", "that others will not approve of me"), (D3) Aimless Future (e.g., "that I'll never achieve my ambitions", "that life may have no purpose"), (D4) Work (e.g., "that I make mistakes at work", "that I leave work unfinished"), (D5) Financial (e.g., "that my money will run out", "that my living conditions are inadequate"), and (D6) Socio-Political (e.g., "that human rights are being violated", "that the environment is becoming polluted/ruined").¹ Domains D1 to D5 represent social-evaluation worries (see Eysenck, 1992; Eysenck & van Berkum, 1992). All items were presented with the standard WDQ answer scale from *Not at all* (0) to *Extremely* (4). Research has demonstrated that both the WDQ total scale (sum[D1-D5]) and the individual domain subscales D1 to D5 show satisfactory reliability and substantial validity (Tallis, Davey, & Bond, 1994; Joormann & Stöber, 1997; Stöber, 1998). No findings are available as to reliability and validity of D6 scores, however.

Social desirability. As a measure of social desirability, we included the Social Desirability Scale-17 (SDS-17; Stöber, 1999, in press). The SDS-17 comprises 16 items (e.g., "During arguments I always stay objective and matter-of-fact", "I sometimes litter", reverse keyed) with a forced-choice answer format ("true" = 1, "false" = 0). The SDS-17 was constructed in the style of the Marlowe-Crowne Scale (Crowne & Marlowe, 1960), but with contents that correspond more closely to today's standards of socially desirable behavior (Stöber, 1999). SDS-17 scores have shown internal consistencies (Cronbach's alphas) above .70; test-retest correlations above .80 over two- to four-week intervals; and convergent correlations between .50 and .75 with other measures of social desirability (Göhner, 1999; Stöber, 1999, in press). Moreover, with respect to Paulhus' two-component model of desirable responding (Paulhus, 1984, 1986), the SDS-17 has shown unique correlations with impression management, but not with self-deception (Stöber, in press).

Thus, the SDS-17 is a reliable and valid measure of social desirability of the impression-management type.²

Procedure

All participants completed a questionnaire consisting of two parts which were administered consecutively. In part one, the WDQ+D6 and SDS-17 were administered under standard instructions. In part two, the social-desirability provoking instructions of Krampen (1993) were employed: participants were asked to imagine that they were applying for an important job and that the way in which they responded to the questionnaires was of great importance for their application. The WDQ+D6 and SDS-17 were then re-administered. To check the effectiveness of the instructional manipulation, differences in SDS-17 scores were examined. Under standard instructions, SDS-17 scores displayed a mean of $M = 7.49$ ($SD = 3.08$). Under job-application instructions, they displayed a mean of $M = 12.61$ ($SD = 3.38$). The difference was significant with $t(154) = 17.74$, $p < .001$, indicating that the job-application instructions were highly effective in provoking socially desirable responding.³

Results

Overall, the results confirmed the hypotheses. In line with previous findings, social-evaluation worries showed negative correlations with social desirability (Table 1). In contrast, socio-political worries showed a significant positive correlation with social desirability. Moreover, in line with expectations, all correlations of social-evaluative worries with social desirability differed significantly from the correlations of socio-political worries with social desirability, $Zs \geq 2.39$, $ps < .01$ (Meng, Rosenthal, & Rubin, 1992). The pattern of mean differences between standard and social-desirability instructions was also as expected. All social-evaluation worries showed significantly lower endorsements following job-application instructions. In contrast, socio-political worries showed significantly higher endorsements. In addition, the contrasting correlation pattern of social-evaluation worries and socio-political worries with social desirability scores was more pronounced under social-desirability provoking instructions: both the negative correlations of social-evaluative worries and the positive correlations of socio-political worries were now significant with $ps < .001$. The only exception was financial worries, which again showed a nonsignificant correlation with social desirability. Nevertheless, all correlations of social-evaluative worries with social desirability again differed significantly from the correlations of socio-political worries with social desirability, $Zs \geq 3.15$, $ps < .001$, including the near-zero correlation between financial worries and social desirability.

In contrast, there was no support for the assumption that the influence of social desirability on socio-political worries is greater than that on social-evaluation worries—on the contrary. First, when the absolute correlations of social-evaluation worries (WDQ, reverse scored) and socio-political worries (D6) with social desirability scores were compared under standard instructions ($r = .21$ versus $r = .15$) and social-desirability provoking instructions ($r = .34$ versus $r = .29$), both differences were nonsignificant, $Zs \leq 0.54$, $ps \geq .59$, two-tailed. Second, when the absolute effect of the social-desirability provoking instructions on the two scales was investigated with a 2 (worries) \times 2 (instructions) repeated-measures ANOVA on the standardized scores, the interaction effect of worries and instructions was significant, with $F(1, 154) = 25.98$, $p < .001$, two-tailed, indicating that socio-political worries were *less* influenced by the instructional

manipulation than social-evaluation worries. Finally, in order to investigate potential gender differences, all analyses were repeated with gender as an additional between-participants factor. However, no significant interaction effects with gender were found.

Discussion

In sum, the present results indicate that socio-political and social-evaluation worries show opposite relationships with social desirability. In line with previous findings, social-evaluation worries showed a negative relationship with social desirability: endorsements of social-evaluation worries displayed a negative correlation with scores from a social desirability scale and a pronounced decrease following social-desirability provoking instructions. In contrast, socio-political worries showed a positive relationship with social desirability: endorsements of socio-political worries displayed a positive correlation with social desirability scores and a pronounced increase when social-desirability provoking instructions were given. However, it is important to note that the magnitude of the correlations between self-reported worry and social desirability was rather small. Only under social-desirability provoking instructions were they of medium size (Cohen, 1988). Moreover, there was no support for Tallis et al.'s (1992; Tallis, Davey, & Bond, 1994) assumption that socio-political worries show a greater social-desirability bias than social-evaluation worries. On the contrary, socio-political worries showed less sensitivity to social-desirability provoking instructions than social-evaluation worries.

The present findings may have important implications for self-report measures of socio-political worries such as measures of environmental worry (Bowler & Schwarzer, 1991; Hodapp et al., 1996) and worry about technological risks (MacGregor, 1991; Sjöberg, 1998). On the one hand, they indicate that these measures may be positively biased in respondents with a tendency for desirable responding. On the other hand, they indicate that this bias may be rather small and, in absolute terms, no greater than the bias associated with self-reported worry status and pathological worry (see Introduction). Thus, self-reports on socio-political worries may be as reliable and valid as self-reports on social-evaluation worries (Stöber, 1998).

Nevertheless, researchers who use self-report questionnaires to measure socio-political worries may be advised to interpret their results with caution. The reason for this is that the amount and frequency of socio-political worries vary greatly when structured and free-recall measures of worry are compared (Dugas, Freeston, Doucet, Lachance, & Ladouceur, 1995). Dugas and associates asked participants to list their predominant worries using a free-response format. When answers were categorized, results showed that only a small percentage of worries pertained to socio-political issues (0-3%). Most of the worries were social-evaluation worries such as worries about one's studies (60-75%), finances (30-39%), intimate relationships (30-34%), work (25-38%), and relationships with family or friends (12-25%). This result stands in stark contrast with the findings from both Tallis et al.'s (1992) study and the present study (see Table 1). In both studies, using the first version of the WDQ as a structured measure of worry, the socio-political worries displayed considerably higher mean endorsements than the social-evaluation worries (see, e.g., Table 1). Thus, socio-political worries seem to be of personal concern only when explicitly mentioned. Social-evaluation worries otherwise seem to predominate, indicating that the relative importance of socio-political worries and social-evaluation worries in self-reports of worry seems to be heavily dependent on how researchers ask their questions (Schwarz, 1999).

Future studies on the relationship of social desirability and worry may consequently profit from including both structured and free-recall measures of worry (Dugas et al., 1995). In addition, they should also include measures of health worries (see, e.g., Lucock & Morley, 1996; Tallis, Eysenck, & Mathews, 1991; Wells, 1994). Worries about health and physical threat have been found to be unrelated to both socio-political and social-evaluation worries (Eysenck & van Berkum, 1992). Consequently, it remains unclear how the present findings generalize to health worries. Finally, future studies may profit from including more than one measure of social desirability. In particular, they should include measures that capture both the impression-management and self-deception components of desirable responding (Paulhus, 1984, 1986) in order to provide a more comprehensive picture of the relationship patterns between the different facets of worry and social desirability.

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Footnotes

¹For the complete list of WDQ items, see Tallis et al. (1992, p. 165, Table 1).

²The English version of the SDS-17 is listed in the Appendix of Stöber (in press).

³Unless indicated otherwise, *p* values are from one-tailed tests.

Table 1: *Socio-Political and Social-Evaluation Worries: Correlations with Social Desirability and Differences Between Standard and Social-Desirability Provoking Instructions*

Scale	Domain	Instructions									
		Standard				Social-desirability provoking ^a				<i>r</i>	<i>t</i> (154)
		<i>M</i>	<i>SD</i>	α	<i>r</i> (SDS)	<i>M</i>	<i>SD</i>	α	<i>r</i> (SDS)		
D1	Relationships	5.33	3.69	.70	-.18*	4.03	3.39	.73	-.27***	.71***	-5.90***
D2	Lack of Confidence	6.37	4.11	.83	-.18*	3.75	3.23	.86	-.33***	.51***	-8.82***
D3	Aimless Future	5.61	3.61	.74	-.13	3.21	2.92	.75	-.32***	.54***	-9.34***
D4	Work	7.18	3.46	.72	-.18*	4.26	3.27	.70	-.40***	.46***	-10.39***
D5	Financial	5.20	3.90	.81	-.12	3.61	3.09	.81	-.06	.62***	-6.33***
WDQ	Sum(D1-D5)	29.69	14.34	.91	-.21**	18.85	12.67	.92	-.34***	.60***	-11.11***
D6	Socio-Political	9.79	4.27	.85	.15*	11.00	4.75	.91	.29***	.62***	3.78***

Note. *N* = 155. D1-D5 = social-evaluation worries; WDQ = Worry Domains Questionnaire, final version; α = Cronbach's alpha; *r*(SDS) = correlation with the Social Desirability Scale-17; *r* = correlation of scores under standard and social-desirability provoking instructions; *t*(154) = *t* value of difference between means.

^aImaginary job application (Krampen, 1993); see text for details.

p* < .05. *p* < .01. ****p* < .001. One-tailed tests.