

Mother and father socially desirable responding in nine countries: Two kinds of agreement and relations to parenting self-reports

Marc H. Bornstein¹, Diane L. Putnick¹, Jennifer E. Lansford², Concetta Pastorelli³, Ann T. Skinner², Emma Sorbring⁴, Sombat Tapanya⁵, Liliana Maria Uribe Tirado^{3,6}, Arnaldo Zelli⁷, Liane Peña Alampay⁸, Suha M. Al-Hassan⁹, Dario Bacchini¹⁰, Anna Silvia Bombi³, Lei Chang¹¹, Kirby Deater-Deckard¹², Laura Di Giunta³, Kenneth A. Dodge², Patrick S. Malone¹³, and Paul Oburu¹⁴

¹Child and Family Research, *Eunice Kennedy Shriver* National Institute of Child Health and Human Development, National Institutes of Health, Public Health Service, USA

²Center for Child and Family Policy, Duke University, Durham, NC, USA

³Faculty of Psychology, Rome University 'La Sapienza', Italy

⁴Department of Psychology, University West, Trollhättan, Sweden

⁵Department of Psychiatry, Chiang Mai University, Thailand

⁶Consultorio Psicológico Popular, Universidad San Buenaventura, Colombia

⁷Department of Education Sciences, University of Rome 'Foro Italico', Italy

⁸Department of Psychology, Ateneo de Manila University, Quezon, Philippines

⁹Queen Rania Faculty for Childhood, Hashemite University, Jordan

¹⁰Department of Psychology, Second University of Naples, Italy

¹¹Department of Educational Psychology, Chinese University of Hong Kong, China

¹²Department of Psychology, Virginia Polytechnic Institute and State University, Blacksburg, VA, USA

¹³Department of Psychology, University of South Carolina, Columbia, SC, USA

¹⁴Department of Psychology, Maseno University, Kenya

We assessed 2 forms of agreement between mothers' and fathers' socially desirable responding in China, Colombia, Italy, Jordan, Kenya, the Philippines, Sweden, Thailand and the United States ($N = 1110$ families). Mothers and fathers in all 9 countries reported socially desirable responding in the upper half of the distribution, and countries varied minimally (but China was higher than the cross-country grand mean and Sweden lower). Mothers and fathers did not differ in reported levels of socially desirable responding, and mothers' and fathers' socially desirable responding were largely uncorrelated. With one exception, mothers' and fathers' socially desirable responding were similarly correlated with self-perceptions of parenting, and correlations varied somewhat across countries. These findings are set in a discussion of socially desirable responding, cultural psychology and family systems.

Keywords: Socially desirable responding; Mothers; Fathers; Culture.

Social desirability is the motive to behave in a way that casts a person in a positive light. People often portray themselves positively, but some individuals do so more

than others. Moreover, people in some cultures may do so more than people in other cultures. In consequence, socially desirable responding merits attention

Correspondence should be addressed to Dr. Marc H. Bornstein, Child and Family Research, *Eunice Kennedy Shriver* National Institute of Child Health and Human Development, Suite 8030, 6705 Rockledge Drive, Bethesda, MD 20892, USA. (E-mail: Marc_H_Bornstein@nih.gov).

MHB, DLP and JEL designed the study. MHB and DLP drafted the initial manuscript. DLP conducted the analyses. All other authors collected and coded the data and contributed to revising the manuscript. We thank A. Dovidio and the families who participated in this research. This research was funded by the *Eunice Kennedy Shriver* National Institute of Child Health and Human Development (grant RO1-HD054805) and the Fogarty International Center (grant RO3-TW008141) and was supported by the Intramural Research Program of the NIH, NICHD. This article has been contributed to by US Government employees and their work is in the public domain in the USA.

from individual differences and cultural perspectives. The present study used data from mothers and fathers in within-family analysis of socially desirable responding in 9 countries. The study addresses four research questions. First, what are the similarities and differences in mean levels of mothers' and fathers' socially desirable responding? Second, are mothers' and fathers' socially desirable responding correlated? Third, are mothers' and fathers' socially desirable responding similarly correlated with their self-perceptions of parenting? Fourth, are mean levels or concordances of socially desirable responding moderated by culture? This study therefore coordinates several issues: socially desirable responding, social group moderation, gender and family systems.

Why study socially desirable responding?

Social desirability is the tendency of individuals to present themselves favourably with respect to prevailing social norms and standards (Zerbe & Paulhus, 1987); that is, "the tendency of individuals to 'manage' social interactions by projecting favourable images of themselves, thereby maximising conformity to others and minimising the danger of receiving negative evaluations from them" (Johnson & van de Vijver, 2003, p. 194). Socially desirable responding may reflect impression management towards conveying a favourable image (Paulhus, 1998; Schlenker & Britt, 1999; Schlenker, Britt, & Pennington, 1996), or defensiveness as expressed in distortions of thoughts and feelings associated with social rejection, negative self-evaluation or avoidance of threatening situations (Crowne, 1979). Hence, social desirability may be motivated by social approval or by avoidance of social disapproval. In short, socially desirable responding reflects a human propensity to emphasise or overstate positive qualities and behaviours while deemphasizing or understating negative ones. On this basis, we expected to find generally high levels of socially desirable responding across members of different social groups.

Socially desirable responding is also a methodological concern. Socially desirable responding is a source of survey measurement error as it is thought to bias self-reports (Bardwell & Dimsdale, 2001; Johnson & van de Vijver, 2003; Tourangeau & Yan, 2007). Psychosocial self-report measures are widely used in health care settings (Sigmon et al., 2005) and management, consumer and market research (Dolnicar & Grun, 2007; Keillor, D'Amico, & Horton, 2001a) as well as psychological and developmental science. Social desirability measures are therefore often used as control variables by researchers and practitioners to screen for self-serving bias in self-reports. As Nancarrow and Brace (2000) noted, social desirability bias creates two potential issues that researchers must address. The first is that social desirability bias relates

to over- or underreporting of beliefs or behaviours based on whether or not they are communally approved and acceptable. Second, social desirability bias can lead to artificial research results: Socially desirable responding may mask a relation between variables, provide a false relation between them, moderate their relation, or influence response rate. Insofar as socially desirable responding may contaminate self-reports (Bernardi & LeComte, 2008), it threatens the validity of empirical conclusions (Baumgartner & Steenkamp, 2001; Kumar, 2006). For this reason, we explored relations between social desirability and another self-report instrument.

Why study social group moderation and socially desirable responding?

Social groups, like ethnicities and cultures, comprise the ways in which a collection of people process and make sense of their experiences and so shape a wide array of cognitions and practices, including socially desirable responding. On the one hand, regardless of group, people might share certain cognitions, which presumably serve comparable functions. On the other hand, community-specific cognitions can be expected to accord with each specific group's setting and needs. Thus, socially desirable responding may be universal, but group specific in its manifestation.

Many limitations constrain our understanding of socially desirable responding, and one is the samples in whom it has been studied: Most contemporary research into social desirability is of Western (North European or North American) origin, and so perhaps more than 90% of the relevant literature emanates from regions of the world that account for less than 10% of the world's population (Arnett, 2008; Bornstein, 1980, 2010; Tomlinson, Bornstein, Marlow, & Swartz, in press). As Henrich, Heine, and Norenzayan (2010) noted, Western, educated, industrialised, rich and democratic samples, in which the preponderance of psychological research has been conducted, are outliers on a number of characteristics when compared with more diverse samples throughout the world. It may be inaccurate, therefore, to draw conclusions about many aspects of psychological functioning on the basis of studies that use limited samples. Moreover, the groups typically studied in social desirability research have constrained many sources of variation, and this restriction of range is limiting in terms of understanding idiosyncrasies as well as generalities. In response to this state of affairs, more diverse comparative studies are requisite to a full understanding of social desirability.

This study presents data on socially desirable responding in parents from nine countries: China, Colombia, Italy, Jordan, Kenya, the Philippines, Sweden, Thailand and the United States. These samples have been understudied and are underrepresented in the social psychological

and developmental literatures. This sample of countries is diverse on several sociodemographic dimensions, including predominant ethnicity, predominant religion, economic indicators and indices of child well-being. For example, on the Human Development Index, a composite indicator of a country's status with respect to health, education and income, participating countries ranged from a rank of 4 to 128 of 169 countries with available data. The participating countries varied widely not only on sociodemographic indicators, but also on psychological constructs such as individualism versus collectivism. Using Hofstede's (2001) rankings, the participating countries ranged from the United States, with the highest individualism score in the world to China, Colombia and Thailand, countries that are among the least individualistic countries in the world. The main purpose of recruiting families from these countries was to create an international sample that would be diverse with respect to a number of sociodemographic and psychological characteristics. Ultimately, this diversity provided us with an opportunity to examine our four research questions in a sample that is more generalizable to a wider range of the world's populations than is typical in most research. Of course, variation in socially desirable responding may also occur between subgroups within nations, and so here we also tested two or three groups in each of three of the participating countries.

Socially desirable responding is believed to reflect individuals' desires to present themselves in the most favourable manner possible, based on their interpretation of local social norms and mores (King & Bruner, 2000; Middleton & Jones, 2000). Crowne and Marlowe described social desirability in a manner that explicitly conceptualised it as being socially conditioned, referring to socially desirable responding as "the need for social approval and acceptance and the belief that it can be attained by means of *culturally* acceptable and appropriate behaviours" (1964, p. 109). The norms and mores prevalent in any given society presumably lead people to positively or negatively value consonant attributes. In attempting to conform to societal norms, individuals will tend to under-report those beliefs or behaviours perceived to be undesirable and over-report those deemed to be desirable (Ganster, Hennessey, & Luthans, 1983). Social desirability may well be a pancultural or etic concept, but could still reflect social conditioning in how and how much it shapes cognitions or practices (Johnson & van de Vijver, 2003; Smith, 2004; van Hemert, van de Vijver, Poortinga, & Georgas, 2002; van Herk, Poortinga, & Verhallen, 2004). In general support of this position, extant research has pointed to ethnic, cultural and national variation in self-serving bias (e.g., Bernardi & Guptill, 2008; Chandler, Shama, Wolf, & Planchard, 1981a, 1981b; Diamantopoulos, Reynolds, & Simintiras, 2006; Markus & Kitayama, 1991; Verardi et al., 2010; see also Bond & Smith, 1996;

Hughes, 1979; Middleton & Jones, 2000; Mwamwenda, 1996). On this basis, we expected some cross-national variation in the generally high level of socially desirable responding.

Finally, differences or similarities across ethnic, cultural or national groups in the substantive measures of beliefs and behaviours may be mistakenly interpreted as group differences if variance in socially desirable responding is not controlled (Diamantopoulos et al., 2006; Keillor, Owens, & Pettijohn, 2001b; Middleton & Jones, 2000; van Herk et al., 2004). For this reason, we collected data on social desirability as well as self-reports of positive and negative behaviours in the same participants, and we expected that social desirability would generally relate to self-reports of positive and negative behaviour. Specifically, we assessed self-reports of parenting.

Mothers and fathers are often asked to report on their parenting beliefs and behaviours. Here, we included one positive and one negative aspect of parenting to determine whether socially desirable responding would relate differentially to self-perceptions of parental warmth (PW) and parenting hostility/rejection/neglect (PHRN) across parents and countries. MacDonald (1992) argued that parental warmth is a universal, adaptive form of caregiving that evolved to protect and nurture offspring, and Trivers (1974) described parent-child conflict as an inherent and necessary part of the parent-child relationship because of the competing goals and demands of parents and children. Therefore, PW and PHRN are two common aspects of parenting, but ones that mothers and fathers may feel compelled to portray positively, thus leaving them susceptible to socially desirable response bias.

Why study mothers' and fathers' socially desirable responding?

If a first limitation of research on socially desirable responding is its Western focus, a second limitation has been its primary use of convenience samples (Henrich et al., 2010). Here, we studied adults of a particular practical kind. The majority of children throughout the world grow up in family systems with more than one significant parenting figure (Bornstein, 2015). Until recently, however, most empirical research in parenting did not fully embrace this reality. Virtually all guiding theories depict parenting and child development as unfolding within the context of the "dyadic" mother-child relationship. Here we studied mothers and fathers. Socially desirable responding may vary with whether the parent is the mother or father. The parenting literature tends to look at consistency as a within-parent variable, but from family systems and coparenting perspectives interparent consistency may be as or more important. Researchers need to

be attuned to the family's "parenting map" when attempting to study family process (Demo & Cox, 2000). Germane to the present study, socially desirable responding may shape parents' tendency to present themselves, their parenting, and their children favourably.

Thus, understanding socially desirable responding of both mothers and fathers is important because families are social systems that transcend just mother-child or father-child dyads (Bornstein, 2015). Studying socially desirable responding in mothers and fathers in a within-family design (as we do here) is also important because socially desirable responding may inflate correlations in couples. The "marital conventionalization" argument (Edmonds, Withers, & Dibatista, 1972; Fowers, Applegate, Olson, & Pomerantz, 1994) claims that empirical relations observed between measures of, say, marital satisfaction may be spurious artefacts of the common contamination of such measures by socially desirable responding. Following this logic, and the observation that in many places around the world women and men self-select into married couples, it is through assortative mating that women and men who are more similar are more likely to join in relationships with one another than are women and men with divergent characteristics (Luo & Klohnen, 2005). On this basis, we expected mean levels of social desirability in mothers and fathers to be similar and mothers and fathers within families to agree in their relative social desirability.

Addressing the question of whether mothers and fathers show similarities or differences in socially desirable responding will contribute to a richer understanding of the joint socialisation influences to which children are exposed. Because strong ethnic, cultural and national differences exist with respect to family roles of women and men (Best, 2010), the extent to which patterns of gender differences reported in one group may be found in any other is not clear.

Moreover, the contemporary literature in gender differences in socially desirable responding is not settled. Gender differences have been recorded sometimes, but not always (Andrews & Meyer, 2003; Barger, 2002, Study 2; Loo & Thorpe, 2000; Robinette, 1991; Xinwen, Feng, & Yiwen, 2004). When differences have been noted, however, females have been reported to score higher in socially desirable responding than males (Barger, 2002, Study 1). To explain the gender difference, various investigators have appealed to other known related gender differences. For example, Marsh, Antill, and Cunningham (1987) construed socially desirable responding as associated with selflessness and conformity in interpersonal relationships; Holden and Fekken (1989) associated socially desirable responding with greater interpersonal sensitivity; and Schwartz, Verkasalo, Antonovsky, and Sagiv (1997) suggested that high scores characterise social harmony. These traits usually are associated more with females than males. Notably, no reports of

males scoring higher than females in socially desirable responding have been published to our knowledge. In consequence, we tested equal numbers of mothers and fathers (females and males) and expected that, if gender differences did arise, they would show females higher than males.

This study

Here, we examined mean-level and rank-order agreement between mothers' and fathers' socially desirable responding in samples in nine countries. Our analyses therefore address four primary research questions. First, what are the similarities and differences in mean levels of mothers' and fathers' socially desirable responding? Second, is mothers' socially desirable responding correlated with fathers' socially desirable responding? Third, are mother and father socially desirable responding similarly correlated with self-reports of parenting? Fourth, are these associations moderated by social group membership? Expanding research on socially desirable responding to include within-family analyses of previously under-represented groups is important to advance an understanding of the extent to which fundamental social cognitions are community-specific or generalizable across social groups.

METHOD

Participants

Mothers and fathers of 8-year-old children from 1110 families in nine countries provided data. Participants were drawn from Shanghai ($n = 119$) and Jinan ($n = 120$), China, Medellín, Colombia ($n = 107$), Naples ($n = 84$) and Rome ($n = 88$), Italy, Zarqa, Jordan ($n = 110$), Kisumu, Kenya ($n = 97$), Manila, Philippines ($n = 94$), Trollhättan/Vänersborg, Sweden ($n = 76$), Chiang Mai, Thailand ($n = 82$), and European American ($n = 62$), African American ($n = 29$), and Latin American ($n = 42$) families in Durham, North Carolina, United States. Participants were females and males in mother and father social roles who were married (90.14%), unmarried and cohabiting (7.60%), or coparenting (2.26%). We excluded from the analyses reported here families with only one participating parent. Parents were recruited from schools that served socioeconomically diverse populations in each country. Mothers averaged 36.64 ($SD = 5.83$) years, and fathers averaged 39.98 ($SD = 6.28$) years. Mothers had completed 12.63 ($SD = 4.10$) and fathers 12.88 ($SD = 3.99$) years of education on average. Parents of girls and boys were represented approximately equally overall (52% girls) and in each country subsample, $\chi^2(8, N = 1110) = 9.59, p = .30$. Children averaged 8.25 ($SD = .62$) years.

Instruments

To assess socially desirable responding, we used the 13-item Social Desirability Scale (SDS-SF Form C; Reynolds, 1982). The SDS-SF is modified from the Marlowe–Crowne Social Desirability Scale (SDS; Crowne & Marlowe, 1960). The SDS has been used extensively in research for the past 50 years, and a meta-analysis reported that over 90% of the available research literature that has employed a social desirability measure has used the SDS (Moorman & Podsakoff, 1992); it has been used previously with Canadian, Chinese, Italian, Norwegian, Mexican, Mexican American, Spanish, Chilean, German and U.S. populations to name a few (e.g., Lai, 2012; Lara-Cantú & Suzan-Reed, 1988; Mladinic, Saiz, Díaz, Ortega, & Oyarce, 1998; Rudmin, 1999). Statements like, “I’m always willing to admit when I make a mistake” and “I am sometimes irritated by people who ask favours of me” (reversed) are rated as *True* or *False*. Six items were reverse scored, and a scale score was created by summing the number of items reported to be true. Thus, higher scores reflect higher levels of socially desirable responding. The SDS-SF has demonstrated strong psychometric properties (Loo & Thorpe, 2000): Internal reliability ranges from .86 to .94 (Fischer & Fick, 1993), and correlations with the full SDS range from .91 to .97 (Andrews & Meyer, 2003; Fischer & Fick, 1993; Loo & Thorpe, 2000). The SDS-SF also correlates with other social desirability scales, including the Edwards Social Desirability Scale (Kozma & Stones, 1987) and the Eysenck Lie Scale (Khavari & Mabry, 1985).

The Parental Acceptance-Rejection/Control Questionnaire-Short Form (PARQ/Control-SF; Rohner, 2005) was used to measure the frequency of self-reported mother and father parenting behaviours. Mothers and fathers each rated 29 items on an adapted response scale as 1, *never or almost never*, 2, *once a month*, 3, *once a week* or 4, *every day*. (In this study, we did not use 5 items about behavioural control.) Based on Rohner and Cournoyer’s (1994) analysis of the factor structure of the PARQ scale in eight cultural groups, two subscales were derived, measuring PW and hostility/rejection/neglect (PHRN). PW was computed as the average of 8 items from the warmth-affection subscale, such as “I make my child feel wanted and needed.” PHRN was computed as the average of 16 items from the hostility-aggression, rejection and neglect-indifference subscales such as “I punish my child severely when I am angry.” and “I pay no attention to my child when (s)he asks for help.” In the present study, correlations between the PW and PHRN subscales were $r(1092) = -.42$, $p < .001$, for mothers (82% of their variance unshared) and $r(1092) = -.34$, $p < .001$, for fathers (88% of their variance unshared), supporting the bidimensionality of PW and PHRN. Internal consistency (α) reliabilities across all countries were

.78 for mother PW and PHRN, .81 for father PW and .77 for father PHRN.

Procedures

Measures were administered in Mandarin Chinese (China), Spanish (Colombia and the United States), Italian (Italy), Arabic (Jordan), Dholuo (Kenya), Filipino (the Philippines), Swedish (Sweden), Thai (Thailand) and English (the United States and the Philippines). A procedure of forward- and back-translation was used to ensure linguistic and conceptual equivalence across languages (Peña, 2007). Translators were fluent in English and the target language. Mothers and fathers completed the questionnaires independently of one another and were given modest financial compensation for their overall participation.

Analytic plan

First, generalised least squares models with gender of parent and the interaction between parent gender and country as within-subjects fixed effects and country as a between-subjects fixed effect tested for differences between mothers’ and fathers’ socially desirable responding across countries. The covariance structure was modelled as heterogeneous compound symmetry, accounting for the likelihood that mothers’ and fathers’ socially desirable responding would be correlated, but allowing mothers’ and fathers’ variances to differ. When a significant effect of country was found, we used a deviation contrast to assess country effects. We did not have a single comparison country and were more interested in the general ordering of countries on a continuum. The deviation contrast assesses each country’s departure from the grand mean of all countries. Results are presented with controls for mothers’ and fathers’ ages and educations and child age because parents who are older and those with lower levels of education or socioeconomic status have been found to exhibit greater socially desirable responding bias (Heerwig & McCabe, 2009; Ross & Mirowsky, 1984).

Because the distribution of ethnic groups in the U.S. sample did not match the population, and we found ethnic group differences in socially desirable responding (see below), we used the boot package (version 1.3–7; Canty & Ripley, 2013) in R 2.15.3 (R Development Core Team, 2013) to obtain average estimates of all model parameters from 2000 random resamples with replacement based on sampling weights that approximated the population ethnic distribution. For example, Latin Americans were over-sampled in our dataset, but in the bootstrap resamples, Latin Americans were assigned a much smaller probability of being sampled [(1/133)*.21]. Therefore, in each of the 2000 samples, Latin Americans were represented in accordance with the population of the United States.

TABLE 1
Descriptive statistics by parent and country, and bootstrapped estimates of the correlations between mothers' and fathers' socially desirable responding

	<i>Mother</i>		<i>Father</i>		<i>Mother–Father</i>	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>r</i>	<i>95% CI</i>
China	9.12	2.14	8.92	2.26	.16*	.04 to .28
Colombia	8.50	2.32	8.85	2.17	-.15	-.32 to .02
Italy	8.55	2.22	8.63	2.58	.03	-.13 to .19
Jordan	8.83	2.26	8.65	2.29	.45***	.26 to .61
Kenya	8.33	2.23	8.36	2.48	.17	-.05 to .36
Philippines	8.98	2.35	8.83	2.29	-.08	-.28 to .12
Sweden	8.07	2.34	7.38	2.63	.07	-.18 to .31
Thailand	8.21	2.55	8.46	2.86	.06	-.14 to .27
United States	8.09	2.58	7.99	2.79	.09	-.06 to .23
Grand mean	8.52	.39	8.45	.50	.13***	—

Note: All statistics for the United States are weighted to match the population distributions of ethnicity. Unweighted descriptives are $M = 8.56$, $SD = 2.65$, for mothers and $M = 8.61$, $SD = 2.66$, for fathers.
* $p < .05$. *** $p < .001$.

Participants in all countries except the United States were given equal chance (within country) of being selected into each random resample. Statistics presented in the text and tables were averaged over the model statistics for the 2000 weighted resamples.

Second, for each country, partial correlations were computed between parents in the same family to assess similarity between mothers' and fathers' socially desirable responding, controlling for parents' ages and levels of education and child age.

Finally, partial correlations were computed between maternal and paternal socially desirable responding and self-reports of PW and PHRN controlling for parents' ages and levels of education and child age. The same bootstrapping procedure described above was used to estimate all partial correlations. Correlations are interpreted following Cohen (1988) where $r = .10$ is a small effect, $r = .30$ is a medium effect and $r = .50$ is a large effect.

RESULTS

Descriptive statistics of mother and father socially desirable responding

Descriptive statistics of mother and father socially desirable responding are presented in Table 1. Although individual scores spanned the full range (0–13), average scores for each country were in the upper half of the range. No differences were found in mean levels of socially desirable responding between the two cities in China and in Italy. Therefore, we combined the subgroups in these two countries. In the United States, European American parents reported lower socially desirable responding than Latin American and African American parents, $F(2, 130) = 5.73$, $p < .001$, $\eta^2_p = .08$, for mothers and $F(2, 130) = 10.88$, $p < .001$, $\eta^2_p = .14$, for

fathers. To make the U.S. sample comparable to the other countries, we weighted the ethnic groups according to the overall distribution in the entire population of the United States at the time of the study (79.28% European American, 13.83% African American, and 6.89% Latin American/white; Grieco & Cassidy, 2001). European Americans were given a weight of 1.70, African Americans a weight of .66, and Latin Americans a weight of .21, and all analyses took into account these weighted distributions.

Agreement between mothers and fathers and mean differences in PW and PHRN are reported in Putnick et al. (2012). Across countries, PW was self-reported to be high (means between 3, *once a week* and 4, *every day*) and PHRN was self-reported to be low (means between 1, *never or almost never* and 2, *once a month*). Mothers' and fathers' PW and PHRN exhibited small to medium correlations within families, and countries varied with respect to mean levels on both constructs.

Parent gender and country similarities and differences in socially desirable responding

The parent gender by country interaction, $F(8, 2177) = 1.01$, $p = .426$, and the main effect of parent gender, $F(1, 2177) = 1.04$, $p = .495$, were nonsignificant. Mothers and fathers reported similar socially desirable responding overall, and the pattern was similar across countries. The main effect of country was significant, $F(8, 2177) = 3.60$, $p = .004$. Table 2 displays country deviations from the grand mean. Chinese parents reported higher socially desirable responding than the grand mean (average of all countries), and Swedish parents reported lower socially desirable responding than the grand mean. Parents in all other countries were similar to the grand mean.

TABLE 2

Descriptive statistics of parents' socially desirable responding by country, and bootstrapped estimates of country deviations from the grand mean

	<i>M</i>	<i>SD</i>	<i>t</i>	<i>p</i>
China	9.01	2.20	3.44	.004
Colombia	8.67	2.25	0.52	.547
Italy	8.59	2.40	0.26	.614
Jordan	8.80	2.23	1.35	.236
Kenya	8.35	2.36	-0.77	.462
Philippines	8.90	2.32	1.80	.130
Sweden	7.76	2.51	-3.04	.012
Thailand	8.27	2.68	-1.00	.381
United States	8.06	2.64	-0.98	.381
Grand mean	8.49	0.41	—	—

Note: All statistics for the United States are weighted to match the population distributions of ethnicity. Unweighted descriptives for the United States are $M = 8.60$, $SD = 2.63$. *T*-tests and *p*-values are bootstrapped estimates.

Within-family correlations between parents' socially desirable responding across country

Overall, mothers and fathers in the same families reported a very small degree of concordance in their socially desirable responding (Table 1). However, the mother–father association was stronger in Jordan than in the other countries, as computed using Fisher *r*-to-*z* transformations, $z_s = 2.18$ – 4.53 , $p_s < .05$.

Correlations between parents' socially desirable responding and self-reports of parenting

Bootstrapped estimates of partial correlations are presented in Table 3. For both mothers and fathers, there were stronger absolute relations between socially desirable responding and self-reports of PHRN than PW across all countries combined as well as in the United States and in Jordan (fathers only). Mother and father relations were similar with the exception of a stronger relation between socially desirable responding and PW in Swedish mothers than Swedish fathers. Finally, there were a few differences in relations across countries. There were stronger relations between socially desirable responding and PHRN in Jordanian and Swedish mothers than in Chinese and Italian mothers. There was also a stronger relation between socially desirable responding and PHRN in Jordanian fathers than in Chinese and Colombian fathers.

DISCUSSION

Socially desirable responding comprises the tendency for people to represent themselves in a favourable way or in self-deceptive enhancement, where people possess inflated views of themselves (Paulhus, 1998). It is a

TABLE 3

Bootstrapped estimates of partial correlations of socially desirable responding with self-perceptions of parenting warmth and hostility/rejection/neglect of children

	<i>Mother</i>		<i>Father</i>	
	<i>PW</i>	<i>PHRN</i>	<i>PW</i>	<i>PHRN</i>
China	.14*	-.18**ab	.15*	-.19***e
Colombia	.27**	-.40***	.04	-.19 ^f
Italy	.17*	-.23**cd	.14	-.36***
Jordan	.25**	-.49***ac	.06 ^h	-.45***efh
Kenya	.12	-.30**	.06	-.38***
Philippines	.09	-.30**	.07	-.20
Sweden	.34**g	-.48***bd	-.02 ^g	-.22
Thailand	.16	-.41***	.03	-.22
United States	.16 ⁱ	-.37***i	.12 ^j	-.33***j
Grand mean	.10***k	-.24***k	.03 ^l	-.25***l

Note: Correlations with the same superscripts significantly differ. ^a $z = 2.97$, $p = .003$. ^b $z = 2.50$, $p = .012$. ^c $z = 2.39$, $p = .02$. ^d $z = 2.03$, $p = .042$. ^e $z = 2.49$, $p = .014$. ^f $z = 2.08$, $p = .037$. ^g $z = 2.21$, $p = .026$. ^h $z = -3.65$, $p < .001$. ⁱ $z = -2.17$, $p = .030$. ^j $z = -2.25$, $p = .024$. ^k $z = -3.78$, $p < .001$. ^l $z = -6.48$, $p < .001$. * $p < .05$. ** $p < .01$. *** $p < .001$.

multipurpose concept relevant to contemporary developmental, cultural, social, organisational and clinical psychology. The present study examined socially desirable responding among more than 1000 mothers and fathers in nine countries. We found (a) socially desirable responding averaged in the upper half of the possible range; (b) mothers and fathers did not differ in their mean levels of socially desirable responding; (c) mothers' and fathers' socially desirable responses were largely unrelated; (d) few country differences emerged in socially desirable responding, except that Chinese were high and Swedes were low relative to the grand mean of countries studied; (e) socially desirable responding was more strongly related to self-reports of negative parenting than positive parenting in both parents across countries; (f) mothers and fathers had largely similar relations between socially desirable responding and parenting; and (g) correlations between socially desirable responding and self-reports of parenting were similar across countries for positive and largely similar for negative parenting (with only 4 of 36 significant differences for mother and 2 of 36 significant differences for father PHRN). We discuss each of these main findings and their implications.

Socially desirable responding across countries

Country means of socially desirable responding were mostly similar after controlling for parents' age and education and child age. Other investigators have reported that group similarities in judgments of social desirability outweigh differences, as in Williams, Satterwhite, and Saiz's (1998) 10-country comparison (Chile, China, Korea, Nigeria, Norway, Pakistan, Portugal, Singapore,

Turkey and the United States). Social desirability is likely a universal concept, given its relatively high mean level and strong group similarities.

That said, some residual differences in patterning across countries also emerged, suggesting possible cultural-specific factors that merit mention. Relative to the grand mean of countries we examined, China was high and Sweden low. Of course, many factors could account for these disparities. One which we examine here briefly is collectivism–individualism, which focuses on the individual’s relationships with other individuals. The participating countries varied widely in terms of their collectivist-individualist bent. Using Hofstede’s (2001) rankings, participating countries ranged from the United States and Sweden, with the highest individualism scores, to China, Colombia and Thailand, countries that are among the most collectivist. Individuals in collectivist cultures are expected to express greater group loyalty and are thus more likely to respond in a socially desirable manner, whereas individuals in individualistic cultures are believed to experience less social pressure and thus to respond in less socially desirable ways (Johnson & van de Vijver, 2003). According to Triandis (1995), openness in interactions with strangers is a characteristic that is more highly valued in individualist societies, whereas concerns about maintaining good relationships and face-saving are more salient (and hence, socially desirable) in collectivist countries. Eastern societies are thought to be more collectivist, where individuals are presumed to look after the interests of their group before their own. By contrast, Western societies characteristically exhibit stronger propensities towards individualism, which implies a more loosely knit social fabric in which people are expected to care primarily for themselves and their immediate family. A socially desirable responding bias may encourage individuals in collectivist societies to select options that place in-group welfare above out-group welfare. The same tendency occurs among social groups that stress the importance of keeping up a proper image, because socially desirable responses may be seen as strategies for presenting a good face (Ross & Mirowsky, 1984). Among collectivists, propensities to conformity (Bond & Smith, 1996) and reticence to self-disclose (Smith & Bond, 1998) are characteristics likely to be associated with socially desirable reporting (Johnson & van de Vijver, 2003). Collectivist values have been linked with a tendency to present oneself in normatively appropriate ways, whereas people in individualist societies are expected to feel weaker social pressures to conform and hence be less prone to profess socially desirable answers.

In support of this interpretation, Johnson (in Johnson & van de Vijver, 2003) reported findings from a study in the United States that documented a positive correlation between the Marlowe–Crowne SDS and a collectivist orientation scale and a negative correlation with a measure of individualism. Van Hemert

et al. (2002) also reported significant negative correlations across 23 nations between national individualism scores and mean scores on the Lie scale of the Eysenck Personality Inventory (Eysenck & Eysenck, 1964; see also Lalwani, Shavitt, & Johnson, 2006). Thus, the two country extremes in socially desirable responding that emerged in our study might reflect national differences in individualism–collectivism.

China

Chinese parents rated socially desirable responding relatively high. These findings are consistent with previous research showing higher SDS scores among East Asians compared to U.S. Americans (Keillor, D’Amico, et al., 2001a; Keillor, Owens, et al., 2001b; Middleton & Jones, 2000). A “courtesy bias” is thought to prevail in traditional Asian cultures (Jones, 1983) that may encourage social desirability as a byproduct of respondents’ need to maintain positive and harmonious social relationships. Ross and Mirowsky (1984) suggested that high scores on impression management characterise individuals who, like Chinese, valorize social harmony. In the same vein, Tangney, Baumeister, and Boone (2004) described impression management as an ability to override selfish interests in the service of what may be best for the entire community, and such impression management is associated with prioritising communal values and social harmony (e.g., benevolence, tradition and conformity), as is thought to be true in China, over agentic values, as are more common in Western countries (Lönnqvist, Paunonen, Tuulio-Henriksson, Lönnqvist, & Verkasalo, 2007). Moreover, “saving face” may be a pertinent concept in China; that is, to present oneself more positively is to avoid shaming self or family.

Sweden

By contrast, Swedish parents rated socially desirable responding relatively low. The Swedish cultural context emphasises personal agency (Carlson & Earls, 2001), and Swedish parents rate modern and individualist attitudes relatively highly (Sorbring & Gurdal, 2011). Sweden is an international leader in progressive social policies. Moreover, Swedes are not reticent about sharing information about themselves. For example, Swedes have a “personal identity number” (*personnummer*), use it extensively, and are asked about it frequently. Swedes regularly share personal information.

These interpretations are *post-hoc*, and do not explain why other Asian groups (the Philippines and Thailand) did not score equally high to China and other Western ones (the United States) did not score equally low to Sweden. Moreover, these mean-level cultural differences did not translate into relations with self-reports. For example, Chinese mothers, who had the highest mean on socially

desirable responding, had significantly lower relations between socially desirable responding and self-report of PHRN than Swedish mothers, who had the lowest mean on socially desirable responding. The “courtesy bias” in China may inflate responses to questions on the SDS-SF because some items tap social norms, but the courtesy bias might have little effect on reports of other self-perceptions.

Socially desirable responding in mothers and fathers

Mothers and fathers did not differ in mean levels of socially desirable responding or relations between socially desirable responding and self-perceptions of parenting (with one exception for PW in Sweden). Past research has found little evidence of systematic gender differences in socially desirable responding (Watkins & Cheung, 1995). Cultural factors or mutual socialisation might help to explain why parents independently report similar levels of socially desirable responding. Perhaps these forces implicitly or explicitly shape mothers and fathers to adopt uniform stances (Durrant & Olsen, 1997).

However, within families, mothers and fathers differed in their relative levels of social desirability. Pooling across countries, mothers’ and fathers’ socially desirable responding shared only 2% of their common variance. Through assortative mating, romantic partners who are more similar are presumed more likely to select into relationships (Luo & Klohnen, 2005). Moreover, once they are in a relationship, men and women may also influence one another’s cognitions (and practices) towards greater consonance. It is surprising, therefore, that mothers’ and fathers’ social desirability were unrelated. Perhaps social desirability is a personality trait that is not easily moderated. This wife–husband discordance and its possible implications for childrearing call for additional investigation.

Relations with parenting

As expected, socially desirable responding was related to parenting self-reports across countries. However, socially desirable responding was more strongly related to negative than positive parenting. Researchers should be aware that self-reports of negative behaviours, such as physical punishment, harsh parenting and criticism may engage parents’ social desirability bias more than reports of positive behaviours, such as warmth, support and sensitivity. Hence, statistical controls for socially desirable responding may be more important when accessing negative parenting. Furthermore, researchers should consider different means of data collection for sensitive information. For example, Richman, Kiesler, Weisband, and Drasgow (1999) compared modes of

administration in a meta-analysis of social desirability distortion. Completing questionnaires while alone and allowing participants the ability to revise their responses led to lower socially desirable responding.

Limitations and directions for future research

Certain characteristics of our samples limit generalizability of the findings. We studied mothers and fathers with children of specific age ($M \approx 8$ years). So, interparental agreement in terms of mean and relative levels could vary in parents of younger or older children as it might in parents married for different lengths of time. There may also be within-country regional differences in socially desirable responding, with couples in urban areas holding different attitudes from those in rural areas, for example. We discussed our results in terms of nations, but modern nations are complex and heterogeneous (especially with respect to ethnic and cultural groups). We examined mothers and fathers from nine countries, but because of our focus on mothers’ and fathers’ socially desirable responding our analyses were limited to families in which both a mother and father were available to participate. Finally, we took great care in translating and back translating the questionnaires, but we cannot be certain that mothers and fathers in all countries interpreted all questions in the same way (i.e., there was measurement invariance of the scales). All these limitations prompt future research directions.

CONCLUSIONS

Psychological, cultural, clinical and developmental science are concerned with understanding what cognitions people hold, why they hold specific cognitions, what functions cognitions serve, how cognitions are shared, when and how cognitions develop, and the effects of cognitions. Across nine countries, we found country, gender and parental similarities and differences in socially desirable responding. The overall means revealed that, on average, mothers and fathers from a wide variety of countries expressed similarly high levels of social desirability. However, two country differences suggested that cultural processes may shape socially desirable responding to some extent. Mothers and fathers were also discordant from one another. The results further suggest that social desirability might play a role in how parents respond to caregiving measures typically used in the literature and that social desirability might operate in different ways for different constructs, for example exerting an influence on whether and how parents respond about harsh parenting but having less influence in whether and how parents respond about positive parenting. Investigations of one or the other would be affected differently. These kinds of comparative evidence are key to

understand the generalizability as well as the specificity of basic psychological processes.

Manuscript received February 2014
Revised manuscript accepted June 2014
First published online July 2014

REFERENCES

- Andrews, P., & Meyer, R. G. (2003). Marlowe-Crowne social desirability scale and the short form C: Forensic norms. *Journal of Clinical Psychology, 59*, 483–492. doi:10.1002/jclp.10136.
- Arnett, J. J. (2008). The neglected 95%: Why American psychology needs to become less American. *American Psychologist, 63*, 602–614. doi:10.1037/0003-066X.63.7.602.
- Bardwell, W. A., & Dimsdale, J. E. (2001). The impact of ethnicity and response bias on the self-report of negative affect. *Journal of Applied Biobehavioral Research, 6*, 27–38. doi:10.1111/j.1751-9861.2001.tb00105.x.
- Barger, S. D. (2002). The Marlowe-Crowne affair: Short forms, psychometric structure, and social desirability. *Journal of Personality Assessment, 79*, 286–305. doi:10.1207/S15327752JPA7902_11.
- Baumgartner, H., & Steenkamp, J. E. M. (2001). Response styles in marketing research: A cross-national investigation. *Journal of Marketing Research, 38*, 143–156. doi:10.1509/jmkr.38.2.143.18840.
- Bernardi, R. A., & Guptill, S. T. (2008). Social desirability response bias, gender, and factors influencing organizational commitment: An international study. *Journal of Business Ethics, 81*, 797–809. doi:10.1007/s10551-007-9548-4.
- Bernardi, R. A., & LeComte, K. L. (2008). Impressions of questionable marketing practices in Indonesia: The influence of gender and social desirability response bias. *Electronic Journal of Business Ethics and Organization Studies, 13*, 42–50.
- Best, D. L. (2010). The contributions of the Whittings to the study of the socialization of gender. *Journal of Cross-Cultural Psychology, 41*, 534–545. doi:10.1177/0022022110362570.
- Bond, R., & Smith, P. B. (1996). Culture and conformity: A meta-analysis of studies using Asch's (1952b, 1956) Line Judgment Task. *Psychological Bulletin, 119*, 111–137. doi:10.1037/0033-2909.119.1.111.
- Bornstein, M. H. (1980). Cross-cultural developmental psychology. In M. H. Bornstein (Ed.), *Comparative methods in psychology* (pp. 231–281). Hillsdale, NJ: Erlbaum.
- Bornstein, M. H. (Ed.) (2010). *The handbook of cultural developmental science. Part 1. Domains of development across cultures. Part 2. Development in different places on earth*. New York, NY: Psychology Press.
- Bornstein, M. H. (2015). Children's parents. In M. H. Bornstein & T. Leventhal (Eds.), *Ecological settings and processes in developmental systems*. Handbook of child psychology and developmental science (Vol. 4, 7th ed.). Hoboken, NJ: Wiley.
- Canty, A., & Ripley, B. (2013). Boot: Bootstrap R (S-Plus) functions. R package version 1.3-7.
- Carlson, M., & Earls, F. (2001). The child as citizen: Implications for the science and practice of child development. *International Society for the Study of Behavioral Development Newsletter, 2*(38), 12–16.
- Chandler, T. A., Shama, D. D., Wolf, F. M., & Planchard, S. K. (1981a). Multiattribitional causality: A five cross-national samples study. *Journal of Cross-Cultural Psychology, 12*, 207–221. doi:10.1177/0022022181122006.
- Chandler, T. A., Shama, D. D., Wolf, F. M., & Planchard, S. K. (1981b). Multiattribitional causality for social affiliation across five cross-national samples. *The Journal of Psychology, 107*, 219–229. doi:10.1080/00223980.1981.9915226.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Erlbaum.
- Crowne, D. P. (1979). *The experimental study of personality*. Hillsdale, NJ: Erlbaum.
- Crowne, D. P., & Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. *Journal of Consulting Psychology, 24*, 963–968. doi:10.1037/h0047358.
- Crowne, D. P., & Marlowe, D. (1964). *The approval motive*. New York, NY: Wiley.
- Demo, D. H., & Cox, M. J. (2000). Families with young children: A review of research in the 1990s. *Journal of Marriage and the Family, 62*, 876–895. doi:10.1111/j.1741-3737.2000.00876.x.
- Diamantopoulos, A., Reynolds, N. L., & Simintiras, A. C. (2006). The impact of response styles on the stability of cross-national comparisons. *Journal of Business Research, 59*, 925–935. doi:10.1016/j.jbusres.2006.03.001.
- Dolnicar, S., & Grun, B. (2007). Cross-cultural differences in survey response patterns. *International Marketing Review, 24*, 127–143. doi:10.1108/02651330710741785.
- Durrant, J. E., & Olsen, G. M. (1997). Parenting and public policy: Contextualizing the Swedish corporal punishment ban. *Journal of Social Welfare and Family Law, 19*, 443–461. doi:10.1080/09649069708410210.
- Edmonds, V. H., Withers, G., & Dibatista, B. (1972). Adjustment, conservatism, and marital conventionalization. *Journal of Marriage and the Family, 34*, 96–103. doi:10.2307/349634.
- Eysenck, H. J., & Eysenck, S. B. G. (1964). *Manual of the Eysenck Personality Inventory*. London, U.K.: University of London Press.
- Fischer, D. G., & Fick, C. (1993). Measuring social desirability: Short forms of the Marlowe-Crowne Social Desirability scale. *Educational and Psychological Measurement, 53*, 417–424. doi:10.1177/0013164493053002011.
- Fowers, B. J., Applegate, B., Olson, D. H., & Pomerantz, B. (1994). Marital conventionalization as measure of marital satisfaction: A confirmatory factor analysis. *Journal of Family Psychology, 8*, 98–103. doi:10.1037/0893-3200.8.1.98.
- Ganster, D. C., Hennessey, H. W., & Luthans, F. (1983). Social desirability response effects: Three alternative models. *Academy of Management Journal, 26*, 321–331. doi:10.2307/255979.
- Grieco, E. M., & Cassidy, R. C. (2001). Overview of race and Hispanic origin: Census 2000 brief. Retrieved from <http://www.census.gov/prod/2001pubs/cenbr01-1.pdf>.
- Heerwig, J. A., & McCabe, B. J. (2009). Education and social desirability bias: The case of a black presidential candidate. *Social Science Quarterly, 90*, 674–686. doi:10.1111/j.1540-6237.2009.00637.x.

- van Hemert, D. A., van de Vijver, F. J. R., Poortinga, Y. H., & Georgas, J. (2002). Structure and score levels of the Eysenck Personality Questionnaire across individuals and countries. *Personality and Individual Differences*, *33*, 1229–1249.
- Henrich, J., Heine, S. J., & Norenzayan, A. (2010). The weirdest people in the world? *Behavioral and Brain Sciences*, *33*, 61–135. doi:10.1017/S0140525X0999152X.
- van Herk, H., Poortinga, Y. H., & Verhallen, T. M. M. (2004). Response styles in rating scales: Evidence of method bias in data from six EU countries. *Journal of Cross-Cultural Psychology*, *35*, 346–360. doi:10.1177/0022022104264126.
- Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviors, institutions and organizations across nations* (2nd ed.). Thousand Oaks, CA: Sage.
- Holden, R. R., & Fekken, G. C. (1989). Three common social desirability scales: Friends, acquaintances, or strangers? *Journal of Research in Personality*, *23*, 180–191. doi:10.1016/0092-6566(89)90022-6.
- Hughes, R. N. (1979). Bem sex-role inventory performance in students: Comparisons between New Zealand, Australian and American samples. *New Zealand Psychologist*, *8*, 61–66.
- Johnson, T. P., & Van de Vijver, F. J. (2003). Social desirability in cross-cultural research. In J. Harkness, F. J. Van de Vijver, & P. P. Mohler (Eds.), *Cross-cultural survey methods* (pp. 193–209). New York, NY: Wiley.
- Jones, E. L. (1983). The courtesy bias in South-East Asian surveys. In M. Bulmer & D. P. Warwick (Eds.), *Social research in developing countries* (pp. 253–260). London, U.K.: UCL Press.
- Keillor, B. D., D'Amico, M., & Horton, V. (2001a). Global consumer tendencies. *Psychology & Marketing*, *18*, 1–19. doi:10.1002/1520-6793(200101)18:1<1::AID-MAR1>3.0.CO;2-U.
- Keillor, B., Owens, D., & Pettijohn, C. (2001b). A cross-cultural/cross-national study of influencing factors and socially desirable response biases. *International Journal of Market Research*, *43*, 63–84.
- King, M. F., & Bruner, G. C. (2000). Social desirability bias: A neglected aspect of validity testing. *Psychology & Marketing*, *17*, 79–103. doi:10.1002/(SICI)1520-6793(200002)17:2<79::AID-MAR2>3.0.CO;2-O.
- Khavari, K. A., & Mabry, E. A. (1985). Personality and attitude correlates of psychosedative drug use. *Drug and Alcohol Dependence*, *16*, 159–168. doi:10.1016/0376-8716(85)90114-0.
- Kozma, A., & Stones, M. J. (1987). Social desirability in measures of subjective well-being: A systematic evaluation. *Journal of Gerontology*, *4*, 56–59. doi:10.1093/geronj/42.1.56.
- Kumar, V. (2006). International marketing research. In R. Grover & M. Vriens (Eds.), *The handbook of marketing research: Uses, misuses, and future advances* (pp. 628–645). Thousand Oaks, CA: Sage.
- Lai, J. C. L. (2012). Perceived stress and physical symptoms: The problem of the response set of social desirability in Hong Kong undergraduates. *Psychologia*, *39*, 50–54.
- Lalwani, A. K., Shavitt, S., & Johnson, T. (2006). What is the relation between cultural orientation and socially desirable responding? *Journal of Personality and Social Psychology*, *90*, 165–178. doi:10.1037/0022-3514.90.1.165.
- Lara-Cantú, M. A., & Suzan-Reed, M. (1988). La Escala de Deseabilidad Social de Marlowe y Crowne: Un estudio psicométrico [Marlowe's and Crowne's Social Desirability Scale: A psychometric study]. *Salud Mental*, *11*, 25–29.
- Lönnqvist, J. E., Paunonen, S. V., Tuulio-Henriksson, A., Lönnqvist, J., & Verkasalo, M. (2007). Substance and style in socially desirable responding. *Journal of Personality*, *75*, 291–322. doi:10.1111/j.1467-6494.2006.00440.x.
- Loo, R., & Thorpe, K. (2000). Confirmatory factor analyses of the full and short versions of the Marlowe Crowne Social Desirability scale. *Journal of Social Psychology*, *140*, 628–635. doi:10.1111/j.1559-1816.2004.tb01980.x.
- Luo, S., & Klohnen, E. C. (2005). Assortative mating and marital quality in newlyweds: A couple-centered approach. *Journal of Personality and Social Psychology*, *88*, 304–326. doi:10.1037/0022-3514.88.2.304.
- MacDonald, K. (1992). Warmth as a developmental construct: An evolutionary analysis. *Child Development*, *63*, 753–773. doi:10.2307/1131231.
- Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, *98*, 224–253. doi:10.1037/0033-295X.98.2.224.
- Marsh, H. W., Antill, J. K., & Cunningham, J. D. (1987). Masculinity, femininity, and androgyny: Relations to self-esteem and social desirability. *Journal of Personality*, *55*, 661–683. doi:10.1111/j.1467-6494.1987.tb00457.x.
- Middleton, K. L., & Jones, J. L. (2000). Socially desirable response sets: The impact of country culture. *Psychology & Marketing*, *17*, 149–163. doi:10.1002/(SICI)1520-6793(200002)17:2<149::AID-MAR6>3.0.CO;2-L.
- Mladinic, A., Saiz, J. L., Díaz, M., Ortega, A., & Oyarce, P. (1998). Sexismo Ambivalente en Estudiantes Universitarios Chilenos: Teoría Medición y Diferencias de Género [Ambivalent sexism in Chilean university students]. *Revista de Psicología Social y Personalidad*, *14*, 1–14.
- Moorman, R. H., & Podsakoff, P. M. (1992). A meta-analytic review and empirical test of the potential confounding effects of social desirability response sets in organizational behaviour research. *Journal of Occupational and Organizational Psychology*, *65*, 131–149. doi:10.1111/j.2044-8325.1992.tb00490.x.
- Mwamwenda, T. S. (1996). Social desirability scores of South African and Canadian students. *Psychological Reports*, *78*, 723–726. doi:10.2466/pr0.1996.78.3.723.
- Nancarrow, C., & Brace, I. (2000). Saying the 'right thing': Coping with social desirability bias in marketing research. *Bristol Business School Teaching and Research Review*, *1*, 8–16.
- Paulhus, D. L. (1998). Interpersonal and intrapsychic adaptiveness of trait self enhancement: A mixed blessing? *Journal of Personality and Social Psychology*, *74*, 1197–1208. doi:10.1037/0022-3514.74.5.1197.
- Peña, E. D. (2007). Lost in translation: Methodological considerations in cross-cultural research. *Child Development*, *78*, 1255–1264. doi:10.1111/j.1467-8624.2007.01064.x.
- Putnick, D. L., Bornstein, M. H., Lansford, J. E., Chang, L., Deater-Deckard, K., Di Giunta, L., Gurdal, S., Dodge, K. A., Malone, P. S., Oburu, P., Pastorelli, C., Skinner, A. T., Sorbring, E., Tapanya, S., Uribe Tirado, L. M., Zelli, A., Peña Alampay, L., Al-Hassan, S. A., Bacchini, D., & Bombi, A. S. (2012). Agreement in mother and father acceptance-rejection, warmth, and hostility/rejection/neglect

- of children across nine countries. *Cross-Cultural Research: The Journal of Comparative Social Science*, 46, 191–223.
- R Development Core Team. (2013). *R: A language and environment for statistical computing. Reference Index. Version 2.15.3 (2013-03-01)*. Vienna, Austria: R Foundation for Statistical Computing.
- Reynolds, W. M. (1982). Development of reliable and valid short forms of the Marlowe-Crowne Social Desirability Scale. *Journal of Clinical Psychology*, 38, 119–125.
- Richman, W. L., Kiesler, S., Weisband, S., & Drasgow, F. (1999). A meta-analytic study of social desirability distortion in computer-administered questionnaires, traditional questionnaires, and interviews. *Journal of Applied Psychology*, 84(5), 754–775. doi:10.1037/0021-9010.84.5.754.
- Robinette, R. L. (1991). The relationship between the Marlowe-Crowne form C and the validity scales of the MMPI. *Journal of Clinical Psychology*, 47, 396–399. doi:10.1002/1097-4679(199105)47:3<396::AID-JCLP2270470311>3.0.CO;2-K.
- Rohner, R. P. (2005). Parental Acceptance-Rejection/Control Questionnaire (PARQ/Control): Test manual. In R. P. Rohner & A. Khaleque (Eds.), *Handbook for the study of parental acceptance and rejection* (4th ed., pp. 137–186). Storrs: University of Connecticut.
- Rohner, R. P., & Cournoyer, D. E. (1994). Universals in youths' perceptions of parental acceptance and rejection: Evidence from factor analyses within eight sociocultural groups worldwide. *Cross-Cultural Research*, 28, 371–383. doi:10.1177/106939719402800408.
- Ross, C. E., & Mirowsky, J. (1984). Socially-desirable response and acquiescence in a cross-cultural survey of mental health. *Journal of Health and Social Behavior*, 25, 189–197. doi:10.2307/2136668.
- Rudmin, F. W. (1999). Norwegian short-form of the Marlowe-Crowne Social Desirability Scale. *Scandinavian Journal of Psychology*, 40, 229–233. doi:10.1111/1467-9450.00121.
- Schlenker, B. R., & Britt, T. W. (1999). Beneficial impression management: Strategically controlling information to help friends. *Journal of Personality and Social Psychology*, 76, 559–573. doi:10.1037/0022-3514.76.4.559.
- Schlenker, B. R., Britt, T. W., & Pennington, J. (1996). Impression regulation and management: Highlights of a theory of self-identification. In R. M. Sorrentino & E. T. Higgins (Eds.), *Handbook of motivation and cognition, Vol. 3: The foundations of social behavior* (pp. 118–147). New York, NY: Guilford.
- Schwartz, S. H., Verkasalo, M., Antonovsky, A., & Sagiv, L. (1997). Value priorities and social desirability: Much substance, some style. *British Journal of Social Psychology*, 36, 3–18. doi:10.1111/j.2044-8309.1997.tb01115.x.
- Sigmon, S. T., Pells, J. J., Boulard, N. E., Whitcomb-Smith, S., Edenfield, T. M., Hermann, B. A., ... Kubik, E. (2005). Gender differences in self-reports of depression: The response bias hypothesis revisited. *Sex Roles*, 53, 401–411. doi:10.1007/s11199-005-6762-3.
- Smith, P. B. (2004). Acquiescent response bias as an aspect of cultural communication style. *Journal of Cross-Cultural Psychology*, 35, 50–61. doi:10.1177/0022022103260380.
- Smith, P. B., & Bond, M. H. (1998). *Social psychology across cultures* (2nd ed.). Hemel Hempstead, U.K.: Harvester Wheatsheaf.
- Sorbring, E., & Gurdal, S. (2011). Attributions and attitudes of mothers and fathers in Sweden. *Parenting: Science and Practice*, 11, 177–189. doi:10.1080/15295192.2011.585565.
- Tangney, J. P., Baumeister, R. F., & Boone, A. L. (2004). High self control predicts good adjustment, less pathology, better grades, and interpersonal success. *Journal of Personality*, 72, 271–322. doi:10.1111/j.0022-3506.2004.00263.x.
- Tomlinson, M., Bornstein, M. H., Marlow, M., & Swartz, L. (in press). Imbalances in the knowledge about infant mental health in rich and poor countries: Too little progress in bridging the gap. *Infant Mental Health Journal*.
- Tourangeau, R., & Yan, T. (2007). Sensitive questions in surveys. *Psychological Bulletin*, 133, 859–883. doi:10.1037/0033-2909.133.5.859.
- Triandis, H. C. (1995). *Individualism and collectivism*. Boulder, CO: Westview Press.
- Trivers, R. L. (1974). Parent-offspring conflict. *American Zoologist*, 14, 249–264.
- Verardi, S., Dahourou, D., Ah-Kion, J., Bhowon, U., Tseung, C. N., Amoussou-Yeye, D., ... Rossier, J. (2010). Psychometric properties of the Marlowe-Crowne Social Desirability Scale in eight African countries and Switzerland. *Journal of Cross-Cultural Psychology*, 41, 19–34. doi:10.1177/0022022109348918.
- Watkins, D., & Cheung, S. (1995). Culture, gender, and response bias: An analysis of responses to the self-description questionnaire. *Journal of Cross-Cultural Psychology*, 26, 490–504. doi:10.1177/0022022195265003.
- Williams, J. E., Satterwhite, R. C., & Saiz, J. L. (1998). *The importance of psychological traits*. New York, NY: Plenum Press.
- Xinwen, B., Feng, L., & Yiwen, C. (2004). The measurement equivalence of social desirability. *Psychological Science (China)*, 27(5), 1083–1086.
- Zerbe, W. J., & Paulhus, D. L. (1987). Socially desirable responding in organizational behavior: A preconception. *Academy of Management Review*, 12, 250–264. doi:10.2307/258533.