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Children's social desirability: Effects of test assessment mode

Patricia H. Miller [a], Suzanne D. Baxter [b,*], Julie A. Royer [b,c], David B. Hitchcock [d], Albert F. Smith [e], Kathleen L. Collins [b], Caroline H. Guinn [b], Alyssa L. Smith [b], Megan P. Puryear [b], Kate K. Vaadi [b], Christopher J. Finney [b,c]

[a] Department of Psychology, San Francisco State University, San Francisco, CA 94132, USA
[b] Institute for Families in Society, College of Social Work, University of South Carolina, Columbia, SC 29208, USA
[c] South Carolina Revenue and Fiscal Affairs Office, Health and Demographics Section, Columbia, SC 29201, USA
[d] Department of Statistics, University of South Carolina, Columbia, SC 29208, USA
[e] Department of Psychology, Cleveland State University, Cleveland, OH 44115, USA

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ABSTRACT

This study examined a recently developed short version of the Children's Social Desirability (CSD-S) scale with 157 fourth-grade children. Of interest was (a) whether one-month test–retest reliability would vary as a function of test assessment mode (interview or classroom), gender, race, SES, and BMI percentile, and (b) whether the degree of social desirability would vary as a function of these same variables. The CSD-S scale showed good test–retest reliability for both interview and classroom assessment modes (.85 and .83, respectively). Internal consistency also was good (first interview administration = .84; first classroom administration = .81). Reliability was good and did not vary significantly over assessment mode or any child subgroup variables, suggesting that the CSD-S scale is appropriate for general use. The interview mode elicited significantly more socially desirable answers than did the classroom mode. Social desirability did not differ across child subgroups. Some of these findings were examined, and replicated, on another sample. Thus, the CSD-S scale may be used with diverse groups of children to (a) reliably assess a social desirability bias that may systematically bias other self-reports of interest to researchers and (b) examine individual differences in degree of social desirability.

1. Introduction

Social desirability refers to some people's tendency to present themselves in a positive light by over-reporting culturally approved positive behaviors and under-reporting negative behaviors (e.g., Crandall, Crandall, & Katkovsky, 1965; Crowne & Marlowe, 1960). Specifically, they may report that they *never* perform a behavior that most people perform at least occasionally or *always* perform a behavior that most people usually perform but omit occasionally (Paulhus, 1991). Social desirability in both adults and children is of interest for methodological and theoretical reasons, as well as for applications. Regarding methodology, a challenging issue is to ascertain whether research participants provide accurate answers rather than those approved by others. This is particularly an issue when assessing sensitive topics, such as eating unhealthy foods, overeating, or engaging in risky behaviors. It is plausible that people who over-report positive behaviors on a social desirability self-report assessment will also do so on the self-report of interest in the study. Thus, a social desirability bias makes it difficult to distinguish people with favorable traits or behaviors from those over-reporting them. Researchers can use a social desirability assessment to control for this bias when examining the self-report of interest or can eliminate participants who demonstrate a strong social desirability bias. Regarding theory, information about the tendency to report socially desirable behaviors is relevant to an understanding of individual differences and personality. Finally, practitioners can use information about social desirability to aid their interpretation of clients' behaviors.

The present study had two aims. Aim one was a methodological one—to examine one-month test–retest reliability of a recently developed short version of a social desirability scale for children, as a function of interview versus classroom assessment mode, gender, race, SES (socioeconomic status), and BMI (body mass index)

* Corresponding author. Tel.: +1 803 777 1824x12.
E-mail addresses: phmiller@sfsu.edu (P.H. Miller), sbaxter@mailbox.sc.edu (S.D. Baxter), royerj@mailbox.sc.edu (J.A. Royer), hitchcock@stat.sc.edu (D.B. Hitchcock), a.f.smith@csuohio.edu (A.F. Smith), colli239@mailbox.sc.edu (K.L. Collins), cguinn@mailbox.sc.edu (C.H. Guinn), smith335@mailbox.sc.edu (A.L. Smith), pricev@mailbox.sc.edu (M.P. Puryear), vaadi@mailbox.sc.edu (K.K. Vaadi), finneyc@mailbox.sc.edu (C.J. Finney).

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percentile. Aim two was a theoretical one—to examine the degree of social desirability bias shown as a function of these variables.

Researchers have developed questionnaires, such as the widely used Marlowe–Crowne Social Desirability scale, to detect social desirability response bias in adults (Crowne & Marlowe, 1960). The Children's Social Desirability (CSD) scale was developed in the 1960s (Crandall et al., 1965), with slightly different versions for younger (grades 3–5) and older (grades 6–12) children. The CSD scale for grades 3–5 has 46 yes/no items—for example, "Do you always listen to your parents?" and "Do you ever get angry?"—with a "yes" and "no" response, respectively, keyed as the socially desirable response. More socially desirable responses were given by younger children than by older children, by girls than by boys, by lower IQ children than by higher IQ children, by African American children than by European American children, and by children with lower than with higher academic achievement scores (Crandall, 1966; Crandall et al., 1965).

There has been a need for a shorter version of this 46-item scale for research conducted at schools. Limits on the amount of time that children can be removed from class, children's limited patience and attention, and researchers' primary interest in collecting other data make administration of the full CSD scale impractical.

Short versions of the CSD scale for older children (grades 6–12) and younger children (grades 3–5) have been developed for children in grades 6–9 (Carifio, 1994) and grade 4 (Baxter et al., 2004). The short version for younger children is particularly important because they tend to have higher social desirability scores (Carifio, 1994; Crandall, 1966), may have more trouble than older children sustaining attention, and are the target of many health intervention programs. The short version for younger children (CSD-S scale) was developed by drawing 14 items from the longer 46-item CSD scale (Baxter et al., 2004). The CSD-S scale has adequate test–retest reliability (.70) and adequate internal consistency (.82) in classroom assessment for children in grade 4 (Miller et al., 2014). Good external validity was shown, as fourth graders' social desirability scores were inversely related to their dietary reporting accuracy for school meals (comparing self-reports to direct observations of those meals) (Guinn et al., 2010).

One limitation of the CSD-S scale is that its psychometric properties have been examined only for classroom assessment. However, researchers often assess children in one-on-one interviews. Thus, the present study examined whether an interview assessment mode also provided adequate test–retest reliability for the CSD-S scale, and whether this reliability differed from that in a classroom assessment mode. Also of interest was whether the CSD-S scale showed adequate test–retest reliability for diverse subgroups of children formed by gender, race, SES, and BMI percentile, and whether their reliabilities differed. It is important to know reliabilities for subgroups of children other than middle class European Americans, because other groups often are the subject of research on health disparities. We examined BMI percentile, in addition to usual demographic variables, because of the considerable current interest in studying childhood obesity.

In addition to assessing one-month test–retest reliabilities and internal consistency in two assessment modes, the present study examined differences in the degree of social desirability as a function of assessment mode, gender, race, SES, and BMI percentile. Significant group differences would indicate that it is particularly important for researchers to include a social desirability assessment for certain populations. Moreover, any difference would increase knowledge of the contributors to individual differences in social desirability among children. Currently, there is little information about children's social desirability biases in non-white, low SES, and high BMI populations (but see Miller et al., 2014). The present study provides information about these possible group differences.

2. Method

2.1. Participants

During Spring, 2014, data were collected from 157 children (72 girls, 85 boys; mean age = 10 years, 1 month) from 21 fourth-grade classes at five schools (three urban and two rural) in four school districts in a southeastern U.S. state. This age was selected because the CSD-S scale was developed on a sample of this age. By fourth grade, children can read well enough to complete a questionnaire in a classroom or interview setting (though research staff read items to children in both assessment modes). The group was African American ($n = 79$), European American ($n = 65$), Hispanic ($n = 7$), and mixed ($n = 6$) (as reported by parents for school records). For statistical analyses, a combined Hispanic/mixed group ($n = 13$) was formed due to small sample sizes. The mean (± standard deviation) BMI percentile was 68.84 ± 29.96. Two BMI groups were formed: BMI at or above the 85th percentile ($n = 63$) is an expert committee's definition of "overweight or obese" for children (Barlow, 2007); the other group ($n = 94$) was below the 85th percentile. The low SES group ($n = 118$) was eligible for free/reduced-price meals (i.e., children from families with income less than 130% of the U.S. Department of Agriculture, Food and Nutrition Service poverty level were eligible for free meals and those from families with income between 130% and 185% of the poverty level were eligible for reduced-price meals). Children paying full meal price ($n = 25$) formed the other SES group. The study had university Institutional Review Board approval. Parents and children provided written consent and assent, respectively.

2.2. Assessments and procedure

The CSD-S scale (see Table 1) consists of 14 items from the 46-item CSD (see Baxter et al., 2004, and Miller et al., 2014, for development of the CSD-S scale and its psychometric properties). CSD-S scale scores can range from 0 to 14, with higher scores indicating a greater tendency to answer in a socially desirable manner. To calculate BMI, children's weight and height were measured twice by research staff in the morning immediately after the first CSD-S scale administration, using established procedures (Lohman, Roche, & Martorell, 1988; Maternal and Child Health Bureau of USDHHS, 2000). The Centers for Disease Control and Prevention's age/gender BMI charts were used to determine BMI percentiles (Kuczmarski et al., 2002).

2.3. CSD-S scale assessment modes and administrations

Classes within each school were randomly assigned to the interview or classroom assessment mode. For the interview assessment mode (10 classes; 77 children), one of three researchers total read each item aloud to individual children in a private location at school. Children were asked to respond "yes" or "no" verbally, and the researcher marked the answer given on the child's form. The CSD-S scale was administered again to the same children, in the same manner, by a different researcher, 28 to 32 days later. Each interview was audio-recorded. A non-interviewing researcher compared the audio-recording against the form for each child for each administration to ensure that each answer provided by the child was what the researcher had circled on the form.

For the classroom assessment mode (11 classes; 80 children), in each classroom, two of a total of three researchers distributed paper CSD-S scale forms. Researcher 1 read each item aloud while children followed along, and asked children to circle "yes" or "no" on their forms, while Researcher 2 walked around the classroom to