Psychometric Properties of the Social Desirability Scale-17 with Individuals on Probation and Parole in the United States

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Abstract

This research project investigated the reliability and validity of the Social Desirability Scale-17 (SDS-17; Stober, 1999, 2001) when used with a sample of adult men and women on probation or parole. Results reveal that the SDS-17 has strong internal consistency estimates, concurrent validity with the Marlowe-Crowne Social Desirability Scale and Minnesota Multiphasic Personality Inventory − 2 L Scale, and test re-test reliability over a three week period. Information is provided to aid evaluators' interpretation of the SDS-17 when used with adult men and women on probation or parole.

Keywords: Social Desirability, Impression Management, Response Management, Reliability and Validity, Fake Good.

Introduction

Social desirability is the tendency to give biased, distorted, and overly positive self-descriptions that portray oneself in a way that can make a favorable impression on others (Paulhus, 2002). Individuals who present themselves in a socially desirable manner attempt to appear overly virtuous by denying common yet undesirable traits or characteristics, and/or exaggerating uncommon but desirable traits. Social desirability has long been identified as a potential contaminate of self-report information, particularly from individuals on probation or parole where there is often a strong motivation to present oneself in a virtuous way (Crowne & Marlowe, 1960; Tatman & Schouten, 2008; Tatman, Swogger, Love, & Cook, 2009). For example, many convicted offenders have a propensity to paint a highly moral and righteous picture of self as a way to gain favor with their probation/parole officer (PPO), counselor, or evaluator, making a formal assessment of social desirability an important component of any clinical interview or evaluation.

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Theory driving the use of a measure of social desirability concurrent with clinical interviews or psychological assessments asserts that such instruments provide supporting evidence for the validity of results obtained from simultaneously administered interviews and testing tools (Paulhus, 2002). For example, if a person exhibits elevated response bias on a social desirability scale, the validity of results from his or her simultaneously administered Level of Service Inventory-Revised (Andrews & Bonta, 1995) or pre-sentence investigation interviews should be in question.

The Marlowe-Crowne Social Desirability Scale (MCSDS; Crowne & Marlowe, 1960) has been identified as arguably the most frequently used and researched measure of social desirability (Beretvas, Meyers, & Leite, 2002). However, a critique of the MCSDS is that the items are rather dated, and potentially incorporate culturally bound referents (Stober, 1999, 2001; Ballard, Crino, & Rubenfeld, 1988). Stober (1999) developed the Social Desirability Scale-17 (SDS-17) in an attempt to address these limitations. The SDS-17 contains items with more contemporary referents and phrasing, while also being free of psychopathological implications. The SDS-17 was originally a 17 item, true-false scale. However, after subsequent research, one item was dropped due to poor internal consistency, resulting in the currently used 16-item version (Stober, 2001). The SDS-17 has since been found to be a statistically reliable and valid measure of social desirability. Stober (1999, 2001) measured the psychometric properties of the SDS-17 with German samples and found it had strong internal consistency, test–retest reliability, as well as concurrent validity with the MCSDS, the Eysenck Personality Questionnaire- Lie Scale (EPQ; Eysenck & Eysenck, 1991), and the Balanced Inventory of Desirable Responding (BIDR; Paulhus, 1994). Stober (1999) also found that the SDS-17 had strong 4 week test-retest reliability when used with a German sample. Blake, Valdiserri, Neuedorf, and Nemeth (2006) expanded on Stober's research by conducting a variety of studies to measure the psychometric properties of the SDS-17 with a United States sample. Blake et al., (2006) found that the SDS-17 had strong internal consistency with United States samples, and showed strong convergent validity with the MCSDS and BIDR.

Although the SDS-17 has been shown to be a valid and reliable tool for measuring social desirability in both German and United States samples, existing research has been on community samples. Psychometric data on the SDS-17 with individuals on probation or parole have yet to be developed. Like any evaluation tool, the SDS-17's validity, and therefore utility, is limited by the availability of norms from the population with which it is administered. Therefore, the purpose of this study was to examine the psychometric properties of the SDS-17 when used with individuals on probation or parole. Therefore, we asked the following research questions:

1. What is the SDS-17's internal consistency when used with a sample of adult probationers and parolees?
2. What is the SDS-17's test-retest reliability over a three week period when used with a sample of adult probationers and parolees?
3. Does the SDS-17 have adequate concurrent validity with the Marlowe Crown Social Desirability Scale (MCSDS) when used with a sample of adult probationers and parolees?
4. Does the SDS-17 have adequate concurrent validity with Minnesota Multiphasic Personality Inventory – 2 (MMPI-2) validity scales L, K, and S when used with a sample of adult probationers and parolees?

Method

Main Samples of the Study

Participants in this study consisted of 852 offenders on probation or parole supervision in a metropolitan, Midwestern city. Participants completed the SDS-17 as part of a larger intake packet and screening battery completed by all probationers and parolees entering the correctional system in the authors' judicial district. Of the 852 offenders 646 (76%) were males and 204 (24%) were females. Two participants did not identify gender. Results from the independent-samples t-test revealed no significant differences in SDS-17 scores between males (M = 10.83, SD = 4.54) and females (M = 10.81, SD = 4.62; t(850) = .05, p = .96). Racial composition consisted of 630 (74%) Caucasian, 140 (16.5%) African American, 64 (7.5%) Hispanic, and 9 (1%) Asian offenders. Nine participants did not identify race. Results from a one-way between-groups ANOVA revealed no significant difference in SDS-17 scores between the various racial groups (F(3, 848) = 1.0, p = .374). Participants ranged in age from 17 to 71, with a mean age of 32.70 (SD = 11.96), and a median age of 30.

Results

a. Research Question 1

Method and Results

In order to answer research question 1 "What is the SDS-17's internal consistency when used with a sample of adult probationers and parolees?" a Cronbach alpha was calculated. The mean SDS-17 for this sample of 852 offenders was 11.47 (SD = 3.17). The Cronbach alpha obtained in this sample was .76, suggesting that the SDS-17 has adequate internal consistency (i.e., reliability) when used with a sample of adult probation and parolees.

Also for **Research Questions 2-4**, Sub-samples were created from the original 852 offender population to answer the following research questions due to the variation of assessments used, and reporting frequency observed in this population. For example, not every offender supervised in the authors' district naturally complete the same instruments (e.g., MMPI-2), or report to their probation or parole officer at the same frequency. Information is provided below about the demographics of each sub-sample.

b. Research Question 2

Methods and Participants

In order to answer research question 2 "What is the SDS-17's test-retest reliability over a three week period when used with a sample of adult probationers and parolees?" a three-week test re-test methodology was used. A sub-sample was taken from the initial sample listed above due to the varying frequency at which offenders return to see their probation or parole officer. For example, high risk offenders return weekly or bi-weekly, while lower risk offenders could see their supervising officer every 4 to 6 months. Therefore, we chose to use offenders participating in weekly, Court ordered, community-based treatment group (e.g., sex offender or batterer's education) to address this particular research question.

The initial administration resulted in a sample size of 233 adult probationers and parolees. However, as a result of some offenders choosing not to participate in the second administration, some being absent during the second administration, or probation or parole revocation, the final sample size was reduced to 136 participants who completed

both administrations. This final sample consisted of 119 (87.5%) males and 17 (9.9%) females. The total sample had a mean age of 37.3 (SD = 15.88). The racial composition consisted of 97 (74%) Caucasian, 21 (16%) African American, 11 (8.4%) Hispanic, 1 (.8%) Asian, and 1 (.8%) African participants. Five participants did not identify race.

Results

The initial administration of the SDS-17 generated a mean score of 10.02 (SD = 3.64). The three week, re-test mean score was 10.04 (SD = 3.31). A Pearson correlation was conducted to measure test-retest reliability. Results from the test-retest analysis revealed that the two administrations were strongly correlated (r = .812, *p* < .000), suggesting that the SDS-17 has strong reliability over a 3 week period.

c. Research Question 3

In order to answer research question 3 "Does the SDS-17 have adequate concurrent validity with the Marlowe Crown Social Desirability Scale (MCSDS) when used with a sample of adult probationers and parolees?" a second sub-sample was taken from this larger population of 852 offenders described above. The MCSDS was naturally administered to offenders entering cognitive-behavioral programming in the authors' district, resulting in the authors using this natural subset of offenders to answer this particular research question. This sub-sample consisted of 156 adult probationers and parolees, which included 143 (92.3%) males and 12 (7.7%) females. One participant did not identify gender. The total sample had a mean age of 36.85 (SD = 13.72). The racial composition consisted of 107 (78.1%) Caucasian, 21 (15.3%) African American, and 9 (6.6%) Hispanic participants. Nineteen participants did not identify race.

Measure

The MCSDS is a 33–item self-report questionnaire which uses a forced choice, True – False format for responding to items. Total scores range from zero (low) to 33 (high social desirability). The MCSDS has been identified as the most frequently used tool in clinical and research settings for measuring social desirability (Beretvas et al., 2002). It has undergone extensive research, being listed in over 1,000 articles and dissertations (Beretvas et al.), and has been normed and found to be valid and reliable in correctional settings (Tatman**,** & Schouten, 2008; Tatman**,** Swogger, Love & Cook, 2009).

Methods and Results

This sub-sample produced a mean SDS-17 score of 9.83 (SD = 3.58), and a mean MCSDS scale score of 19.22 (SD = 5.75). Internal consistency for the MCSDS full scale was .72, which was significantly reduced by item 1: "Before voting I thoroughly investigated the qualifications of all the candidates". When item 1 was excluded the Cronbach alpha rose to .83. Therefore, given that our offender population can not vote, and therefore was skewing MCSDS results, we excluded it from the rest of the calculations, resulting in a 32 item MCSDS. A Pearson correlation revealed a significant, positive relationship between the SDS-17 and the 32–item MCSDS (r = .73, *p* < .000).

d. Research Question 4

Participants

In order to answer research question 4 "Does the SDS-17 have adequate concurrent validity with Minnesota Multiphasic Personality Inventory – 2 (MMPI-2) validity scales L, K, and S when used with a sample of adult probation and parolees?" a sub-sample of 69 sexual offenders were taken from the larger, 852 offender population sample. These 69 offenders were selected due to their completion of both the SDS-17 and MMPI-2 as a natural part of a comprehensive psychological evaluation used to help guide treatment recommendations and supervision direction for this subset of offenders. Sixty-eight (99%) participants were male, while 1 (1%) was female. Fifty five participants (79.71%) were Caucasian, 6 (8.70%) were African American, and 4 (6.80%) were Hispanic. Four participants did not identify race. Participants ranged in age from 19 to 70, with a mean age of 38.41 (SD = 15.12).

Measures

MMPI-2 L, K, and S scale scores were used in relationship to SDS-17 scores to measure concurrent validity. The MMPI-2 has been established as one of the most researched and utilized personality assessment instruments. The L, K, and S scales are a group of MMPI-2 validity scales that help measure an examinee's level of impression management, degree of defensiveness, and exaggeration of psychological health while responding to test items, respectively. More specifically, the L-scale assesses honest or frank response tendencies, and is commonly known as the "lie scale" or the "faking good" scale. Research has clearly demonstrated that the L-scale is a reliable and valid measure of an individual's tendency to minimize personal limitations and exaggerate personal virtues (Friedman, Lewak, Nichols, & Webb, 2001). The K-scale has been found to be a valid and reliable measure of an individual's tendency to endorse items in a defensive manner, or with a degree of denial regarding personal flaws and faults (Friedman et al., 2001). The S scale (Butcher & Han, 1995) measures the degree to which an individual feels they are mentally healthy, content in their life, and have the ability to get along effectively with others. Although many people feel they possess these characteristics, few will endorse all of them to a high degree. High scores on the S scale suggest that the individual's claims of superlative adjustment are likely exaggerated.

Results

The mean SDS-17 for this sub-sample was 9.23 (SD = 3.27). Concurrent validity was measured by conducting Pearson correlations between the SDS-17 and the MMPI-2 scales. Pearson correlations revealed a significant, positive relationship between SDS-17 scores and the MMPI-2 validity scale L ($r = .38$, $p < .001$), supporting the SDS-17's concurrent validity with a conceptually similar measure of social desirability. However, the present findings reveal that the SDS-17 was not significantly correlated with validity scale K ($r = .013$, $p = .91$) or S ($r = .13$, $p = .31$). This suggests that the SDS may be more sensitive to obvious attempts to present positive impression, a "faking good" response style, and an exaggeration of personal morals and virtues, than to more subtle defensiveness and exaggeration of psychological health.

Discussion and Conclusion

This research project investigated the psychometric properties of the SDS-17 when used with a sample of convicted adult males and females on probation and parole. Results reveal that the SDS-17 is a reliable and valid measure of social desirability when used with individuals on probation and parole. Results from this study found no significant differences in SDS-17 scores between men and women. Results also revealed no significant differences in SDS-17 scores between the Caucasian, African American, Hispanic, or Asian participants. Results further reveal that the SDS-17 has strong internal consistency and test-retest reliability over a 3 week period, when used with adults on probation or parole. Consistent with existing research (Stober, 2001), this study also supports the SDS-17's concurrent validity by showing strong correlations with the MCSDS and the MMPI-2 L "Lie" scale. However, the present findings reveal that the SDS-17 was not significantly correlated with validity scale K or S. This non-significant relationship between the SDS-17 and the K scale suggests that the SDS-17 may not be a sensitive measure of subtle defensiveness, general guardedness, or an exaggeration of emotional control and poise. In relation to the S scale, this non-significant relationship with SDS-17 scores may actually support the SDS-17's construct validity. Stober (1999) developed the SDS-17 to be a measure of social desirability free of psychological implications. The MMPI-2's S scale, on the other hand, measures an individual's perception about their overall psychological health, perceived mental stability, serenity, freedom from impatience, and as a result is heavily influenced by psychological implications. Therefore, this non-significant relationship with the S scale may suggest that the SDS-17 has limited sensitivity to exaggerations of psychological health and wellbeing, supporting that the SDS-17 is a measure of social desirability independent of psychopathology.

Results generated from this research would support the use of the SDS-17 within a comprehensive evaluation battery, or as part of a structured interview process, to assess the degree to which offenders are attempting to respond to interview questions or test items in a socially desirable manner. Probation and parole officers (PPOs) may also find that using the SDS-17 could provide an objective, empirical measure of social desirability that can be used during the initial and subsequent meetings with clients. Identifying a trend of social desirable self-reporting at the start of the PPO-client relationship could enable the PPO to confront this presentation style and address it in a therapeutic way before it has a chance to crystallize and set the stage for future PPO-client interactions. A second benefit to using a designated assessment of social desirability is that it can provide a measure of validity for other assessments administered during a more comprehensive evaluation. Individuals who self-report in a socially desirable way on one instrument will more then likely self-report in a similar way on other assessments administered in the evaluation (Paulhus, 2002). A limitation of many of the self-report measures used by PPOs (e.g., Level of Service Inventory-Revised or Criminal Sentiment Scale) is a lack of validity scales for impression management, making them highly susceptible to distortion through response management. Based on results obtained in this research, the SDS-17 could provide PPOs with an external, and objective, evaluation of their client's self-reported information provided on commonly used measures of risk and criminogenic needs.

The SDS-17 has an advantage over other, similar measures of social desirability (e.g., the Marlowe-Crowne Social Desirability Scale (MCSDS) or The Balanced Inventory of Desirable Responding) due to its brevity and public domain access. This makes the SDS-

17 a relatively quick and inexpensive measure of social desirability. However, the countering argument to this is that the SDS–17 is rather limited in its scope of focus as compared to these aforementioned tools by measuring a single, broad construct of social desirability rather than multiple, and more specific, domains. For example, the MCSDS has 2 distinct factors (Attribution and Denial) which help allow examiners to decipher if elevations on social desirability are due to the individual's propensity to endorse items depicting socially approved, but uncommon, behaviors (i.e., Attribution) or the tendency to deny socially disapproved, but common, behaviors (i.e., Denial). However, if users are interested in a brief, yet general, assessment of an individual's level of social desirability then the SDS–17 would be quite fitting for this purpose.

Table 1. *SDS–17 Percentile Scores and Score Rankings*

SDS-17 Score	Percentile	Score Ranking
0	< 1	Very Low
1	< 1	Very Low
2	1	Very Low
3	2	Very Low
4	4	Low
5	7	Low
6	11	Low
7	18	AVERAGE
8	27	AVERAGE
9	37	AVERAGE
10	48	AVERAGE
11	60	AVERAGE
12	71	AVERAGE
13	80	AVERAGE
14	87	High
15	92	High
16	96	High

Note. Table 1 percentile scores were developed from the overall average mean (10.12) and standard deviation (3.39). Score Rankings were developed based on rounded averages (10) and standard deviations (3).

This paper also provides normative data from which interpretations of SDS–17 scores can be made for this specific sample population. Table 1 provides percentile scores and score rankings based on the overall mean and standard deviation scores (M = 10.12, SD = 3.39) obtained in this project in order to help readers interpret SDS–17 scores when used with individuals on probation and parole. Based on data outlined in Table 1, readers can find that an individual who generates a SDS–17 score of 14, for example, falls 1.13 standard deviations from the mean, and therefore scores higher then about 87% of other probation and parolees. In order to further aid interpretation of scores, Table 1 also provides a ranking system we developed from rounding the overall mean and standard deviation scores (M = 10, SD = 3) listed above. This ranking system will help users

visualize where a particular score falls, in comparison to the mean and standard deviation. For example, a SDS-17 score of 15 would be considered a High SDS-17 score compared to other adult offenders, and suggestive of significant social desirability on the part of the examinee.

Limitations and Future Research

A potential limitation of this research is that the sample composition was comprised largely of Caucasian participants. Although the ratio of Caucasian to non-Caucasian participants closely fit the natural ratio of clientele in the Iowa Department of Correctional Services' Fifth Judicial District, it may not be representative of populations from other jurisdictions containing a greater concentration of minority offenders. Therefore, additional research is recommended on social desirability in non-Caucasian probationers and parolees in order to help support results generated within this study. A second limitation of this study is that the sample populations used in this study was comprised entirely of offenders on community-based supervision (i.e., offenders on probation or parole). Although that was the intention of this study, results generated may not generalize to a sample of offenders incarcerated in prison. Given the structural environment of prison, the option of receiving "good time," and other institutional privileges, arguments could be made that incarcerated offenders may endorse items in a more socially desirable way on the SDS-17. However, arguments could also be made that individuals on probation and parole have similar reasons and incentives as prisoners for responding in a socially desirable manner, and therefore would likely score quite similar. Needless to say, further research is recommended in this area.

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