

Psychometric Properties of the Marlowe-Crowne Social Desirability Scale
with Adult Male Sexual Offenders

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Abstract

This research project investigated the factor structure, reliability and validity of the Marlowe-Crowne Social Desirability Scale (MCSDS; Crowne & Marlowe, 1960) when used with a sample of convicted, adult male sexual offenders. Results confirm the two factor structure (Denial and Attribution) originally proposed by the authors (Study 1, $n = 247$). Results also reveal that the full scale MCSDS has strong internal consistency estimates (Study 1), discriminant and convergent validity (Study 2, $n = 91$), and test re-test reliability over a three week period (Study 3, $n = 74$). Information is provided to aid evaluators' interpretation of MCSDS full scale and factor scores when used with male adult sexual offenders.

Key words: Social desirability, sex offender, Marlowe-Crowne Social Desirability Scale, impression management, factor structure, test-retest, reliability and validity, fake good

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Social desirability is the tendency to give overly positive self-descriptions (Paulhus, 2002). Individuals who present in a socially desirable manner attempt to appear overly moral, honorable, and virtuous by denying common yet undesirable traits (e.g., jealousy or anger), and/or exaggerating uncommon yet desirable traits (e.g., never being late or never lying to others) (Crowne & Marlowe, 1960). Self-report is susceptible to social desirability, which can significantly impact the validity of information obtained during clinical interviews or psychological assessments. Given the nature of crimes committed by sex offenders, and the fear, shame and guilt often resulting from their offense(s), sexual offenders often deny significant elements of the crime, justify or rationalize their behavior, deflect culpability, and/or minimize the severity of their actions. Sexual offenders, like many convicted offenders, also have a propensity to paint a highly virtuous picture of themselves 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 a clinical interview or evaluation.

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 Rape Myth Acceptance Scale (Burt, 1980) or Wilson Sexual Fantasy Questionnaire (Wilson, 1978), should be in question. Research has also suggested that social desirability may represent an underlying personality trait, rather than a situationally determined response style, and therefore does not

undercut the validity of self-report information (McCrae & Costa, 1983; Mills, Loza, & Kroner, 2003). Paulhus (1984, 2002), on the other hand, takes a both/and perspective and suggests that the tendency to respond in social desirable ways may stem from an underlying psychological trait and conscious motives. However, regardless of whether an offender responds in a socially desirable way consciously in attempts to obtain special privileges or early discharge, for example, or unconsciously as a result of self-deceptive denial, the tendency to respond in such a way remains an important piece of information. By formally assessing social desirable responding PPOs, counselors, and evaluators can identify if there is at least an indication of response management and devote treatment efforts to rule out whether it stems from conscious intentions or unconscious self-denial, for example.

Of the instruments available that assess social desirability, the Marlowe-Crowne Social Desirability Scale (MCSDS; Crowne & Marlowe, 1960) has been the most frequently used in clinical and research settings (Beretvas, Meyers, & Leite, 2002). Several features of the MCSDS make it an appealing instrument for both research and clinical application. It has undergone extensive research, being listed in over 1,000 articles and dissertations (Beretvas et al., 2002), has been normed and found reliable in forensic evaluations (Andrews & Meyer, 2003), used as a measure of defensiveness in medical research (Deshields, Tait, Gfeller, & Chibnall, 1995; Mann & James, 1998), is a self-report instrument that can be easily and quickly administered, and exhibits acceptable reliability and validity in a number of different samples (Davis & Cowles, 1989; Loo & Thorpe, 2000). The MCSDS is also a public domain instrument, making it cost effective for users. A number of factor analyses have been conducted on the MCSDS, producing a variety of shortened versions (Reynolds, 1982; Strahan & Gerbasi, 1972). Although some research has shown that these shortened versions demonstrate adequate factor structure (Fischer

& Fick, 1993; Thorpe, 2000), not one has been consistently identified as being superior to the others. Therefore, the full scale MCSDS remains the recommended measure for both clinical and research purposes (Loo & Thorpe, 2000). Research devoted to investigating the factor structure of the MCSDS has produced mixed results. While some researchers have found that the MCSDS fails to fit a one or two factor model and therefore propose that the instrument measures a variety of different constructs (Ballard, 1992; Leite & Beretvas, 2005), many findings support the two factor structure originally proposed (Loo & Loewen, 2004; Loo & Thorpe, 2000; Ramanaiah, & Martin, 1980; Ramanaiah, Schill, & Leung, 1977).

Despite the MCSDS's availability and extensive research history, we are aware of only a few studies that documented psychometric data for the MCSDS when used with sexual offenders (Allan, Grace, Rutherford, & Hudson, 2007; Cortoni & Marshall, 2001; Hayashino, Wurtle, & Klebe, 1995; Pervan & Hunter, 2007). Psychometric data provided within this existing research, however, consists primarily of means and SDs. For example, Hayashino et al. (1995) reported MCSDS mean and standard deviation (SD) scores of 18.59 and 7.53, respectively, for incest offenders, a mean of 13.52 and SD of 5.6 for extrafamilial offenders, and a mean score of 14.24 and SD of 6.27 for a sample of rapists. Pervan and Hunter (2007) found similar mean scores for rapists (16.2) and child molesters (16.0). Allan et al (2007) also found MCSDS mean and standard deviation scores of 16.38 and 5.94, respectively, for a sample of adult males convicted for sexual offenses against children under 16 years of age. Only one study was found that reported MCSDS internal consistency estimates for sexual offenders ($\alpha = .77$; Cortoni & Marshall).

Like any evaluation tool, the MCSDS's validity, and therefore utility, is limited by the availability of norms from the population with which it is administered. For example, even if the

MCSDS is found to be reliable and valid with one population (e.g., college students), norms would be needed for male adult sexual offenders in order to provide valid and reliable interpretations with this specific population. Despite a number of studies utilizing the MCSDS with sex offenders, we were unable to locate research on the factor structure and validity of the MCSDS when used with this specific sample population, and only one study reporting internal consistency (i.e., reliability; Cortoni & Marshall, 2001). Therefore, we sought to answer the following research questions:

1. Does the two factor structure (Attribution and Denial), originally proposed by Crowne and Marlowe (1960), fit a sample of adult male sex offenders (Study 1)?
2. What is the internal consistency (reliability) of the full scale MCSDS, as well as its two factors, Attribution and Denial, when used with a sample of adult male sex offenders (Study 1)?
3. Does the MCSDS have adequate concurrent validity with other well known measures of social desirability, and discriminant validity against measures of symptom exaggeration or self-deprecation (concepts theoretically opposite from that of social desirability) when used with a sample of adult male sex offenders (Study 2)?
4. Does the MCSDS demonstrate adequate test-retest reliability over a three week period when used with a sample of adult male sex offenders (Study 3)?

Study 1

Study 1 will answer research question 1: “Does the two factor structure (Attribution and Denial), originally proposed by Crowne and Marlowe (1960), remain with a sample of adult male sex offenders” Study 1 will also answer research question 2: “What is the internal consistency

(reliability) of the full scale MCSDS, as well as its two factors, Attribution and Denial, when used with a sample of adult male sex offenders?”

Method

Participants

Participants for Study 1 consisted of 247 adult males who were convicted of a sexual offense, and who completed the MCSDS as a component of their community-based, sex offender treatment. Participants were convicted of crimes against children (e.g., Incest, Indecent Contact with a Child, Sexual Abuse, Sexual Exploitation of a Minor, Child Endangerment, Lascivious Act with a Child, and Enticing Away a Minor; $n = 131$), Registry Violations ($n = 54$), Indecent Exposure ($n = 17$), drug possession or Operating While Intoxicated ($n = 10$), Assault or Domestic Abuse ($n = 12$), and other charges such as Burglary, Forgery, weapons charges, Invasion of Privacy, and Larceny ($n = 23$). It should be noted here that all participants involved in this research project were convicted of a sexual crime, despite the charge listed above. For example, those individuals currently on probation for drug charges or Domestic Abuse had a previous sexual abuse conviction; however, were either not required to complete sex offender treatment at the time of that original sex charge, or were deemed by sex offender treatment staff as requiring additional sex offender treatment as a result of their current charge. Two hundred and twenty participants were Caucasian, 8 were African American, 2 were Hispanic, 3 were Asian, and 3 were Hawaiian. Ages ranged from 18 to 69, with a mode of 21 and a mean age of 34.

Measure

Social desirability was measured with the MCSDS (Appendix). 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 two

factors: Attribution and Denial. Eighteen items make up the Attribution subscale, which addresses an individual's propensity to endorse items depicting socially approved, but uncommon, behaviors. A sample Attribution item is "I never hesitate to go out of my way to help someone in trouble." Fifteen items make up the Denial subscale, which addresses the tendency to deny socially disapproved, but common, behaviors. A sample Denial item is "There have been times when I was quite jealous of the good fortune of others." Crowne and Marlowe (1960) revealed an internal consistency coefficient of .88, and one month test-retest correlation of .89. Subsequent research found the MCSDS to have adequate reliability and validity (Beretvas et al., 2002; Loo & Thorpe, 2000). One study was identified that indicated that the MCSDS has adequate internal consistency with a sample of sex offenders (.77; Cortoni & Marshall, 2001).

Procedure

In order to answer research question 1, a confirmatory factor analysis (CFA) was conducted on all 33 items using LISREL 8.80. The Root Mean Square Error of Approximation (RMSEA) and the chi-square to degrees of freedom ratio fit indexes were computed. In regard to research question 2, Cronbach alpha scores were calculated.

Results and Discussion

The MCSDS mean for this study's sample of 247 sexual offenders was 17.20, with a SD of 6.20. The mean Attribution factor score was 10.09, with a SD of 3.63, while the mean Denial factor score was 7.11, with a SD of 3.43. These findings are similar to existing research with sex offenders (Hayashino et al., 1995; Pervan & Hunter, 2007), however significantly differ from results obtained from a sample of 793 males administered the MCSDS as a part of a forensic evaluation (Andrews & Meyer, 2003). Results from the present study were compared with those generated from Andrews and Meyer (mean = 19.03, SD = 6.35), revealing a significant difference

between the two samples (two tailed $t = 3.98$; $df = 1038$; $p > .0001$). This significance difference may imply that MCSDS scores are dramatically influenced by the context in which the instrument is taken, and therefore provides added support for social desirability being a situationally controlled response style, rather than an underlying personality trait.

RMSEA values below .08 indicate an adequate fit with the tested factor structure (Brown & Cudeck, 1993). Results obtained from the CFA gave a RMSEA value of .053, suggesting that the original two-factor structure proposed by Crowne and Marlowe (1960) is an adequate fit with our sample of adult male sexual offenders. Chi-square to degrees of freedom ratio values below 2.0, a conservative cutoff, or 5.0, a more liberal cutoff, indicate acceptable fit with the hypothesized factor structure (Byrne, 1989, Carmines & McIver, 1981; Marsh & Hocevar, 1985). Chi-square to degrees of freedom ratio results generated a ratio of 1.7, indicating that the data is an adequate fit with the tested factor structure, and therefore further supporting the MCSDS's two factor structure when used with adult male sex offenders. Results generated from this study are consistent with prior research supporting the MCSDS's two factor structure (Loo & Loewen, 2004; Loo & Thorpe, 2000; Ramanaiah, & Martin, 1980; Ramanaiah, Schill, & Leung, 1977).

Cronbach alpha (internal consistency) scores of .85 were generated for the MCSDS, .76 for the Attribution factor, and .78 for the Denial factor. These results indicate that the full scale MCSDS, as well as its two factors, have adequate internal consistency when used with a sample of adult male sexual offenders. These findings are similar to existing research which generated alpha scores ranging from .72 to .88 for the full scale MCSDS (Cortoni & Marshall; Crowne & Marlowe, 1960; Loo & Thorpe, 2000), .56 for the Attribution factor and .63 for the Denial factor (Ramanaiah et al., 1977).

Study 2

Study 2 was conducted to answer research question #3: “Does the MCSDS have adequate concurrent validity with other well known measures of social desirability, and discriminate validity against measures of symptom exaggeration or self-deprecation (concepts theoretically opposite from that of social desirability) when used with a sample of adult male sex offenders?”

Method

Participants

Participants for Study 2 consisted of 91 adult male sexual offenders from Study 1 who were administered a comprehensive psychosexual evaluation as a component of their community-based, sex offender treatment. Given that not all individuals who entered sex offender treatment received a psychosexual evaluation with our department (due to having one completed in prison or at an earlier date), not all participants from Study 1 were able to be included in Study 2. Eighty-six participants were Caucasian, 3 were African American, and 2 were Asian. Participants ranged in age from 18 to 69, with a mean age of 35, and a mode age of 40. Eighty-five participants were convicted of crimes against minors, 4 were charged with registry violations, while 2 were charged with Indecent Exposure.

Measures

MCSDS. Please refer to Study 1 for specific information on the MCSDS.

MMPI-2 scores were used in relationship to MCSDS scores to determine convergent and discriminant validity. The MMPI-2 has been established as one of the most researched and utilized personality assessment instruments. In addition to 10 clinical scales, the MMPI-2 has a number of validity scales that investigate a participant’s response style, level of honesty and openness when responding, and degree of consistency in their responses. 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 detects an individual’s tendency to endorse items in a defensive manner, or with a degree of denial regarding personal flaws and faults. Research has also found the K-scale to be a reliable and valid measure of defensiveness (Friedman et al., 2001). The MMPI-2 also contains validity scales that detect a person’s tendency to exaggerate negative attributes or self-deprecate. Scale F is one such scale, and is often referred to as the “faking bad” scale. Scale F specifically detects the degree to which individuals consciously attempt to portray themselves in a self-deprecating and pathological manner. Similar to scales L and K, scale F has been extensively researched and shown to have strong reliability and validity (Friedman et al.).

Procedure

Concurrent validity was assessed by conducting Pearson correlations between MCSDS full scale scores and MMPI-2 scales L and K. Discriminate validity was evaluated by conducted Pearson correlations between MCSDS full scale scores with the MMPI-2 F scale.

Results and Discussion

Pearson correlations revealed significant, positive relationships between MCSDS scores and the MMPI-2 validity scales L ($r = .535, p < .01$) and K ($r = .236, p < .05$). The present findings suggest that, although the MCSDS is correlated with scales assessing both virtuous responding (i.e., scale L; faking good) and defensiveness (i.e., scale K), it may be more sensitive to faking good response styles, a need of approval, agreeableness, self-deceptive denial, and exaggeration of personal morals and virtues. These results are quite similar to those proposed by

Crowne and Marlowe (1960), who found significant, positive correlations between the MCSDS and the original MMPI scale L ($r = .54, p < .01$) and scale K ($r = .40, p < .05$).

Discriminate validity was established by results revealing a significant, negative correlation between MCSDS total scores and the MMPI-2 F scale ($r = -.33, p < .01$). This finding is also similar to that found by Crowne and Marlowe (1960) ($r = -.36, p < .05$). As expected, this result suggests that the MCSDS, a measure of social desirability, is significantly different than a well known, empirically validated scale measuring self-deprecation and symptom exaggeration.

Study 3

Study 3 will answer research question 4: “Does the MCSDS demonstrate adequate test-retest reliability over a three week period, when used with a sample of adult male sex offenders?”

Method

Participants

The sample for Study 3 originally consisted of 80 adult males convicted of a sex offense and who were involved in community-based sex offender treatment. The final sample, however, was reduced from 80 to 74 participants due to 4 participants’ probation being revoked and 2 participants discharging their sentence. This final sample had a mean age of 35, ranging from 19 to 67. Sixty-nine individuals were Caucasian, 3 individuals were Hawaiian, and 2 were African American. Participants consisted of adult males convicted of sexual crimes against children ($n = 44$), registry violations ($n = 19$), Sexual Abuse against an adult ($n = 5$), and other crimes (Indecent Exposure, Burglary, and drug possession) ($n = 6$).

Procedure

A three-week test re-test methodology was used in this study. Both administrations occurred while the offenders were completing their community-based treatment.

Results and Discussion

The initial administration of the MCSDS generated a mean score of 16.49 with a SD of 6.63. The three week, re-test mean score was 17.05, with a SD of 7.14. A test-retest correlation of .89 ($p < .01$) was generated, indicating strong test-retest reliability. Results from this reliability analysis are consistent with existing research, which have reported a coefficients of .86 for a test re-test interval of more than 1 month (Beretvas et al., 2002) and .89 for a one month interval (Crowne & Marlowe, 1960).

General Discussion

This research project investigated the psychometric properties of the MCSDS when used with a sample of convicted adult male sex offenders completing community-based treatment. Global results confirmed that the original two factor structure of the MCSDS is an adequate fit with a sample of adult male sex offenders, and that the MCSDS is a reliable and valid measure of social desirability for this specific sample.

Results from this project would support the use of the MCSDS within a comprehensive evaluation battery, or as part of a structured interview process, to assess the degree to which sexual offenders are attempting to respond to interview questions or test items in a socially desirable manner. This study also provides normative data from which interpretations of MCSDS full scale and factor scores can be made for this specific sample population. Despite its over 40 years of use, the authors were unable to locate guidelines or recommendations for what constitutes a low, medium or high score on the MCSDS. Therefore, Table 1 lists percentile

scores in order to help readers interpret MCSDS total and factor scores when used with male sex offenders involved in community-based treatment. Based on data outlined in Table 1, readers can find that an individual who generates a MCSDS full scale score of 28 scores higher than about 97% of other adult male sex offenders. Table 1 also provides a ranking system we developed from mean and SD scores generated from Study 1 to further help readers use and interpret MCSDS scores. This ranking system will help users visualize where a particular score falls, in comparison to the mean and SD. For example, a MCSDS full scale score of 28 is one SD above the mean, and based on our suggested classification system, would be considered a High MCSDS score compared to other adult male sexual offenders.

Consistent with Loo and Loewen (2004), results from this study should encourage readers to use the two MCSDS factors (Attribution and Denial) in addition to their interpretations of the full scale. Table 1 provides readers with information on how to interpret these specific factors. Separate interpretation of these factors is recommended in order to obtain additional information about the client's specific pattern of responding. For example, readers can see that a MCSDS score of 17 would place a client within the Average range of responding, and therefore not considered to be exhibiting above average social desirability. A more detailed investigation into this particular client's factor scores, however, could reveal that 15 of his points came from the Attribution factor. High scores on the Attribution factor would indicate an exaggeration of social status, intellectual abilities, emotional stability, as well as an indication of egotistical tendencies. Individuals exhibiting this form of self-deception will have unrealistically positive perceptions of themselves and will typically have a narcissistic style to their presentation. This type of responding would typically be seen by an individual attempting to impress a partner on a first date, a person in a job interview, or during an evaluation. High scores on the Denial factor,

on the other hand, indicate a tendency to deceive oneself by denying socially disapproved or deviant thoughts or behaviors. Individuals who score high on this particular factor attempt to present themselves as highly virtuous, “saint-like,” and have overly positive self-perceptions pertaining to their restraint, dutifulness, as well as moral and ethical fortitude. Denial is typically seen in an individual making excuses for their behavior, a client attempting to do ‘damage control’, or by someone trying to avoid prosecution, punishment, or defacement.

Limitations and Future Research

A potential limitation of this study 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’s Sex Offender Treatment Program, it may not be representative of populations from other jurisdictions containing a greater concentration of minority clients. Therefore, additional research is needed on social desirability in non-Caucasian probationers/parolees in order to validate results generated within this study. A second limitation of this study is that the sample populations comprise entirely of community-based sex offenders. Although that was the intention of this study, results generated may not generalize to a sample of incarcerated sex offenders. Given the structural environment of prison, the option of receiving “good time,” and other institutional privileges, arguments could be made that incarcerated male sex offenders may score similar to those evaluated for forensic purposes (Andrews & Meyer, 2003), and therefore naturally score somewhat higher on the MCSDS than those on probation or parole. 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 on incarcerated sex

offender's patterns of social desirable responding. Lastly, little is known about what low scores on the MCSDS mean. Although Andrews and Meyer indicated that low scores could be interpreted as indicating low emotional resiliency, a negative self-evaluation and exaggeration of symptoms, no empirical research has explicitly sought out to explore what low MCSDS demonstrate. The MCSDS may prove to be an even more valuable tool if extremely low scores were empirically identified to demonstrate symptom exaggeration or self-deprecation. Research is therefore needed to investigate if low MCSDS scores indicate the lack of social desirability, self-deprecation, conscious exaggeration of negative attributes, low emotional resiliency, or some other psychological construct.

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Table 1

MCSDS Percentile Scores and Score Rankings

MCSDS Score	Full Scale Percentile	Full Scale Score Ranking	Attribution Percentile	Attribution Score Ranking	Denial Percentile	Denial Score Ranking
0	< 1%	Extremely Low	1%	Extremely Low	1%	Low
1	< 1%	Extremely Low	1%	Extremely Low	2%	Low
2	< 1%	Extremely Low	2%	Low	5%	Low
3	< 1%	Extremely Low	4%	Low	9%	Low
4	2%	Low	7%	Low	16%	Average
5	2%	Low	10%	Low	25%	Average
6	3%	Low	16%	Average	37%	Average
7	5%	Low	23%	Average	50%	Average
8	7%	Low	32%	Average	62%	Average
9	9%	Low	39%	Average	76%	Average
10	12%	Low	50%	Average	84%	Average
11	16%	Average	61%	Average	91%	High
12	20%	Average	70%	Average	96%	High
13	25%	Average	77%	Average	98%	High
14	31%	Average	84%	Average	99%	Extremely High
15	37%	Average	90%	High	99%	Extremely High
16	43%	Average	94%	High		
17	50%	Average	96%	High		
18	57%	Average	98%	High		
19	63%	Average				
20	69%	Average				
21	75%	Average				
22	80%	Average				
23	84%	Average				
24	88%	High				
25	91%	High				
26	93%	High				
27	95%	High				
28	97%	High				
29	98%	High				
30	99%	High				
31	99%	Extremely High				
32	99%	Extremely High				
33	99%	Extremely High				

Appendix

Marlowe-Crowne Social Desirability Scale and Scoring Guide

MCSDS

Listed below are a number of statements concerning personal attitudes and traits. Read each item and put an X through the “T” if the statement is True for you, or put an X through the “F” if the statement is False for you.

	<u>True</u>	<u>False</u>
1. Before voting I thoroughly investigated the qualifications of all the candidates.	T	F
2. I never hesitate to go out of my way to help someone in trouble.	T	F
3. It is sometimes hard for me to go on with my work if I am not encouraged.	T	F
4. I have never intensely disliked anyone.	T	F
5. On occasion I have had doubts about my ability to succeed in life.	T	F
6. I sometimes feel resentful when I don't get my way.	T	F
7. I am always careful about my manner of dress.	T	F
8. My table manners at home are as good as when I eat out in a restaurant.	T	F
9. If I could get into a movie without paying and be sure I was not seen, I probably would do it.	T	F
10. On a few occasions, I have given up doing something because I thought too little of my ability.	T	F
11. I like to gossip at times.	T	F
12. There have been times when I felt like rebelling against people in authority even though I knew they were right.	T	F
13. No matter who I'm talking to, I'm always a good listener.	T	F
14. I can remember “playing sick” to get out of something.	T	F
15. There have been occasions when I took advantage of someone.	T	F
16. I'm always willing to admit it when I make a mistake.	T	F
17. I always try to practice what I preach.	T	F
18. I don't find it particularly difficult to get along with loud-mouthed, obnoxious people.	T	F
19. I sometimes try to get even rather than forgive and forget.	T	F
20. When I don't know something I don't at all mind admitting it.	T	F
21. I am always courteous, even to people who are disagreeable.	T	F
22. At times I have really insisted on having things my own way.	T	F
23. There have been occasions when I felt like smashing things.	T	F
24. I would never think of letting someone else be punished for my wrongdoings.	T	F
25. I never resent being asked to return a favor.	T	F
26. I have never been irked when people expressed ideas very different from my own.	T	F
27. I never make a long trip without checking the safety of my car.	T	F
28. There have been times when I was quite jealous of the good fortunes of others.	T	F
29. I have almost never felt the urge to tell someone off.	T	F
30. I am sometimes irritated by people who ask favors of me.	T	F
31. I have never felt that I was punished without cause.	T	F
32. I sometimes think when people have a misfortune they only got what they deserved.	T	F
33. I have never deliberately said something that hurt someone's feelings.	T	F

Scoring Guide

Attribution: Add 1 point if TRUE is marked for the following items:

1, 2, 4, 7, 8, 13, 16, 17, 18, 20, 21, 24, 25, 26, 27, 29, 31, 33

Denial: Add 1 point if FALSE is marked for the following items:

3, 5, 6, 9, 10, 11, 12, 14, 15, 19, 22, 23, 28, 30, 32