Step One Survey II®

Technical Manual

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Profiles International, Inc.

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Chapter 1: CONSTRUCTION OF THE STEP ONE SURVEY II[®]

Developing the SOSII

The Background of Honesty Testing

Honesty testing, a multimillion-dollar industry (Tompor, 1981), is designed to curb employee theft which has been reported to cost organizations as much as \$40 billion per year (Gorman, 1989). Originally, these types of instruments were developed as an alternative to the polygraph, the use of which was limited by the Employee Polygraph Protection Act signed into law on June 29, 1988.

Honesty tests have undergone much evolution over the years with psychological testing practices becoming the focus of new test development. The Step One Survey II[®] (SOSII) is the latest test developed that measures constructs demonstrated to relate to reliable and honest behavior.

The SOSII is a two-part survey designed for pre-employment selection. Part One consists of direct admission questions. These are essential inquiries that could be asked during an interview but which some interviewers might be uncomfortable asking. Part Two surveys attitudes toward integrity, drug use, reliability and work ethics. But, before we can cover the details related to the SOSII in Chapter 2 of this Technical Manual, a review of honesty testing in general would prove useful.

Historically speaking, honesty tests fall into two distinct groups. Sackett et al. (1989) labeled these types as overt integrity tests and personality-based measures.

Overt Integrity Tests

Overt integrity tests are represented in the marketplace by the Stanton, Reid Report, Personnel Selection Inventory, Wilkerson Audit, Phase II, and others. As a group, they mix admission and theft-type items targeted to reveal unacceptable attitudes toward employee theft and similar forms of dishonesty in the workplace. With the exception of the Wilkerson Audit, there is no attempt to disguise the purpose of the test. All except the Reid Report include a lie scale to detect faking good. These tests were developed as an alternative to the polygraph examination.

Personality-based Measures

Personality-based measures are represented in the marketplace by the Milby Profile, Personal Outlook Inventory, and others. As a group, they usually use standard personality test items first published as scales on the CPI, MMPI, or 16PF mixed with theft items used on overt integrity tests. The rationale is to soften the honesty items and thus disguise them. In general, the composition of the personality-based test items provides information on performance, tenure, reliability, interpersonal cooperation,

and drug avoidance. Some purport to reveal hostility toward authority, thrill seeking attitudes, conscientiousness, and confusion due to vocational identity, social insensitivity, non-conformance, irresponsibility, self-restraint, and acceptance of convention. They all include a lie scale to detect faking good.

Validity

Sackett and Harris (1984) reviewed 41 validation studies and grouped the different validation strategies used into five categories: polygraph comparisons, future behavior (predictive validity), theft admissions, shrinkage reduction and comparisons of contrasted groups. Results of the five studies, cited in Sackett and Harris (1984) and Sackett et al. (1989) indicated that honesty tests significantly differentiate between honest and dishonest people. When honesty testing is used prior to employment, employers are attempting to detect potentially dishonest employees. Therefore, honesty tests should be administered to job applicants only as part of the *selection* process and the SOSII must never be used with people who are currently employed by your organization. As with all test reviews, the specific results of validity analyses must be applied to the test being considered by the consumer. See page 11 of this manual to review the results of our analysis of the SOSII.

Reliability

Quality honesty tests must be reliable. Their high reliability coefficients compare very well with reliability of other tests in the ability domain (Gatewood & Field, 1987). According to Gatewood and Field (1987), reliabilities for these tests, taking subscales and overall scales into consideration, range from .64 to .94, and mechanical and clerical ability tests have yielded similar reliabilities (.72 to .90). Because personality-based, paper-and-pencil honesty tests are broader in focus (Sackett et al., 1989), they have less reliable internal consistency coefficients. It is, therefore, not surprising that their overall reliability (.74) is less than overt paper-and-pencil honesty tests (.86). As with all test reviews, the specific results of reliability analyses must be applied to the test being considered by the consumer. See page 11 of this manual to review the results of our analysis of the SOSII.

Adverse Impact

Adverse impact studies, reviewed by Sackett and Harris (1984) and Sackett et al. (1989) reported no discrimination against protected groups in their samples. In fact, some studies reported results in favor of females and African-Americans. Only age had a significant impact on test performance in their studies. Generally speaking, applicants in their teens or early twenties were more likely to score poorly on honesty tests. As with all test reviews, the specific results of adverse impact analyses must be applied to the test being considered by the consumer. See page 11 of this manual to review the results of our analysis of the SOSII.

Conceptual Concerns

Comparisons with polygraph judgments should be dismissed out-of-hand (Sackett et.al., 1984). A criterion in which results are so flawed as to be outlawed by the federal government for pre-employment use cannot serve as a meaningful basis for validation of any instrument. In other words, it is not appropriate to compare an honesty test like the SOSII, or any psychometrically-based test, with polygraph tests if only because the polygraph is not considered a valid measure of honesty for selection processes in the business setting.

Predicting how human beings will act in the future is a difficult task. No one can be sure what or why another person thinks in certain patterns. Past behavior may predict future behavior, but the relationship is by no means perfect, nor should one expect it to be. It is only a clue for determining how an individual will act and react on the job. This is the reason that employers check past employer recommendations, run background checks and contact personal references before making a hiring decision. It is assumed by the employer that if complimentary reports are received from these sources, then the same type of behavior(s) will take place on the job if and when the individual is hired by the company. The honesty test is therefore an integral *part* of the selection process, providing additional information from the applicant himself that may help in determining whether the motivations and opinions stated reflect a quality of character that has been proven to relate to the attitudes of fairness, respect, safety, and responsibility.

The Step One Survey[®] (the Original SOS)

To understand the SOSII, one must investigate its roots in the original Step One Survey[®]. The objective of the original SOS (released in 1996) was to add another dimension to the investigative phase of the hiring process with information as to an applicant's attitudes in the areas of *integrity*, *substance abuse*, *reliability*, and *work ethic*. These constructs may be defined as "ways of thinking on the part of the applicant that cannot be directly or practically observed by the interviewer." Just as with employer recommendations, background checks, and personal references, the only criterion available is past behavior(s).

The challenge in developing the SOS was to identify individuals whose past behavior(s) in the targeted areas were deemed unacceptable by their employers and society in general. Many other studies have used incarcerated convicts as a standard (Sackett et.al., 1984). The reported flaw in this methodology is that those incarcerated with no chance for release would not take the exercise seriously. Those close to release may try to fake good to enhance their chances for parole.

The Study

The designers of the Step One Survey[®] chose the methodology of *Contrasting Groups* for the validity study. Parolees formulated the group to represent past behaviors unacceptable in society and the workplace. This controlled for the long-term convict and, because participants had already been paroled, it also controlled for those who may try to fake good to get released from prison.

To represent past behaviors acceptable by society and the workplace, a population of employees rated as "ideal" by their supervisors was chosen. Participants had to have been on the job for at least one year and rated as superior in the four targeted areas (*integrity, substance abuse, reliability,* and *work ethic*).

A questionnaire was created containing items with high content and face validity to be administered to the two populations. It was determined that since past studies using items originally appearing on the CPI, MMPI, and 16PF resulted in lower reliability scores, such items would not be used in this study. Instead, items were designed asking the opinions of the participants about different issues pertinent to the targeted areas. A Distortion scale was also added to help detect faking-good, or answering in such a way as to over-represent one's capability for "model" behavior.

Arrangements were made with the Texas Department of Criminal Justice Institutional Division to administer the new instrument to over 200 convicted criminals as they were released from prison. Age, race, sex, and offense information was gathered for EEOC purposes. Their offenses grouped generally as 50% theft, 35% substance abuse, 5% other (kidnapping, murder, weapons offenses, etc.), and 10% unknown. At the same time, arrangements were made to administer the exact same instrument to current employees of a major retailer. This population comprised over 400 employees.

As with the parolee sample, age, race, and sex information for the current employee sample was gathered for EEOC purposes. Once all instruments from both populations were received, the data were forwarded to Dr. Earl McCallon and Dr. Randy Schumacker at the University of North Texas. They were instructed to complete a Construct and Concurrent Validation Study in tandem with Reliability, Adverse Impact and Standardization Studies.

Study Results

As previously stated, personality-based honesty tests are broader in focus (Sackett et al., 1989) and report less reliable internal consistency coefficients while overt honesty tests such as Stanton, Reid Report, Personnel Selection Inventory, Wilkerson Audit, Phase II, and others result in consistently high internal consistency reliability. The Step One Survey[®] internal consistency reliability estimates calculated for each scale ranged from .84 to .87, comparable to overt honesty tests.

The Step One Survey[®] also successfully differentiated between the two groups. Using a nine-point, or *stanine*, scale in which a score of 1 is low and a score of nine is high, over half of the parolees scored one on the Integrity scale. On the other three scales, 40% of parolees scored three or less. Over 75% of the employee group scored four or higher on all scales.

Design of the Final Instrument

To accomplish the purposes of the Step One Survey[®], it was decided to divide the instrument into two sections. The first section had 45 items and sought information on self-reported behaviors and admissions while the second section of 80 items focused upon behaviorally-based attitudes. Together they combined self-admission questions, interview questions, personality-based questions and distortion questions. Because the sections complimented each other, it was important for the user to consider the results from both sections in the decision making process.

Section I of the Original SOS Test Booklet

One of the most useful groups of items included in overt honesty tests are those that ask for the applicant to self-report on past behavior(s). These are referred to as admissions questions. A second concept included on many personality-based honesty tests is the use of interview questions. Because the purpose of the Step One Survey[®] was to help the interviewer in the investigative hiring process, a decision was made to mix these two types of questions into a separate section to precede the psychometric items. Identified as Section I, it consisted of 45 items appearing on the final instrument.

Examples:

SOS Question: When did you start work at your current (or last) position?

- A. 0 2 months ago
- B. 3 5 months ago
- C. 6 11 months ago
- D. 1-3 years ago
- E. Over 3 years ago
- F. This will be my first job

SOS Question: Have you ever filed a medical claim even though you knew you were not sick or injured?

- A. Yes
- B. Can't remember
- C. No

Since the purpose of the Step One Survey[®] was to furnish the interviewer with more information in order to make a better quality decision, the report gave suggested verbal interview questions based on the answers to the items in Section I.

Section II of the Original SOS Test Booklet

Section II contained 80 items. It measured behaviorally-based attitudes towards Integrity, Substance Abuse, Reliability, and Work Ethic. Since this can be defined as the psychometric portion of the Step One Survey[®], it was logical to conduct validation and reliability studies and these were completed at the University of North Texas.

Examples of these attitude-measuring items include:

- A. Sloppy company security causes some people to steal.
- B. A person doesn't have a drug problem if all he/she does is smoke marijuana on weekends.
- C. If you have a good excuse, it's okay not to show up to work.
- D. Loyalty to a company is a thing of the past.

Applicants taking the test would mark their agreement or disagreement for each item, the accumulation of which generated raw scores for analysis by the test engine.

Distortion Scale of the Original SOS

Because the final instrument was designed to be used with job applicants, it was important to include some way to determine if the applicant was revealing his or her true feelings and not what he or she considered the "correct" answer. Therefore, a scale labeled Distortion was incorporated throughout the instrument.

If the applicant responded positively to a majority of items on this scale, the accumulated results could be considered an indication of the applicant's intention to demonstrate a higher than realistic impression of a virtuous (and by implication, idealistic) demeanor. This impression is often referred to as "looking good," which implies an effort on the applicant's part to express a "perfect" image on the test. This distortion scale also looked for inconsistencies in the applicant's response pattern.

The Distortion scale was designed to detect obvious untruths and/or inconsistencies in the applicant's responses on Section II of the survey. If the score obtained on this scale suggested a distortion problem, the user was asked to weigh carefully the accuracy of the applicant's responses.

The Step One Survey[®] Today

Now that the background that deals with the original version of the Step One Survey[®] has been reviewed, a comprehensive study of the SOSII is appropriate. The decisions that lead to the development of the original SOS have influenced the priorities involved in the development of the SOSII and shall be referred to often in Chapter 2 of this Technical Manual.

Before that begins, however, a few more discussion points have been addressed that apply to both the original and the latest versions of the Step One Survey[®].

Discussion

There may be a question as to why parolees were used as one of the contrasting groups because they are a subgroup that may not actually represent applicants seen by employers. Another concern might be that all the Step One Survey[®] does is segregate and isolate this subgroup from "normal" applicants, not discerning who will steal from the employer if hired. Some thoughts on these issues follow:

- Parolees were chosen to represent a group of individuals whose past behavior(s) indicate patterns of thinking unacceptable by society or in the workplace, by virtue of their criminal records. Even those asking the questions would agree that in all probability there are numerous individuals in our society who have not been convicted or gone to prison even though they think in the same anti-social patterns. Unfortunately, there is no way to differentiate these applicants from those with so-called "normal" attitudes since the interviewer cannot tell which applicants think in these unacceptable patterns. Therefore, using a group known to have these types of attitudes establishes a needed baseline for comparison. Using the parolees' group scores as a baseline does not keep an individual parolee who does not think in these unacceptable patterns from obtaining a high score on any of the Step One Survey[®] scales. We are dealing with trends of behavior here and the idea is to differentiate between the trends for two contrasting groups of assessment takers.
- It was not the intended purpose of the Step One Survey[®] to make an absolute judgment about applicants who will steal if hired by the user-company. No honesty-test instrument can make that claim. In fact, no one can be totally accurate about what another person will do in any given situation because no one can tell what another person is truly feeling or thinking at any given time. The purpose of the SOS (and its successor the SOSII) is to help the interviewer by furnishing valuable information as to how an applicant thinks in four targeted areas. Test results are only a part of the hiring decision. There are no cut-off scores and no pass-fail scores. The final decision, after reviewing test results, remains with the interviewer.

It is suggested that the user weigh test results as only one-third (33%) of the decision process. The balance is suggested to be evenly divided between history (resume, references, background checks, physicals, etc.) and interview results. This combination gives the user a balanced and comprehensive view of the applicant.

Chapter 2: NORMING AND VALIDATION STUDIES FOR THE SOSII

Introduction

This report presents the results of a norming and validation study for the SOSII instrument. The studies described in this report are follow-up studies to a series of studies conducted earlier that determined the factorial structure of the SOS instrument and presented selected validity and impact analyses. New test items have been developed for this version of the SOS, and therefore much statistical analysis has been required to establish the reliability and validity of the new product. This project collected new data in the fall of 2003.

These data consisted of test results for two distinct samples:

- 354 currently employed individuals in the workforce (referred to as the norming group/sample in this study)
- and 38 recent prison parolees

The format of this study mirrors that of the study conducted in 1996 at the University of North Texas for the original SOS and seeks to achieve comparable results and provide similar implications. The current study sought to determine the best measurement items on the four scales underlying the attitudes portion of the SOSII instrument calculate norms for our sample of currently employed individuals in the workforce and analyze the performance of the parolee groups on these norms. Since our alterations of the content of the items on these scales would be expected to impact the reliability and validity estimates of the scales established by earlier studies, new reliability coefficients have been calculated. New discriminate validity studies have also been conducted. These results are presented in this report.

This study was conducted using the strict standards and guidelines established by the American Psychological Association (APA) for Test Development.

Description of Statistical Methodology

Factor loadings and communality estimates from the original factor analysis study using the principal components estimation method with varimax rotation were used to determine items on each scale that best represented that particular factor. Once these items had been determined, Cronbach's Alpha internal consistency coefficients were computed to assess the reliability of each scale. Table 2.1 shows these coefficients as well as the average factor loadings and variance accounted for by each of the SOSII scales.

Table 2.1.

SOSII Scale	Cronbach's Alpha	Avg. Factor Loading	Cumulative Variance Explained
Integrity	.769	.533	10.73%
Substance Abuse	.737	.516	20.18%
Reliability	.804	.489	26.69%
Work Ethic	.839	.498	31.20%

Alpha coefficients, factor loadings, and cumulative variance for SOSII scales

The second series of analyses consisted of impact studies for the age, race, and gender variables. The age and race variables were analyzed using one-way analysis of variance and Scheffe post-hoc procedures. Gender differences were studied using the independent t-test. These procedures were performed on each scale on the SOSII instrument with our norming sample.

Once the above analyses had been performed, norms were calculated using our sample of currently employed individuals in the workforce. Raw scores were converted to stanine scores. The parolee group's performance was then determined and compared to the norming (employee) sample. It was hypothesized that the relative performance of the parolee group would be lower than that of the norming (employee) group.

Statistical Results

Table 2.2.

Table 2.2 presents descriptive data for the norming (employee) group. Race was not representative, and therefore, not used in this analysis.

Composition of norming (employee) sample (N=354)		
Variable/Category	N	Percent
Age (1 respondent non-reporting)		
15-24	11	3.1
25-34	28	7.9
35-44	72	20.3
45-54	130	36.7
55-64	92	26.0
65+	20	5.6
Gender (1 respondent non-reporting)		
Male	240	67.8
Female	113	31.9

Race: Insufficient diversity for analysis purposes in this sample.

Table 2.3 provides the raw score data for the norming (employee) group as well as the internal consistency estimate (alpha coefficient) for each scale. It can be noted that these estimates ranged from .76 to .84.

Table 2.3.

	No.			Alpha
Scale	Items	Mean	SD	Coefficient
Integrity	15	65.5	6.6	.83
Substance Abuse	15	69.1	6.0	.84
Reliability	19	74.7	7.1	.77
Work Ethic	21	80.1	8.0	.76

Scale descriptive statistics and alpha coefficients (N=354)

Norms and Validity Study

Tables 2.4 through 2.7 present cumulative stanine distribution data for both samples in this study. The difference in performance is clearly evident. The difference was more pronounced on the Integrity dimension where over half of the parolees had a stanine score of one. On the Substance Abuse, Reliability, and Work Ethic scales over 40% obtained a stanine score of three or less.

Table 2.4.

	Cumulative Percent		
Integrity Stanine	Norming Group	Parolee Group	
1	4	23	
2	11	53	
3	23	70	
4	40	88	
5	60	97	
6	77	98	
7	89	100	
8	96	100	
9	100	100	

Table 2.5.

	Cumulative Percent		
Integrity Stanine	Norming Group	Parolee Group	
1	4	60	
2	11	68	
3	23	86	
4	40	97	
5	60	100	
6	77	100	
7	89	100	
8	96	100	
9	100	100	

Table 2.6.

	Cumulative Percent			
Integrity Stanine	Norming Group	Parolee Group		
1	4	41		
2	11	56		
3	23	58		
4	40	64		
5	60	70		
6	77	84		
7	89	91		
8	96	95		
9	100	100		

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Cumulative	aistribution	of stanine scores	(Reliability)

Table 2.7.

Cumulative distribution of stanine scores (Work Ethic)

	Cumulative Percent		
Integrity Stanine	Norming Group	Parolee Group	
1	4	20	
2	11	46	
3	23	51	
4	40	59	
5	60	64	
6	77	84	
7	89	94	
8	96	98	
9	100	100	

Table 2.8 presents the results of comparing average raw scores on the four scales between prison parolees and the norming (employee) sample.

Table 2.8.

Raw score ANOVA between norming group (employees) and parolees by scale					
Scale/Group	Ν	Mean	SD	F	р
Integrity					
Employees	354	65.5	6.6	.632	.43
Parolees	38	64.6	10.3		
Substance Abuse					
Employees	354	68.4	7.3	5.515	.02
Parolees	38	65.3	7.4		
Reliability					
Employees	354	64.8	8.0	25.807	.00
Parolees	38	60.1	7.4		
Work Ethic					
Employees	354	76.1	9.6	1.192	.28
Parolees	38	69.7	10.4		

Table 2.9 presents the results of comparing average raw scores for male and female subjects in the norming (employee) sample on each of the four scales. These analyses indicated no statistical difference in average scores between the two groups on any of the four scales.

Raw Score ANOVA	bv aender for	normina aroup ((emplovees)

Scale/Gender	N	Mean	SD	F	р
Integrity					
Male	279	86.0	7.3	.860	.39
Female	132	85.3	7.6		
Substance Abuse					
Male	279	68.5	7.3	.540	.58
Female	132	68.1	7.5		
Reliability					
Male	279	65.0	7.9	.900	.37
Female	132	64.3	8.1		
Work Ethic					
Male	279	76.7	9.7	1.680	.09
Female	132	75.0	9.3		

Table 2.10 presents an analysis of average raw score differences between three ethnic groups in the norming sample. These were the only three groups with a sufficient number of subjects for statistical analysis purposes. The analyses indicated no statistically significant differences among the three groups on the four scales.

Table 2.10.

Down ocorro ANOVA by otherioi	h for norming group	(amplay and)
Raw score ANOVA by ethnicit	\mathbf{v} for normina arous	remoioveesi
		(0

Scale/Ethnicity	Ν	Mean	SD	F	р
Integrity					
White	333	86.0	7.3	.87	.41
African American	23	84.5	8.7		
Hispanic	46	84.8	7.3		
Substance Abuse					
White	333	68.5	7.2	.29	.74
African American	23	69.0	7.2		
Hispanic	46	67.7	8.3		
Reliability					
White	333	65.0	7.8	.33	.72
African American	23	64.7	9.8		
Hispanic	46	64.0	7.9		
Work Ethic					
White	333	76.5	9.4	.91	.40
African American	23	75.3	11.9		
Hispanic	46	74.6	10.0		

Table 2.11 presents the results of an analysis of average scale scores by the following age groups, 15 to 24 years of age, 25 to 34, 35 to 44, 45 to 54, 55 to 64, and 65+ years old. Mean score differences reflect a statistically significant difference between age groups that suggests that younger applicants tend to score lower than older applicants.

Such a relationship based on age has been identified in previous studies of honesty/ integrity tests and leaves the user with the responsibility to gauge such differences between real-world applicants judiciously. Primarily, it is important to realize that younger applicants who score lower than older applicants of otherwise equivalent potential and job suitability should be given a little leeway when the final decisions for selection are made.

<u>Raw score ANOVA by a</u> Scale/Age Range	N	Mean	SD	F	n
Integrity	IN	Mean	30	Г	р
15 – 24	29	66.1	8.4	1.024	.409
25 – 34	46	64.8	11.9	1.024	.403
25 – 34 35 – 44	40 90	66.1	7.3		
45 – 54	139	65.5	6.5		
45 – 54 55 – 64	94	67.3	4.5		
65 or More	20	67.7	4.3 5.4		
Substance Abuse	20	07.7	5.4		
15 – 24	29	70.8	5.2	7.414	.000
15 – 24 25 – 34	29 46	69.9	12.2	7.414	.000
25 – 34 35 – 44	40 90	73.8	6.3		
35 – 44 45 – 54	139	73.3	7.5		
45 – 54 55 – 64	94	73.3	7.5 5.6		
65 or More	94 20	78.2	5.0 6.2		
Reliability	20	10.2	0.2		
15 – 24	29	75.1	9.2	2.322	.033
15 – 24 25 – 34	29 46	70.3	9.2 14.3	2.322	.055
25 - 34 35 - 44		70.3	8.0		
	90				
45 – 54	139	69.4	6.8 4.4		
55 – 64 65. or More	94	70.3			
65 or More	20	70.8	4.0		
Work Ethic	20	05.4	10.4	2 200	000
15 – 24	29	85.4	12.1	2.306	.032
25 – 34	46	80.6	16.7		
35 – 44	90	82.2	10.0		
45 – 54	139	79.8	8.2		
55 – 64	94	83.1	6.6		
65 or More	20	83.6	7.1		

The Distortion Scale Score

The Distortion scale score of the SOSII applies ONLY to Section Two of the test form. This score refers to the reliability of the results of this section, not the honesty of the individual. A low score on this scale suggests that for some reason the applicant may have misrepresented their responses in the "look good" direction. This could possibly happen because of an attempt to portray a picture of how they would like to be seen, rather than an accurate picture of how they are.

With a Distortion score of 7, 8, or 9, no obvious attempts to "look good" were detected. With Distortion scores in the 4 to 6 range, the results may reflect a somewhat "polished" version of reality. When the Distortion score reaches the lower end of the scale, 1, 2, or

3, then the SOSII results should not be a part of the decision-making process for that individual.

The suggested interview questions found in the SOSII report should be pursued in all cases where an individual continues to be considered for a position. When the applicant has openly admitted to a behavior, the discussion of that behavior may prove fruitful to the hiring process.

Summary

This report summarized the results of norming, reliability, validation, and impact studies for the SOSII (formerly known as the Step One Survey[®]). An earlier factor analysis study identified the four scales that encompass the basic constructs of the SOSII. Factors were named Integrity, Substance Abuse, Reliability, and Work Ethic. The earlier study also demonstrated the ability of the items on the scales to distinguish between a prison parolee sample and a sample of retail store employees. Impact analyses using these scales also indicated no average score differences between gender and race groups. Significant mean differences were found among the age categories with subjects in the younger age group scoring in the average lower on all four scales than the two older age categories.

The present study for the SOSII used the original factor analysis data to identify the constructs used in this version of the test. Reliability estimates were calculated for each scale. The resulting internal consistency reliability estimates ranged from .737 to .839. Norms were then calculated using a sample of currently employed individuals in the workplace and a contrasting prison parolee group. Scores were studied using these norms. As might be expected, the parolee group scored significantly lower on all four scales.

A series of discriminate validity studies were also conducted with the norming (employee) sample using the gender, race, and age variables. No significant mean differences were found on the gender and race variables. However, a significant mean difference was found among the age categories. Younger subjects tended to score, on the average, lower than older groups.

Appendix A: LEGAL OPINION LETTER

NICHOLS, WOLFE, STAMPER, NALLY, FALLIS & ROBERTSON, INC.

ATTORNEYS-AT-LAW OLD CITY HALL BUILDING. SUITE 400 124 EAST FOURTH STREET TULSA, OKLAHOMA 74103-5010 (918) 584-5182

June 12, 1996

Mr. Jim Sirbasku

Profiles International, Inc. 5205 Lake Shore Drive Waco, Texas 76710-1732 Re: The Step One Survey

Dear Mr. Sirbasku:

Pursuant to your request we have reviewed The Step One Survey ("Step One" herein) to determine if Step One violated any federal Equal Employment Opportunity laws. You asked our specific opinion on whether the questions posed, or the purpose of Step One, violated any federal Equal Employment Opportunity Laws, including Title VII of the Civil Rights Act of I964 ("Title VII") and the Americans With Disabilities Act ("ADA"). This letter concerns the version of Step One as last revised in March 1996. That version of Step One is hereby incorporated into this letter by reference and is considered to be an indispensable part of this letter. Our opinion is that Step One does not violate any federal Equal Employment Opportunity laws in the questions asked or in the purposes for which Step One is administered.

Step One is a paper and pencil examination to be completed by an applicant for employment with one of your client companies. Step One is divided into two (2) sections, with an applicant to complete both sections. Step One is intended to reveal a person's attitudes towards integrity, substance abuse, reliability and work ethic, and to contrast those attitudes to those of incarcerated felons.

Your clients are specifically advised that Step One is not a "pass/fail" test, and is not to be used as a "selection procedure" within the meaning of the Uniform Guidelines on Employee Selection Procedures, which means that Step One is not to be used as an exclusive basis for making an employment decision. Instead, it represents information on important attitudes of an applicant and should be considered in conjunction with all other information gathered in the application process. Any client which uses Step One as a pass/fail selection device is using Step One in a manner contrary to your instructions, and in a manner contrary to its intended purposes.

There is no general prohibition against the use of paper and pencil tests in the employment setting. Federal law does prohibit the use of any pre-employment inquiry which is used to overtly discriminate on any basis proscribed by law, or which disproportionately screens out members of protected groups, unless such inquiries are justified by business necessity, are shown to be job-related, and no alternative which does not have a disparate impact is available. Since Step One is not to be used as the sole criterion in making a hiring decision, we see no way that it could screen out a disproportionate percentage of any protected group. Our review of Step One reveals no violation of federal Equal Employment Opportunity laws. That is:

(1) The questions in Step One reflect no obvious bias against any race, sex, religion, national origin, or age group, or against persons with a mental or physical disability. The answers to the questions on Step One will not reveal an applicant's race, sex, age, color, religion, national origin, or the existence of a

disability protected by the ADA. In short, the questions, on their face, are appropriate and nondiscriminatory.

(2) The intended purposes for Step One are legitimate and nondiscriminatory. Employers have wholly legal and justifiable concern over an applicant's attitudes towards integrity, substance abuse, reliability and work ethic. Thus, the intended purposes of Step One, to determine an applicant's attitudes toward those important characteristics and to compare them with convicted felons, are appropriate and nondiscriminatory.

It is our conclusion that the use of Step One is not prohibited by Title VII, the ADA, or any other federal Equal Employment Opportunity law, and that there would be no valid claim by a rejected applicant against Profiles International simply because an employer had properly used Step One as part of its application process, and eventually rejected the applicant. However, because we cannot be assured that all of your clients will use Step One properly, we cannot warrant that no claim against an employer will ever be asserted or, if asserted, never will succeed.

We express no opinion on the accuracy or effectiveness of Step One in accurately judging the attitude of an applicant on the subjects tested. Also, while most state equal employment opportunity laws closely track federal statutes, there may be variances and thus we express no opinion concerning the compliance of Step One with the laws of the 50 states, or with the laws of any country other than the United States.

We hope this letter is a satisfactory response to your inquiry. Please contact the undersigned if you have any questions concerning this letter.

Sincerely,

Thomas D. Robertson

Nw

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