A Validation Study of the Assessment of Dissimulation Scale Using Criminal and Civilly Committed Participants.

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A VALIDATION STUDY OF THE ASSESSMENT OF DISSIMULATION SCALE USING CRIMINAL AND CIVILLY COMMITTED PARTICIPANTS

A Dissertation

Submitted to the Graduate Faculty of the Louisiana State University and Agricultural and Mechanical College
in partial fulfillment of the requirements for the degree of Doctor of Philosophy

in

The Department of Psychology

by

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Abstract

Dissimulation malingering, unlike simulation malingering, refers to downplaying actual psychological difficulties in order to achieve secondary gain. Although several psychological tests have subscales designed to detect dissimulation, only the Assessment of Dissimulation Scale (ADS) has been specifically designed for this purpose. This screening instrument had limited usefulness, as it was validated only with college students. The purpose of this study was to determine whether the ADS was effective in detecting dissimulation in criminal and civilly committed populations which are likely to be the clinical targets for such a scale, and to establish a cut-off score on the ADS above which dissimulation should be suspected. In addition, the role of executive functioning on an individual's ability to dissimulate was explored. The ADS proved efficacious, correctly classifying 69% of clinical participants as either faking good or answering honestly. This classification rate is significantly better than chance (p<.0001). Furthermore, a cut-off score of ≥ 19, minimized false positive and false negative error rates; and, in a cross validation sample, correctly classified 72.2% of honest responders and 53.3% of dissimulators. Sensitivity and specificity data are also provided for other scores. Furthermore, validity data are presented and the difficulties of studying the role of executive functioning in this population are discussed.
Introduction

Malingering should be suspected if a client is litigious, if there is a difference between the individual's reported stress level and unbiased findings, if the individual does not cooperate during the evaluation or with therapy, and/or if Antisocial Personality Disorder has been diagnosed on Axis II (American Psychiatric Association [APA], 1994). Malingering severity runs the gamut from a behavior as benign as feigning illness to avoiding jury duty to faking neurological/psychological impairment to avoid standing trial for murder (APA, 1987, 1994).

The use of the term "malingering" in the literature is not consistent. In contrast to the American Psychiatric Association's slant which depicts malingerers as uncooperative, lying, greedy sociopaths (APA, 1987, 1994), Rogers (1990) proposes that malingering may be adaptive in some cases. He believes some patients view an evaluation as possibly damaging, and may malinger because of fears they may lose something or not gain something by performing in an honest and forthright manner. Accordingly, an individual can malinger in one of two ways. The first is exaggerating or producing false psychiatric or other symptoms (e.g., memory impairment). The second is a lesser understood and researched situation and refers to when an individual attempts to deny or downplay real psychiatric symptomatology. Price (1995) identifies these two categories of malingering as simulation and dissimulation, respectively.

Some authors assert dissimulation is feigning nonexistent problems or exaggerating real difficulties (e.g., Pope, Butcher, & Seelen, 1993). Others feel the
opposite -- that dissimulation is the intentional downplaying of psychological
difficulties motivated by external incentives (Graham, Watts, & Timbrook, 1991;
Harvey & Sipprelle, 1976; Hayes et al., 1997; Price, 1995). The impetus for denying
these symptoms could be obtaining favorable employment, gaining release from a
mental hospital/prison or being awarded custody of a child (Cashel, Rogers, Sewell, &
Martin-Cannici, 1995; Greene, 1991; Lanyon, Dannenbaum, Wolf, & Brown, 1989;
Parker, 1991; Wilcox & Krasnoff, 1967). Although the term "dissimulation" has been
used either way - to describe faking good or faking bad, in an effort to establish
uniformity in this paper, the term dissimulation will refer to "faking good" in order to
appear more psychologically healthy or fit, while simulation will refer to faking bad to
mimic or exaggerate psychological or neuropsychological deficits.

Many instruments have been developed to aid in the detection of simulation in a
clinical setting (e.g., Dot Counting Test - Rey, 1941; M Test - Beaber, Marston,
Michelli, & Mills, 1985; Portland Digit Recognition Test - Binder & Willis, 1991; Rey
15-Item Memory Test - Rey, 1964; Structured Interview of Reported Symptoms -
Rogers, Bagby, & Dickens, 1992). Additionally, several measures have subscales
which are helpful in detecting dissimulation (e.g., Minnesota Multiphasic Personality
Inventory - Hathaway & McKinley, 1943; Minnesota Multiphasic Personality Inventory
- II - Butcher, Dahlstrom, Graham, Tellegen, & Kaemmer, 1989; Millon Clinical
Multiaxial Inventory - Millon, 1977). Only one test to date has been developed

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specifically as a screening measure for the detection of dissimulation in a clinical setting, the Assessment of Dissimulation Scale (Hayes et al., 1997).

**Existing Measures that Detect Dissimulation**

**Minnesota Multiphasic Personality Inventory (MMPI)**

The MMPI is a 566 item, true/false questionnaire which is the most frequently used clinical test of dissimulation (Lubin, Larsen, & Matarazzo, 1984). It is objectively scored and interpreted and contains validity scales, indices associated with behavioral correlates and other scales intended to address specific behavioral or psychological problem areas (Pope et al., 1993). Although the MMPI represented an extraordinary advance in developing an empirically derived personality questionnaire, it has several limitations. Some items appear to be outdated, the normative sample had questionable generalizability, and its norms are relatively obsolete. This situation led to the development of the MMPI-II (Pope et al., 1993).

Despite limitations, much research has been conducted over the years on several MMPI subscales that may be related to dissimulation tendencies among individuals taking the test. The MMPI's sensitivity in detecting individuals attempting to present themselves in a positive light was good. In fact, Lanyon (1977, as cited in Parker, 1991) found that 2/3 of college students faking good on the MMPI could not escape detection using the standard validity scales of the MMPI. These results were not replicated using a clinical sample.
L Scale

The L Scale of the MMPI was based on the work of Hartshorne and May (1928). Most of the questions concern behaviors many would indicate are amoral and which "should" not be engaged in. Nonetheless are still behaviors which the majority of individuals indicate having done at some point in their life (e.g., Question 30 - At times I feel like swearing). The questions are related to denial of aggression, bad thoughts, character weaknesses, poor self-control, prejudices and dishonesty (Dahlstrom, Welsh, & Dahlstrom, 1960). Dahlstrom, Welsh and Dahlstrom (1972) indicated the L Scale was developed to "identify deliberate or intentional efforts to evade answering the test frankly and honestly" (p. 109). Accordingly, the higher the score, the greater the likelihood of dissimulation.

Woychyshyn, McElheran and Romney (1992) studied whether the L scale was predictive of dissimulation in a psychiatric inpatient population. Although the mean scores of honest responders and individuals instructed to fake good on the L Scale were significantly different, 70% of individuals in the fake good group were misclassified as honest responders (Woychyshyn et al., 1992). The authors suggested the reason for poor classification is that many patients are also quite willing to admit to common, everyday faults, thus producing L scale scores which were within normal limits and not indicative of dissimulation.
F Scale

The 64 item F Scale of the MMPI was developed to detect unusual responding or atypical ways of answering questions on the MMPI (See Appendix H). The items chosen for this scale were endorsed by less than 10 percent of non-clinical adult participants, with many items endorsed less frequently (e.g., Everything tastes the same; Pope et al., 1993). The F scale is often used to identify individuals exaggerating their symptoms or simulating. However, other interpretations of a high F score could include difficulty reading the questions, random responding and/or severe mental illness (Pope et al., 1993). The F scale is typically not used alone for the detection of dissimulation. It is commonly combined with the K scale, to make the F-K Index.

K Scale

The K Scale of the MMPI was developed by Meehl and Hathaway (1946). Their goals were twofold: (1) To detect individuals who are consciously attempting to present themselves in a positive light; and (2) to determine which individuals were answering in a defensive manner (i.e., denying individual weakness while indicating excessive personal virtue) (Dahlstrom et al., 1960; Pope et al., 1993). The K Scale was developed to be a sensitive validity measure, in contrast to the rather broad and basic Cannot Say (i.e., left the question blank), L, and F validity scales. It is thought to be a measure of defensiveness in test taking attitude. The questions on the K scale are more subtle than those of the L scale and cover items such as mental health, stability, control, feelings about others and family relationships (e.g., Question 27 - At times I feel like

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smashing things; Dahlstrom et al., 1960). Based on an individual’s raw score on the K Scale, an adjustment is made to five clinical subscales to correct for defensive responding. Failure to compute K corrections for these scales may result in a “within normal limits” test profile for an individual with significant psychological disturbance.

The K scale cannot be used in isolation to rule out dissimulation. In fact, Woychyshyn and colleagues (1992) found the K scale alone misclassified 58% of a clinical sample instructed to deliberately fake good. It’s most common use is in combination with the F scale to yield the F-K Validity Index.

**F-K Index**

To detect simulators and dissimulators, Gough (1947, 1950) developed an index using the difference between F and K to assess the extent to which a person has either exaggerated or minimized symptomatology. Gough asserted an F-K raw score of + 9 was indicative of exaggeration of symptoms or a “fake bad” profile. A situation in which the raw K score is more than nine points greater than the F score (i.e., - 9) is typically thought of as a “fake good” profile (Pope et al., 1993).

Some researchers have indicated that the F-K index is useful in detecting dissimulation. They report correct overall classification rates (analogue faking good vs. honest responding) as high as 86% using a student analogue sample (Gough, 1950; Grow, McVaugh, & Eno, 1980; Woychyshyn et al., 1992). Other authors contend the F-K index is only slightly better than chance in ruling out dissimulation. McAnulty,
Rappaport and McAnulty (1985) reported the F-K index has a high rate of classifying individuals as honest when they fake good or bad (i.e., overall false negatives - 63.3%).

Mp Scale

Cofer, Chance and Judson (1949) developed the Malingering Positive Scale of the MMPI and studied the response patterns of college students instructed to either take the MMPI honestly, fake bad or fake good. Using a within subjects design, the authors found 34 questions differentiated dissimulators from controls and simulators (fake bad). The answers to these questions were in one direction when the subjects were answering honestly or simulated, but were in the opposite direction when the subjects dissimulated.

The authors indicate a raw score of 20 or above is an effective cutting score for identifying dissimulation. Although this scale appeared promising, several studies indicate its utility is questionable. Wales and Seeman (1968) reported that the Mp scale accurately identified 68% of the fake good subject and Grow, McVaugh and Eno (1980) reported a 77% classification rate. Woychyshyn, McElheran and Romney (1992) stated 48% of a clinical sample instructed to fake good on the Mp Scale were misclassified as honest responders.

Dissimulation Scale

The Dissimulation Scale (Gough, 1954) is a subscale of the MMPI which attempts to identify individuals, as the terms are used in this paper, who are actually simulating and not dissimulating. He suggested a raw cutting score of 35 or greater.
was suggestive of feigning or exaggerating symptoms of psychopathology. The Dissimulation Scale does appear useful in the detection of analogue simulators. In one study it correctly classified 95% of subjects as either being in the fake bad, fake good or control group (Grow et al., 1980). Its utility with a clinical population is unknown.

**Subtle-Obvious Scales**

Wiener (1948) designated some items on the MMPI as either subtle or obvious. Obvious items are ones which are easily identified as indicative of psychopathology (e.g., #41, I have had period of days, weeks or months when I couldn’t take care of things because I couldn’t get going; Depression subscale). Subtle items are the opposite. That is, the reference to psychopathology is not easily identified (e.g., #12, I enjoy reading detective or mystery stories; Hysteria subscale). There are 110 subtle items and 140 obvious items. Grow, McVaugh and Eno (1980) reported disappointing classification rates when they attempted to classify honest, fake good and fake bad responders. This finding occurred using the number of obvious items subtracted from the number of subtle items ($\leq -4$, 69%), total obvious items ($\leq 65$, 63%) and total subtle items ($\geq 61$, 77%). Furthermore, Woychyshyn, McElheran and Romney (1992) reported 48% of inpatients were misclassified as honest responders when asked to answer as if they had nothing wrong with them.

**Minnesota Multiphasic Personality Inventory - II (MMPI-II)**

The University of Minnesota Press, the copyright holder of the MMPI, launched a time-consuming and comprehensive study to correct the problems of the
MMPI (i.e., inadequate norms and the non-representative validation sample - Butcher, Dahlstrom et al., 1989). As a result of their efforts, the MMPI-II was released in 1989 (Pope et al., 1993). Although some revision has been made to the above scales, their purposes remain the same. The MMPI-II authors state it is appropriate to use the subscales and supplemental scales of the MMPI-II as if they were the MMPI’s (Pope et al., 1993), but this leap of faith is difficult for many without research to confirm this assertion (Adler, 1990; Leckart, 1994).

In efforts to overcome this knowledge gap, several authors have conducted research on the effectiveness of the MMPI-II to detect dissimulation with mixed results. Using the MMPI-II cutting scores, Austin (1992) indicated an F-K raw score < -13 correctly classified 90% of fake good responders, and an L scale T score >85 correctly classified 78% of fake good responders, supporting fairly good sensitivity for these measures. The F, Subtle-Obvious and K scales all had correct classification rates less than 33%. While the F-K scale appears promising, it misclassified 42% of individuals answering the test honestly. This rather high rate of false alarms suggest poor specificity for this index.

Parker (1991) reports similar results for these validity scales (i.e., L > 7 incorrectly classified 24% of honest responders, F-K < -11 incorrectly classified 42% of honest responders and K > 17 misclassified 29% of honest responders using a student analogue population). He proposed using an experimental subscale, the Fake Good (FkGd) scale which was derived from a Yates corrected chi-square after asking college
students to first answer the MMPI-II honestly, and then answer in a way which would ensure them obtaining a job they wanted badly. He correctly classified 80% of honest responders and 89% of dissimulating responders using a cutting score of \( >41 \). He suggested additional research be conducted before relying on the scale for use with clinical populations.

Bagby, Rogers and Buis (1994) indicated the validity indicators on the MMPI-II are virtually ineffective, with only the F-K and Subtle-obvious subscales having “moderate utility” (p. 191). Bagby, Buis and Nicholson (1995) examined the ability of the Mp scale and the Subtle-obvious subscales to detect dissimulation. These authors indicated the Subtle-obvious subscales should not be used to rule out dissimulation, and the Malingering Positive and L scales were only marginally effective at detecting dissimulation.

Although the revised dissimulation scale of the MMPI-II correlates well with the MMPI dissimulation scale (Leckart, 1994), as stated above, the dissimulation scale is not without its limitations. In addition, when coached about the validity scales on the MMPI-II, it appears individuals who under report symptoms can escape detection (Baer, Wetter, & Berry, 1995). Although the MMPI and the MMPI-II are the most researched instruments for detecting dissimulation, other broad band psychopathy measures such as the Millon Clinical Multiaxial Inventory also address this issue.
Millon Clinical Multiaxial Inventory (MCMI)

The 175 item MCMI (Millon, 1977, 1983) is a self-report questionnaire used for differential diagnosis. It has 20 clinical scales -- 9 measure psychological syndromes and symptoms, and 11 measure personality styles. The MCMI appears to have acceptable reliability and validity, though its utility to detect dissimulation is questionable (Bonato, Cyr, Kalpin, Prendergast, & Sanhueza, 1988; Sexton, McIlwraith, Barnes, & Dunn, 1987; Van Gorp & Meyer, 1986).

Wierbicki (1993) developed an index involving differential endorsement of subtle and obvious MCMI items using college students. This researcher asserted these subtle and obvious items were better than the MCMI validity scale at differentiating honest responders from faking responders. The subtle-obvious items did not, however, enhance the classification of individuals instructed to fake good (84.88% vs. 83.72%).

In a later version of the MCMI, the MCMI-II (Millon, 1987), three subscales were specifically developed to detect either faking bad or good. These are the Disclosure Scale (DIS), Desirability Gauge Scale (DES) and the Debasement Measure (DEB). The DES is the only subscale developed specifically to detect dissimulation. When all three scales were combined, 70% of subjects were correctly classified as faking good or honest (Bagby, Gillis, Toner, & Goldberg, 1991). The DES scale was not analyzed alone without the other two subscales.
Credibility Scale

The Credibility Scale is still in the early experimental stages. Its author recommended the Credibility Scale be used as an adjunct to a clinical interview and as a supplement to further psychological testing (Lees-Haley, 1989). He suggests using the Credibility Scale as a standardized procedure from which clinical interview questions may be generated and clinical impressions may be gleaned. In form, this scale is similar to a 100 item Lie scale, with item content focused specifically on domains of feigned illness and denial of motivation to seek financial gain.

Personality Assessment Inventory (PAI)

The Personality Assessment Inventory developed by Morey (PAI; 1991), has 344 items, four validity scales, 11 clinical scales, 5 treatment scales and 2 interpersonal scales (Cashel et al., 1995). One subscale of the PAI, the Positive Impression Scale (PIM), screens for individuals attempting to present themselves in a positive light by denying minor imperfections in character. Cashel, Rogers, Sewell and Martin-Cannici (1995) point out that the PAI has several advantages over the MMPI. These include a fourth grade reading level, non-overlapping items and a construct validational approach to development. Using a within subjects design on the PIM subscale, these researchers found 16.5% of individuals responding defensively were correctly classified as faking good using Morey’s recommended cutting score. A newer subscale, the Defensiveness Index (DI; Morey, 1993), also proved ineffective (Cashel, et al., 1995. Cashel and colleagues (1995) asserted that classification results probably were reduced because
only nine items were included in the PIM scale, limiting the power of the subscale. Furthermore, Boyle and Lennon (1994) assert that the Personality Assessment Inventory has marginal reliability and validity.

**Psychological Screening Inventory (PSI)**

The Psychological Screening Inventory (PSI; Lanyon, 1970) is a 130-item, true/false questionnaire used in mental health screening. It has five clinical scales, Alienation, Discomfort, Expression, Defensiveness and Random Response (Vieweg & Hedlund, 1984). Using the PSI, Lanyon (1993) attempted to construct and validate four subscales related to specific deception strategies. These were symptom over endorsement, erroneous stereotype, excessive virtue and endorsement of superior adjustment. These subscales have between 26 and 34 items. Control group and analogue simulators had significantly different mean scores on all subscales. No percentages were offered as to correct classification. Effect sizes were small.

**Social Desirability**

Social desirability is the tendency to present oneself in a favorable light on psychological and personality testing (Holden & Fekken, 1989). Social desirability is similar to dissimulation in that individuals attempting to present as more desirable will try to present themselves as considerate, not aggressive, patient, honest, virtuous, etc. All of these qualities are viewed as “socially desirable.” Several measures of social desirability have been developed. The 33 item, true/false, Marlowe-Crowne Social Desirability Scale is one measure commonly used during the past 30+ years in
psychological research and is reported to be the most widely used clinical measure of social desirability (Crowne & Marlowe, 1960; Reynolds, 1982). Measures of social desirability are useful because they give researchers information about response tendencies in testing and research. Furthermore, they offer information as to the participant’s affect, personality and attitude (Reynolds, 1982). Because social desirability is by definition positive, individuals who dissimulate are also likely to deny interpersonal difficulties and will typically indicate good adjustment. Hence, an individual dissimulating is likely to answer questions on psychological testing in a socially desirable manner. Cashel, Rogers, Sewell and Martin-Cannici (1995) suggest using items from the Marlowe-Crowne in a scale measuring defensiveness. In summary, although many existing measures address aspects of dissimulation, a measure which specifically addresses dissimulation needed to be developed.

Assessment of Dissimulation Scale (ADS)

In order to fill the research void with respect to systematic methods to assess dissimulation, Hayes and colleagues (1997) developed the Assessment of Dissimulation Scale (ADS). The ADS is a 31 item screening instrument consisting of items from the MMPI and Marlowe Crowne Social Desirability Scale (n=5), novel items developed based on theoretical assumptions from a review of the literature and expert opinion (n=26). Preliminary results from analogue studies reveal three factors, Exaggerated Positive Affect (alpha = .93), Superior Adjustment (alpha = .89), and Social Desirability (alpha = .82). The ADS yielded a Cronbach alpha, internal consistency...
reliability coefficient of .94. Convergent and divergent validity were supported by moderate to high positive correlations with the Marlowe-Crowne Social Desirability Scale and the L and K Scales of the MMPI, and by low to high negative correlations with the Ds Scale of the MMPI and the Credibility Scale.

When the ADS and the above validity measures were used as predictor variables in a step-wise discriminant function analysis, the ADS entered first at step one followed by the Ds and K Scales of the MMPI. In addition, when used as the only predictor variable in a discriminant function analysis, the ADS correctly classified 94% of college student analogue subjects as either honest responders or dissimulators. This finding was more than any of the other measures entered alone, and only 2% less than using all six measures together, suggesting the ADS is the best of the five measures at discriminating dissimulators from controls.

Although the results of this study were promising, there were some limitations due to the sample used. First, subjects were predominantly female college students. Second, subjects were asked to “fake good.” They do not represent a clinical group with the same level of motivation to “fake good” based on real-life consequences. However, using undergraduate simulators in this type of research would more likely result in an under generation of dissimulation, which is less problematic than an over generation. Furthermore, while analogue subjects are commonly used to study faking, a third limitation of the sample used is that subjects were presumably well-functioning individuals and cannot be conceptually compared to psychologically impaired
individuals trying to appear normal. These limitations preclude generalizing of these findings to criminals seeking release from prisons, or psychiatric inpatients seeking release from hospitals.

In summary, the ADS may fill a gap in malingering research, not by addressing simulation, but by addressing dissimulation. No other measure is designed specifically to detect dissimulation. Not only does the ADS demonstrate good reliability and validity, but it also improves upon subscales of measures used to discriminate dissimulators from controls. Finally, the ADS is cost effective, time efficient and easy to administer and score.

**Executive Functioning**

Executive functioning refers to the ability of an individual to carry out autonomous and purposeful behavior and involves volition, planning, purposive action and effective performance (Lezak, 1995). Without it individuals cannot care for themselves, work or have social relationships. Impairment of executive functioning differs from cognitive impairment in that cognitive deficiencies generally involve specific deficits in knowledge or ability (Lezak, 1995). Executive disorders on the other hand, are more likely to be global, affecting all aspects of an individual’s life, and quite possibly his/her cognitive functioning (Lezak, 1995).

Several tests have been developed to assess executive functioning. Some executive functioning measures are the Porteus Maze Test, Tower Tests, the Tinkertoy Test, the Uses of Objects or Alternate Uses Test, Design Fluency, Graphic Pattern
Generation and the Trail Making Test, Part B (Lezak, 1995). The last of the tests noted is the best established and most popular in neuropsychological batteries. This test combines elements of attention, mental flexibility, motor functioning and visual search skills (Spreen & Strauss, 1991).

Varney (personal communication) hypothesized that successful malingering may depend on the presence of intact executive functioning with individuals scoring higher on tests of executive functioning being more likely to mangle successfully. This assertion intuitively makes sense as the individual must determine what he/she wants, conceptualize a plan to achieve it, plot the steps needed to reach the goal and then deliver the performance while self-monitoring his/her own actions and varying the intensity of the response accordingly (Lezak, 1995). An individual with poor executive functioning would not likely be able to perform the above steps in order to mangle effectively.
Summary

Malingering refers not only to simulation (faking bad), but also to dissimulation (faking good). Measures exist which have subscales intended to detect dissimulation (e.g., MMPI, MCMI, PAI) or which are similar to dissimulation detection (e.g., Marlowe-Crowne Social Desirability Scale). Only one test to date, however, has been developed specifically to detect dissimulation in a clinical setting, the Assessment of Dissimulation Scale. The utility of the ADS has been limited because no validation with a clinical population has been completed.
Purpose

In addition to the difficulties in using college students for validation studies, existing psychological tests used for dissimulation detection need improvement. Grow, McVaugh and Eno (1980) indicate the proposed cutting scores on the MMPI need further "refinement," and that it is more difficult to detect dissimulation than simulation using the MMPI. Furthermore, based on the classification studies, no existing measure or subscale (e.g., MMPI, MMPI-II, F-K Dissimulation Index, Ds, L, F., K, Mp, PIM, DI, etc.) has acceptable classification accuracy in the detection of dissimulation. It is this poor classification accuracy that led to the development of the ADS.

There are difficulties with conducting validation research, particularly dissimulation studies, with college students. College students have a tendency to present themselves in a positive light and are not representative of individuals who attempt to fake healthy adjustment (Dahlstrom et al., 1972). Furthermore, college students have little psychologically or biologically significant motivation to dissimulate. Therefore, data obtained from a college student population may not be generalizable to individuals with a powerful incentive to dissimulate. Psychiatric patients, for example, will likely dissimulate when assessment is seen as a hurdle to clear before release from a mental hospital or prison (Harvey & Sipprelle, 1976; Wilcox & Krasnoff, 1967).

Since it is known that psychiatric patients will sometimes dissimulate making diagnosis and treatment difficult, clinical validation of the ADS was desirable. If successful, the ADS would provide a screening instrument for dissimulation detection
in order to ensure the safety of the patients and community dwellers after the patients are released. Finally, since it has been hypothesized individuals with good executive functioning are able to malinger more effectively, this variable would also be examined in relation to dissimulation.

Validation of the ADS was to be accomplished in several ways. In order for the ADS to be useful to clinicians, the instrument needed to be sensitive to group condition. Therefore, individuals faking good should have a higher ADS score than individuals who are responding honestly. Furthermore, concurrent and discriminant validity had to be established using existing measures in order to verify the utility of this new screening measure. When compared with the other existing measures, the ADS should be the best discriminator and should be better than chance when ascertaining whether an individual is faking good or answering honestly. Finally, the hypothesis that individuals with better executive functioning are more likely to be able to dissimulate also needed to be confirmed. In summary, the purpose of this study was to determine whether the ADs was effective in detecting dissimulation in criminal and civilly committed population and to establish a cut-off score on the ADS above which dissimulation should be suspected.
Hypotheses

1. The fake good condition will have a significantly higher ADS score than controls.

2. Individuals scoring higher in executive functioning will have higher ADS scores than individuals in the lower executive functioning group while in the fake good condition, but not in the control condition.

3. The ADS will enter first in a discriminant function analysis when analyzed with the other validity measures.

4. The ADS will correlate highly with the Marlowe-Crowne Social Desirability Scale, the L, F and K Scales of the MMPI and the F-K Index.

5. The ADS will correlate minimally with the Barnett Liking of Children Scale.

6. The ADS score will be significantly better than chance in determining group membership (e.g., control or fake good).
Method

Approval

Prior to beginning this research project, a proposal was approved by the Institutional Review Boards of the State of Louisiana, Louisiana State University, Feliciana Forensic Facility (FFF) and East Louisiana State Hospital (ELSH). All participants were tested either at FFF or ELSH. One hospital is a state hospital for mentally ill offenders, and the other is a regional psychiatric facility.

Participants

The sample consisted of 83 males who had been declared not guilty by reason of insanity by the courts or civilly committed to inpatient hospitalization at one of two state psychiatric facilities. Fifty individuals were Study One participants [twenty-five from East Louisiana State Hospital (ELSH); 25 from Feliciana Forensic Facility (FFF)], while the remaining 33 patients (18 from ELSH; 15 from FFF) were included in Study Two to cross validate cut-off scores derived from Study One results. Furthermore, only individuals nearing release were included, as these individuals were the most representative of those seeking release from a mental hospital or prison. This judgment was based on a review of the chart notes and interviews with the direct care staff (e.g., nurse, guard, social worker).
Materials

Consent and Participant Instructions

Informed consent

The consent form outlined the purpose of the study and an individual's legal rights as a research participant (See Appendix A). Additionally, contact information was given for the principal researcher, as well as for an employee of the facility. Each form was individually read to each participant, and their approval was noted by signature. A copy of the consent form was given to each participant.

Instructions in the control condition

A paragraph of instructions read verbatim during the first testing session when the participants were in the control condition is attached (See Appendix B). These instructions reiterated the purpose of the study, asked the participant to answer questions honestly and asked him to perform to the best of his ability. These instructions also indicated the participant would receive $2.00 if he tried his best and answered all questions honestly during both testing sessions.

Instructions in the fake good condition

This set of instructions was designed to be read to every participant during the second testing session when in the dissimulation condition (Appendix C). These instructions reiterated the purpose of the study and asked the participant to answer the questions as if he were trying to gain release from a mental hospital or prison. Participants were reminded that convincing the examiner of good psychological health
would result in his being paid $2.00 for participation in both parts of the study. All participants were paid $2.00 regardless of their performance after completing both portions of testing.

**Instructions to control group cross validation participants**

A paragraph of instructions read verbatim to the cross validation participants in Study Two is attached as Appendix D. These instructions reiterated the purpose of the study, asked the participant to answer all questions in an honest and open manner and requested he perform to the best of his ability. All cross validation participants were told they would be paid $2.00 for a “convincing” performance.

**Instructions to fake good group cross validation participants**

This set of instructions was designed to be read to every cross validation participant assigned to the dissimulation condition (See Appendix E). The experimenters reiterated the purpose of the study and asked the participant to answer the questions as if he were trying to gain release from a mental hospital or prison.

**Debriefing statement**

The debriefing statement again outlined to the participants the purpose of the study and asked if they had any further questions. It gave them information about how to find out the results of the study in the future (See Appendix G).
Psychometric Tests

Trail Making Test A (TMTA)

The TMTA is a test of visual spatial and motor functioning which requires the patient to draw a line connecting a sequence of numbers (Anderson, 1994). Additionally, this pencil and paper test measured number recognition, visual scanning, upper extremity motor functioning and visuomotor coordination (Anderson, 1994). This test was used as an easy to understand, introductory task before administering part B of the Trail Making Test.

Trail Making Test B (TMTB)

The TMTB is a test of executive functioning which required the participant to draw a line alternating between sequences of numbers and letters. In addition to executive functioning, it also measures number and letter recognition, visual scanning, cognitive flexibility, visual-spatial functioning, upper extremity motor functioning and visuomotor coordination (Anderson, 1994). Both TMTA and TMTB have good reliability coefficients (test-retest), with most above .60 and many in the .90 range. Validity has been established repeatedly with a number of different patient populations (c.f., Lezak, 1995). Emotional disturbance tends to have slowing effect on the Trail Making Test (Lezak, 1995).

The Assessment of Dissimulation Scale (ADS)

The ADS is a 31 item true/false self-report measure designed to screen for dissimulation. Scoring was accomplished by reversing the score (e.g., false to true, and
true to false) on items 1, 5, 6, 8, 9, 12, 13, 16, 17, 19, 23, 25 and 30, and then adding all positive responses. This number yields the ADS total score. The words “Test of Mental Health” are printed at the top of each ADS to conceal the purpose of the test.

Five items chosen for the ADS scale were slightly altered questions obtained from either the Minnesota Multiphasic Personality Inventory (Hathaway & McKinley, 1943) or the Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1960). Table One summarizes the ADS questions and the similarly-worded source questions. These questions were similar in content based on a four person expert review panel.

Consensus was obtained from all members. All of these items will be excluded from the L, K and Marlowe-Crowne Social Desirability Scale respectively before the measures are correlated with the ADS. Original ADS items (N=26) were generated based on a literature review and expert interview. Items are both positively and negatively worded and/or scored (e.g., sometimes I do things without thinking about what will happen; I am happy all the time). It is estimated by the Grammar Checker on Word 6.0 that the ADS requires a 4.2 grade reading level. Preliminary studies indicate the ADS has excellent internal consistency (Cronbach alpha = .94) and good concurrent validity.

**L Scale**

The L Scale is comprised of 15 questions and was designed to detect individuals who are purposely trying to deny negative attributes in themselves. These questions are 15, 30, 45, 60, 75, 90, 105, 120, 135, 150, 165, 195, 225, 255, 285 from
the MMPI group administration form. The L Scale is scored by tallying all false responses. The reported mean is 4.24 for males, with a standard deviation of 2.67 (Dahlstrom et al., 1960). MMPI reliability and validity have been investigated at length, and there appears to be a consensus that both are adequate (Dahlstrom et al., 1960; Lezak, 1995; Spreen & Strauss, 1991).

Table 1

Summary of ADS Questions and Similarly Worded Source Questions

<table>
<thead>
<tr>
<th>ADS Question</th>
<th>Source</th>
<th>Source Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. Sometimes I get so angry I want to smash things.</td>
<td>K Scale</td>
<td>At times I feel like smashing things.</td>
</tr>
<tr>
<td>10. I would never let somebody else be punished for something I did.</td>
<td>MC</td>
<td>I would never think of letting someone else be punished for my wrongdoings.</td>
</tr>
<tr>
<td>16. I sometimes try to get even with a person rather than forgive and forget.</td>
<td>MC</td>
<td>I sometimes try to get even rather than forgive and forget.</td>
</tr>
<tr>
<td>21. My table manners at home are as good as when I eat at a restaurant.</td>
<td>MC</td>
<td>My table manners at home are as good as when I eat out in a restaurant.</td>
</tr>
<tr>
<td>25. Sometimes I think of things too bad to talk about.</td>
<td>L Scale</td>
<td>Once in a while I think of things too bad to talk about.</td>
</tr>
</tbody>
</table>

Note. MC= Marlowe-Crowne Social Desirability Scale

F Scale.

Of the 64 items on this subscale, the items scored in the true direction include

14, 23, 27, 31, 34, 35, 40, 42, 48, 49, 50, 53, 56, 66, 85, 121, 123, 139, 146, 151, 156,

**K Scale**

The K scale is composed of 30 items from the MMPI. These include questions 30, 39, 71, 89, 124, 129, 134, 138, 142, 148, 160, 170, 171, 180, 183, 217, 234, 267, 272, 296, 316, 322, 374, 383, 397, 388, 406, 461 and 502. The K Scale is scored by tallying all false responses, with the exception of question 96. This question is scored when answered true. The mean of this scale is 13.21 for males, with a standard deviation of 5.44 (Dahlstrom et al., 1960).

**Marlowe-Crowne Social Desirability Scale**

The Marlowe-Crowne Social Desirability is a 33 item, true/false questionnaire which assesses a response tendency to answer personality and psychological testing in a socially appropriate manner Scale (Crowne & Marlowe, 1960). Reynolds (1982) reports the mean for the Marlowe-Crowne is 15.00 with a standard deviation of 5.91. The internal consistency of the Marlowe-Crowne Social Desirability Scale was originally estimated at .88, and concurrent validity was established through significant correlations with the Edwards Social Desirability Scale, K Scale, F Scale, Hs Scale, D Scale, Pd Scale, Pt Scale, Sc Scale and Ma Scale of the MMPI.
Barnett Liking of Children Scale (BLOCS)

Developed by Barnett and Sinisi (1990), the BLOCS is a 14-item instrument designed to determine how well an individual likes children (See Appendix M). Internal consistency (alpha = .93) and test-retest (r=.91) are excellent, and concurrent validity has been established through significant correlation with the Hereford Childbearing Scale and a number of independent statements of childbearing attitudes. In order to score the BLOCS, items 3, 6, 10 and 13 are reverse scored, and then all items are summed for a total score. A higher score reflects a favorable attitude towards children. The BLOCS was administered in an effort to establish discriminant validity.

Questionnaires

Post test questionnaire

The post test questionnaire includes several questions which asked the participants what they were supposed to do during the study, how hard they tried to do this and how successful they believed they were at accomplishing this task (See Appendix F). Participants were asked if they would try harder given actual circumstances, and if they felt they convinced the examiner they were faking good. These latter two questions did not apply to the control group and were not read to them.
Demographic questionnaire

From a review of patient charts, information was obtained and recorded on a Demographic Questionnaire (See Appendix H). Information obtained included age, marital status, sex, education, arresting charge, psychiatric diagnosis and also included a summary of the above listed test scores.
Design and Procedure

Study One

Testing was conducted as follows: At ELSH, the examiner and participant worked alone in a quiet room. Examiners included undergraduate research assistants trained by the principal examiner and the principal examiner. When testing was conducted at FFF, an unarmed security officer accompanied the examiner if testing was conducted in a secluded room because patients in this hospital have allegedly committed prior criminal offenses. Under these circumstances, this officer sat in a corner, behind the patient and remained quiet. If testing was conducted in a day room or other common area, no guard was necessary, as the participant and examiner could be seen from the guard station.

Initially, all participants were read the informed consent form asking for their participation. No participant was included unless prior consent was obtained. Each participant was assured confidentiality. A participant number was assigned, and a master list of names with participant numbers was in the principal examiner's possession. This list was destroyed upon completion of data collection. Demographic information was obtained by chart review.

Since the initial validation study (i.e., Study One) used a within subjects design, the 50 study participants were involved in two parts of the investigation - control and fake good conditions. Participants were initially placed in the control condition and were read the consent form. If consent was obtained participants were administered
the Trail Making Test Part A and Part B under standard instructions. The participants were then read the instructions for control participants which asked them to comply with testing and perform their best on all tests administered. After being read the instructions, the examiner asked the participants what they were expected to do. For an individual completing testing in the control condition, an appropriate answer was “answer the questions” or “take your tests”, etc. If the participant did not answer in this manner, the instructions were read again. If after reading the instructions three times, the participant was not able to explain what he was being asked to do, he would have been excused from the study; however, no participant required more than two readings of the instructions. After orally completing the experimental measures in a counterbalanced order under standard instructions, the participant was thanked for his participation and was reminded the second part of testing would occur the next week.

After one week, the participant completed testing in the fake good condition. Participants were read the dissimulation instructions and were reminded they would receive $2.00 for successful faking. As was done at time one, if an individual in the fake good group did not summarize the instructions or say “fake good” or “act like I’m trying to get out of a mental hospital or prison”, he would have been asked to listen to the instructions again until criterion was reached. He would have then been asked what is expected of him once more. Questioning would have continued until the participant achieved the minimal level of instructional knowledge or was excused after the third explanation attempt; however, only two instructional presentations were necessary with
all participants. The number of times the instructions were given was recorded on the demographic information form. At this point, the tests described in the materials section were orally administered under standard instructions in a counterbalanced order. After test completion, the participants orally completed the post test questionnaire and were read the debriefing statement. Two dollars was either given to each participant (at ELSH) or placed in his discretionary spending account (at FFF).

Study Two

The cross validation study was necessary to determine classification accuracy based on the cutting score derived in Study One. The same procedures were used during this study. The informed consent form was read to the new participants, and they completed the Trail Making Test, Parts A and B. Participants were then placed in either a control or fake good group on an alternating basis. They were read the appropriate instructions and the above-described internal validity check was used. Among the malingering measures used in Study One, only the ADS was administered (orally), and the participants’ responses were recorded. After completing the ADS, the participants were read the post battery questionnaire and their responses were recorded verbatim. Finally, the debriefing statement was read.
Results

Study One

Descriptive Statistics

All data analyses were conducted using SPSS for Windows, Version 6.0. Means and standard deviations of participant ages and years of education, divided by facility are summarized in Table 2. No significant differences between participants in the two facilities (i.e., ELSH and FFF) on the one way ANOVAs for age \( F (1,48) = .04, \text{NS} \) or education \( F (1,46)= 2.5, \text{NS} \). In addition, Pearson chi-square analyses were used to examine relative frequencies of the nominal variables marital status and race between the two facilities. Both marital status \( (X^2=5.6, \text{df}=3) \) and race \( (X^2=1.3, \text{df}=2) \) were not significant. Primary diagnosis and primary charges across facilities obtained from the participant’s chart are presented in Tables 3 and 4, respectively. The majority of participants were diagnosed with either schizophrenia or other psychotic disorders (78%) or substance related disorders (10%). Likewise, the most frequent criminal charges included murder (38%), battery/assault (16%) and rape (12%).

Hypothesis One

It was hypothesized that the ADS score for participants in the fake good condition would be higher than when they were in the control condition. Since the type of data was interval and samples were related, a Paired Samples T-test was appropriate. Using this statistical test, the above hypothesis was supported [mean
control condition = 14.9, SD = 5.4; mean fake good condition = 20.3, SD = 5.4; t(49) = 5.92, p < .0001. See Figure 1.

Table 2

Means and Standard Deviations (in Parentheses) for Age and Years of Education Stratified by Facility

<table>
<thead>
<tr>
<th></th>
<th>FFF</th>
<th>ELSH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (in years)</td>
<td>40.4 (7.4)</td>
<td>40.8 (8.0)</td>
</tr>
<tr>
<td>Years of Education</td>
<td>11.4 (2.2)</td>
<td>10.2 (2.9)</td>
</tr>
</tbody>
</table>

Note. FFF = Feliciana Forensic Facility, ELSH = East Louisiana State Hospital

Table 3

Primary Diagnoses Across Facilities

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Number of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>50</td>
</tr>
<tr>
<td>Dementia</td>
<td>1 (2%)</td>
</tr>
<tr>
<td>Mood Disorders</td>
<td>1 (2%)</td>
</tr>
<tr>
<td>Personality Disorders</td>
<td>4 (8%)</td>
</tr>
<tr>
<td>Schizophrenia and Other Psychotic Disorders</td>
<td>39 (78%)</td>
</tr>
<tr>
<td>Substance Related Disorders</td>
<td>5 (10%)</td>
</tr>
</tbody>
</table>

Hypothesis Two

It was hypothesized that individuals scoring higher in executive functioning would have higher ADS scores than individuals in the lower executive functioning groups in the fake good, but not the control conditions. High versus low executive functioning was determined by a median split of the times from the Trail Making Test,
### Table 4

**Primary Charges Across Facilities**

<table>
<thead>
<tr>
<th>Charge</th>
<th>Number of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>50</td>
</tr>
<tr>
<td>Arson</td>
<td>4 (8%)</td>
</tr>
<tr>
<td>Battery/Assault</td>
<td>8 (16%)</td>
</tr>
<tr>
<td>Burglary</td>
<td>2 (4%)</td>
</tr>
<tr>
<td>Criminal Damage to Property</td>
<td>1 (2%)</td>
</tr>
<tr>
<td>Disturbing the Peace</td>
<td>2 (4%)</td>
</tr>
<tr>
<td>Forgery</td>
<td>1 (2%)</td>
</tr>
<tr>
<td>Murder</td>
<td>19 (38%)</td>
</tr>
<tr>
<td>Rape</td>
<td>6 (12%)</td>
</tr>
<tr>
<td>Revoked Probation</td>
<td>2 (4%)</td>
</tr>
<tr>
<td>Criminal Damage to Property</td>
<td>1 (2%)</td>
</tr>
<tr>
<td>No Charge</td>
<td>5 (10%)</td>
</tr>
</tbody>
</table>

![Graph](image-url)  

**Figure 1.** Mean value of the ADS score $\pm$ 2 standard deviations between the two experimental conditions

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Part B. This median was 150 seconds. This hypothesis was not supported. In order for this hypothesis to be supported, the interaction effect must be significant. After running a repeated measures ANOVA, it was determined there was no main effect for executive functioning \( [F(1,48) = .82, \text{NS}] \), and no interaction effect between executive functioning and condition \( [F(1,48) = .43, \text{NS}] \), but there was a main effect for condition \( [F(1,48) = 34.69, p < .0001] \).

Since the median performance of the participants was well below the 10th percentile based on the norms of Davies (1968), further analysis was completed using only scores of individuals performing at or above the 50th percentile \( (\leq 78 \text{ seconds}) \) and at or below the 10th percentile \( (\geq 126 \text{ seconds} -- \text{based on the age range 40-49 years, as the mean age for both facilities was 40.6 years}) \). These percentile cutoff scores were chosen as no individuals in the current sample had Trail Making Test, Part B times at or above the 90th percentile, and only one individual performed at or above the 75th percentile. Based on the results of this repeated measures analysis, a significant main effect for executive functioning \( [F(1,38) = 4.40, p < .04] \) and condition \( [F(1, 38) = 25.63, p < .0001] \) was computed. No interaction effect was noted \( [F(1,38) = 2.31, \text{NS}] \). Although scores moved in the expected direction, hypothesis two was not proven. Individuals in the higher executive functioning group increased their ADS score from a mean of 11.5 (5.0) when in the control condition to 19.6 (5.2) when in the fake good condition, for a difference of 8.1; while individuals in
the lower executive functioning group only raised their ADS scores from 16.7 (5.0) to 21.1 (5.2), respectively, for a difference of only 4.4 points.

To determine if the above results might reflect significant differences related to executive functioning level using difference scores, a separate analysis of variance was completed. The difference score between testing under fake good condition and control condition was the dependent variable, and high and low executive functioning determined by a median split was the independent variable. No significant effect for executive functioning was found \( [F (1, 48) = .4, \ NS] \). A separate ANOVA using the percentile cut-off scores described above as the independent variable (i.e., individuals performing at or above the 50th percentile and at or below the 10th percentile), rather than a median split was computed. No significant effect was found in this analysis either \( [F (1,38) = 2.3, \ NS] \).

To determine if any significant trends occurred with regard to executive functioning across all dependent variables, a MANOVA using all six dependent measures (i.e., ADS, L Scale, F Scale, K Scale, F-K Index, Marlowe-Crowne Social Desirability Scale) was run to determine whether main effects exist for condition, executive functioning or the interaction between the two. The median of 150 seconds on the Trail Making Test, Part B was used for this analysis to define the high and low executive functioning groups. No main effect was determined for executive functioning \( [F (6,43) = .1, \ NS] \); however, condition did prove significant \( [F (6,43) = \)
5.6, p < .0001. There was no significant interaction between the two main effects [F (6, 43) = 1.5, NS].

A series of univariate F-tests were conducted based on the results of the above MANOVA to determine which dependent variables were significantly different in the two conditions. Results of these revealed a significant difference between the scores on all six dependent measures between the control and fake good conditions. These results are summarized in Table 5 below.

Table 5

Means, Standard Deviations and p Values of all Dependent Variables Across Experimental Conditions

<table>
<thead>
<tr>
<th>Test</th>
<th>Control Cond. x(SD)</th>
<th>Fake Good Cond. x(SD)</th>
<th>p Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADS</td>
<td>14.9(5.4)</td>
<td>20.3(5.4)</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>L Scale</td>
<td>4.7(2.6)</td>
<td>7.0 (4.1)</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>F Scale</td>
<td>13.1(8.2)</td>
<td>10.4 (7.3)</td>
<td>&lt;.004</td>
</tr>
<tr>
<td>K Scale</td>
<td>13.2(5.4)</td>
<td>16.0(5.9)</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>F-K Index</td>
<td>-.3(11.3)</td>
<td>-.5.8(11.7)</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Marlowe Crowne SDS</td>
<td>19.5(5.2)</td>
<td>23.5 (5.1)</td>
<td>&lt;.0001</td>
</tr>
</tbody>
</table>

Note. Marlowe-Crowne SDS = Marlowe-Crowne Social Desirability Scale

A similar MANOVA was completed based on the cut-off scores described by Davies (1968). In this analysis all 6 dependent measures were entered. The same significant trends occurred as above, with no main effect for executive functioning [F (6, 33) = 1.7, NS], a significant main effect for condition [F (6, 33) = 4.3, p < .002] and
no interaction effect \[F (6, 33) = 1.1, \text{NS}\]. All six measures were significant at or above the .01 level based on the results of univariate \(F\) tests.

**Hypothesis Three**

It was hypothesized that the ADS would enter first in a discriminant function analysis when entered with the other validity measures (i.e., L Scale, F Scale, K Scale, F-K index and Marlowe-Crowne Social Desirability Scale). This analysis reached overall significance \(p < .0001\). Sixty-nine percent of the participants were correctly classified into either the control condition or fake good condition. Seventy percent of individuals in the fake good condition were correctly classified, while 68% of individuals in the control condition were correctly classified. The ADS was the only predictor variable to enter into the analysis. Therefore, hypothesis three was supported.

Separate discriminant function analyses were completed with the five validity measures. The F Scale of the MMPI and the Marlowe-Crowne Social Desirability Scale were not included as initial results indicated their classification rates were no better than chance. The L Scale correctly classified 59% of participants, and both the K Scale and the F-K Index correctly classified 54% of participants into either the control condition or the fake good condition. Accordingly, the ADS is the best predictor of group membership, classifying 69% of individuals correctly into their respective conditions.
Hypothesis Four

It was hypothesized that the ADS would correlate highly with the Marlowe-Crowne Social Desirability Scale and the L, F and K Scales of the MMPI and the F-K Index. Prior to calculating correlations, the five questions which overlap directly with items on the L Scale, K Scale and Marlowe Crowne Social Desirability Scale were omitted. A Pearson correlation ($r$) was performed to measure the strength of the relationship between the ADS and the above listed five convergent and divergent validity measures. As seen in Table 6, modest correlations occurred between the ADS and the L Scale, K Scale and the Marlowe-Crowne Social Desirability Scale. The ADS did not significantly correlate with the F Scale or the F-K Index. Therefore, Hypothesis four was only partially supported.

Table 6

<table>
<thead>
<tr>
<th>Validity Measure</th>
<th>$r$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>L Scale</td>
<td>.4</td>
<td>.002</td>
</tr>
<tr>
<td>F Scale</td>
<td>.03</td>
<td>NS</td>
</tr>
<tr>
<td>K Scale</td>
<td>.33</td>
<td>.02</td>
</tr>
<tr>
<td>F-K Index</td>
<td>-.13</td>
<td>NS</td>
</tr>
<tr>
<td>Marlowe Crowne Social Desirability Scale</td>
<td>.58</td>
<td>.0001</td>
</tr>
</tbody>
</table>

Hypothesis Five

It was hypothesized that the ADS would correlate minimally with the Barnett Liking of Children Scale (BLOCS). A Pearson correlation ($r$) was performed to
measure the strength of the relationship between the ADS and the BLOCS, a
discriminant validity measure. This hypothesis was not supported as the ADS
correlated moderately with the BLOCS (r=.44, p<.001).

Hypothesis Six

It was hypothesized that the ADS score would be significantly better than
chance in determining group membership (e.g., control or fake good). Based on the
results of a discriminant function analysis, this hypothesis was supported as the analysis
reached overall significance (p < .0001). According to this discriminant function
analysis, 69% percent of the participants were correctly classified into either the control
condition or fake good condition. Seventy percent of individuals in the fake good
condition were correctly classified, while 68% of individuals in the control condition
were correctly classified. Table Seven reports percentages of correct classification
based on the data from Study One.

As can be seen from Table 7, a cut-off score of 18/19 represents a 44% error
rate in the faking good condition, and a 22% error rate in the control condition. This
combines for an overall error rate of 33%. Accordingly, the same cut-off scores
correctly classify 56% of individuals in the faking good condition, and 78% of
participants in the control condition, for an average correct classification rate of 67%
(i.e., 134%/2). These cut-off scores minimize false positive and false negative errors.
Therefore, a screening score of 19 or above will be used to indicate dissimulation, and
scores of 18 or below will not. The ADS is a valid and effective predictor of
Table 7

Sensitivity, Specificity, False Positive and False Negative Error Rates for the ADS

<table>
<thead>
<tr>
<th>ADS Cut-Off Score</th>
<th>Sensitivity</th>
<th>Specificity</th>
<th>False Positive Error Rate</th>
<th>False Negative Error Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>100%</td>
<td>2%</td>
<td>98%</td>
<td>0%</td>
</tr>
<tr>
<td>2</td>
<td>100%</td>
<td>2%</td>
<td>98%</td>
<td>0%</td>
</tr>
<tr>
<td>3</td>
<td>100%</td>
<td>2%</td>
<td>98%</td>
<td>0%</td>
</tr>
<tr>
<td>4</td>
<td>100%</td>
<td>4%</td>
<td>96%</td>
<td>0%</td>
</tr>
<tr>
<td>5</td>
<td>100%</td>
<td>4%</td>
<td>96%</td>
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Note. Base rate = .50.
dissimulation, using a dissimulation base rate of 50% which is the case in the present study (See Figure 2; Gouvier, Hayes, & Smiroldo, 1997). Accordingly, the ADS would be effective within the range of base rates for dissimulation that is greater than .34 (Combined Error Rate) and less than .66 (1-Combined Error Rate).

<table>
<thead>
<tr>
<th>ADS Score</th>
<th>≥ 19 - Dissimulator</th>
<th>≤ 18 - Honest Responder</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dissimulator</td>
<td>N = 31 participants</td>
<td>N = 19 participants</td>
</tr>
<tr>
<td>Honest Responder</td>
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<td>2</td>
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<td>4</td>
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<tr>
<td>N = 35 participants</td>
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<th>Sensitivity</th>
<th>&gt;</th>
<th>False Negatives</th>
<th>Specificity</th>
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<td>False Positives</td>
<td>31 &gt; 19</td>
<td>15 &gt; 35</td>
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<td>Yes, it is valid</td>
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<th>Is it effective?</th>
<th>BR</th>
<th>&gt;</th>
<th>FP + FN</th>
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<tr>
<td>.5 &gt; .15 + .19</td>
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<td>.5 &gt; .34</td>
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<tr>
<td>Yes, it is effective (better than base rate only predictors) when the range of malingering base rates go from .34 to .66</td>
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Figure 2. Validity and effectiveness of the Assessment of Dissimulation Scale

Study Two

Using the data from Study Two, cutting scores of 18/19 correctly classified 72.2% of control subjects and 53.3% of dissimulation subjects, for a combined classification rate of 62.75%, with a combined error rate of 37.2%. When using the ADS, classification is better
than chance \[F (1,31) = 12.34, p<.0014\]. Results of a discriminant function analysis indicate correct classification in 69.4% of cases. As was the case with the data from Study One, the ADS is a valid and effective predictor of dissimulation.

**Summary of Post Battery Questionnaire**

Prior simulation research indicated many participants do not follow instructions to mangle (Bernard, 1990; Rogers, 1988). Accordingly, manipulation checks have been suggested to determine if valid results were obtained (Rogers, 1988). In the present study, all 83 participants were read the Post Test Questionnaire, and their answers were recorded verbatim. One participant would not complete the form. The answers to all questions are summarized below.

**Question 1**

Please tell me what you were asked to do for me? All participants were able to inform the examiner of how they were asked to respond.

**Question 2**

Please tell me how hard you tried to follow the instructions: 1 (not at all)—2—3—4—5 (very hard). Ninety-four percent of participants (77/82) scored a three or above, indicating adequate effort levels, with the majority of individuals (48/82 - 58.5%) indicating they tried “very hard” to follow the instructions.
**Question 3**

Please tell me how good of a job you did at convincing me: 1 (not at all)—2—3—4—5 (very hard). Eighty-seven percent of participants (71/82) indicated being from average to very successful at this task.

**Question 4**

Do you think if you were offered more money, you would have worked harder? Seventy percent (58/82) indicated they would not, while 30% indicated they would work more diligently given an increased monetary reinforcer.

**The following questions were only administered to participants in the dissimulation condition (N=64).**

**Question 5**

Do you think you were able to convince me that you were mentally healthy? Eighty-seven percent (56/64) of individuals indicated “yes”, while 13% (8/64) said “no”.

**Question 6**

Do you think that if you really were about to get out of the hospital that you would have worked harder? This question was evenly divided (50%) between participants stating “yes” and “no” (i.e., 32/64 - “yes” and 32/64 - “no”).
Discussion

The ADS is a unique measure, as it is the first screening measure designed specifically to detect psychopathology among a population of individuals attempting to present as mentally healthy and capable of re-introduction into the community. While other measures exist with subscales designed to assist in dissimulation detection (e.g., MMPI, MMPI-2), the ADS is the only measure developed specifically for this purpose. This oversight may be because dissimulators are more difficult to identify than simulators (Grow, et al., 1980). Conversely, many measures have been developed to detect normal psychological functioning in individuals presenting as psychologically unstable (e.g., M-Test; Portland Digit Recognition Test). Furthermore, other dissimulation detection measures are often time consuming, their effectiveness is questionable and cutting-scores are not clearly established (Bagby, et al., 1994; Cashel, et al., 1995).

The Assessment of Dissimulation Scale’s utility has been limited as it was only validated with college students. The present study attempted not only to validate the ADS using a clinical population of criminal and civilly committed participants, but to also determine a cut-off score above which dissimulation could be suspected. Furthermore, the role of executive functioning in the ability to malinger was also explored.

The ADS was useful in detecting dissimulation in a clinical population. Not only was the ADS’ raw score significantly higher in the fake good condition than in the controls (p < .01), but ADS scores also classified 69% of participants correctly into their actual condition according to the results of a discriminant function analysis. In fact, when the ADS
was entered into a step-wise discriminant function analysis with the other five predictor variables (i.e., L Scale, F Scale, K Scale, F-K Index and the Marlowe-Crowne Social Desirability Score), the ADS was the first and only dependent measure to enter into the analysis, indicating the ADS is the best predictor of the six. Furthermore, when each predictor variable was analyzed independently, the F Scale and the Marlowe-Crowne Social Desirability Scale did not enter into the analysis as their classification results were no better than chance. The other three classified between 54 and 59% of participants in the correct conditions. Therefore, the ADS correctly classified 10% more participants than the best of the other five dependent measures. Furthermore, adding the other five predictor variables into the analysis did not improve classification accuracy.

Based on the results of the ADS scores from the first study, ≥ 19 was considered the best cut-off score as it minimizes the combined false positive and false negative error rates (33%) as suggested by Gouvier, Hayes and Smiroldo (1997). That is, scores at 19 or above indicate it is likely an individual is dissimulating, while a score of 18 or below suggests the opposite. Error rates are also presented for scores between 1 and 31 (See Table 7). When ≥ 19 is used as the cutting score for the data from Study Two (cross validation), 72.2% of control and 53.3% of dissimulation participants were correctly classified, for a combined correct classification rate of 62.75%. This indicates the cut-off score derived from the results of Study One is significantly better than chance in determining group membership. Furthermore, the ADS was determined to be both a valid and effective predictor of dissimulation, when the base rate for dissimulation is between 34% and 66%.
Modest convergent validity was established with the L Scale, K Scale and Marlowe Crowne Social Desirability Scale; however, the ADS did not significantly correlate with the F Scale of the MMPI or the F-K Index. Although the F Scale has been used by researchers to detect malingering, it also is thought to measure severe mental illness (Pope et al., 1993). Based on the high range of scores and the relatively large standard deviations, it appears participants answered erratically. It is hypothesized individuals in the current sample were unsure how individuals would respond when dissimulating on the F-Scale and became confused. It is difficult to determine whether this pattern would hold true in another population, as these indices were not used to initially establish convergent or divergent validity in the Hayes et al. study (1997). The same is true for the F-K Index. This finding supports some authors' contention that the F-K Index is slightly better than chance in determining dissimulation (McAnulty et al., 1985). An alternative explanation is that simulation and dissimulation are not opposites on a continuum, but rather represent separate constructs (Lanyon et al., 1989).

Discriminant validity was not established as the ADS significantly correlated with the Barnett Liking of Children Scale. Informal questioning of participants following completion of the study indicated they believed they needed to indicate liking children a great deal in the dissimulation condition, rather than answering as they honestly feel. They described feeling that this scale measured virtue. Lanyon (1993) described excessive virtue as a specific deception strategy in dissimulation. Accordingly, discriminant validity was neither proven nor disproven as the participants likely saw the BLOCS as a scale in which it
was necessary to feign. It appears the significant correlation between the BLOCS and the ADS adds support to convergent validity, although this was not the initial intent of including this measure in the present study. Discriminant validity remains unproven, and this should be addressed in future research.

Although the ADS was better than chance (69%) in determining condition, it was hoped that the classification rates would have been higher. One possible reason the ADS classification rate may have been diminished is that although individuals in Study One were assured their answers would be confidential, they may have dissimulated anyway. All individuals in this study had a reason to dissimulate—release from a mental hospital or prison (i.e., secondary gain - Harvey & Sipprelle, 1986; Wilcox & Krasnoff, 1967). Furthermore, it is likely that many of the participants have not been reinforced in the past for answering honestly. When patients tell mental health professionals how they really feel (e.g., angry, depressed, etc.), this could be seen as adding to their length of stay. Therefore, when the examiners told the participants to answer honestly, and their answers would be confidential, it is likely this statement was not believed, or the participant reverted into a well-learned dissimulating behavioral pattern. Therefore, except for being told their answers would be kept confidential, individuals in the control condition took the ADS under standard instruction. To confirm this hypothesis following completion of both studies, a third group of participants were recruited from various adult education centers in East Baton Rouge Parish, Louisiana with the assistance and permission of Dr. George Varino, Parish Director of Adult Education. Individuals from these centers were demographically similar to
participants in Study One. A total of 41 male participants had a mean age of 19.8 (SD=6.37) and a mean level of education of 10.37 (SD=2.68). Chi square analysis revealed no significant differences in educational level between individuals in Study One and individuals from the adult education centers ($X^2=13.66$, df=13), but an ANOVA did indicate individuals from Study One were significantly older than participants from the adult education center [$F (1, 88) = 190.482$, $p<.0001$]. Sixty-one percent of the participants were African-American, 35.5% were Caucasian and 2.4% elected not to respond. Again, no significant differences in race occurred between the two compared groups ($X^2 = 1.61$, df=2). All participants were asked to answer honestly. The ADS scores of the adult education participants were significantly lower [$F (1,89) = 17.858$, $p<.0001$, Mean = 10.146, SD = 5.332, Range = 2-21] than those of participants in the control condition in Study One (Mean = 14.94, SD = 5.4264). Using the cut-off score of 19, 7.3% of individuals would be incorrectly classified as dissimulators. Therefore, the author’s speculation was likely supported. That is, individuals in the control condition in Study One were likely dissimulating. Still, the higher scores in the control condition by participants in both studies may be a function of mental illness or well-learned role-playing. Further investigation using mentally ill outpatients will more definitively determine if individuals in the present study were dissimulating. Outpatients are recommended as early release from a hospital/prison will not be an issue. At this point, definitive cut-off scores cannot be established.
The question of whether malingering is a function of intact executive functioning was not sufficiently answered in the present study. Using scores from the Trail Making Test, Part B, participants were placed either into a high executive functioning group or a low executive functioning group based on the results of a median split. Unfortunately, most individuals in this study's sample scored low on this measure of executive functioning (<10%); therefore, the median split more accurately placed participants in either a "low" or "lower" category. In fact, many authors consider the observed median performance as seen in this study to be in the severely impaired range (Davies, 1968; Fromm-Auch & Yeudall, 1983; Kennedy, 1981). It would be useful to identify a subset of incarcerated or civilly committed individuals with above average executive functioning (>75%) and compare their scores with individuals already tested who scored below average (<25%) on this domain. Until this occurs, the relationship between executive functioning and malingering remains uncertain.

Other limitations exist in addition to those described above. First, a simulated within subjects research design was employed with individuals with motivation to dissimulate. A better alternative would have been to independently identify dissimulators and honest responders and compare their response styles as suggested by Bagby and his collaborators (1995). Additionally, females were not included as few numbers existed at the evaluation sites. Similarly, this sample may not be representative of civilly and criminally committed individuals in other regions.
Additional research needs to be conducted with the ADS and other malingering measures to ensure their validity and effectiveness. In addition to the above suggested directions, future research needs to consider the influence of demographic variables (e.g., race, gender, socio-economic) and diagnosis on the ability of the ADS to discriminate dissimulators from controls. As pointed out by several researchers (e.g., Lanyon, et al., 1989; Cashel, et al., 1995), dissimulating response styles may be situation and population specific. Cashel and colleagues (1995) indicate one subscale, scale, or cutting score may not be effective in detecting dissimulation in individuals with varied Axis I disorders (e.g., schizophrenia, mood disorders, substance abuse) in different settings (e.g., inpatient hospital, forensic hospital, outpatients). Therefore, the ADS should be validated on individuals meeting diagnostic criteria for various Axis I disorders in different settings to determine sensitivity/specificity rates, cut-off scores and the pattern of responding not only on the ADS but on other measures as well. Furthermore, the ADS needs to be validated on other populations where an incentive for secondary gain exists (e.g., custody evaluations, personnel selection).

In summary, The ADS is superior to the other dependent measures not only because of better classification accuracy, but also because it is less time consuming and cost-efficient. The L, F and K scales are embedded into the MMPI which takes hours to complete and score. Furthermore, while most reviewed studies offered classification rates for a certain cut-off score on a subscale of the MMPI, no researcher offered information regarding the subscales Type I and II error rates at other possible cutting points. Finally, the
ADS was validated with a forensic psychiatric population consisting mostly of individuals diagnosed with schizophrenia and other related psychotic disorders. Many researchers studying the MMPI and other scales have primarily mood disordered individuals in their clinical population, while others only include undergraduate analogue simulators. Taken together, the ADS may hold promise as a useful screening measure for dissimulation detection among psychiatric/forensic participants. As stated earlier, it is incumbent upon mental health professionals to ensure the safety of not only the patient, but also members of society, prior to releasing an individual back into the community. Therefore, when this empirically derived measure is used as an adjunct to clinical interview and behavioral observations, treatment team decisions will likely be enhanced.
References


Appendix A - Informed Consent
Informed Consent

Participant Number: ____________________

1. **Title:** A Validation of the Assessment of the Dissimulation Scale (ADS) Using Criminal and Civilly Committed Patients.

2. **Where:** Feliciana Forensic Facility and East Louisiana State Hospital

3. **Experimenters:** You can get in touch with the following people at any time if you have any questions:

   - **Name:** Jill Hayes
   - **Dept:** LSU Psychology Department
   - **Telephone Number:** 504-388-8745
   - **Fridays:** Extension 59
   - **Tel. Number:** (504) 634-2661

   - **Name:** Dr. David Hale
   - **Dept:** Feliciana Forensic
   - **Telephone Number:** 504-388-8745
   - **Tel. Number:** Extension 59
   - **Fridays:** Extension 59

   Your Social Worker: _____________________________

4. **Purpose of the Study:** To see how people in a mental hospital or a prison score on a new test.

5. **Participants:** This study includes people who have been found by the court to be not guilty by reason of insanity or who have been civilly committed by the court.

6. **Participants Who are Excluded:** People who are having really bad hallucinations and delusions at the time of the study.

7. **What's Going to Happen:** You will be tested once this week, and once next week. This will take you about one hour each time. If you do a really good job and try your best both times, I will give your social worker $2.00 to put into your account after I finish scoring the tests.

   **For cross validation subjects:** You will be asked to answer some questions on a test. This should only take about 15 minutes. If you do a really good job, I will give your social worker $2.00 to put into your account after I finish scoring the test.

8. **Benefits:** This will benefit you because you will get $2.00 for your cooperation if you try your hardest. Also, you will help me (or my friend) finish my (or her) dissertation. Also, you will be helping us see how people in a mental hospital or a prison score on this test.
9. **Risks** - There are no risks at all to you.

10. **Alternatives** - Because there is only one study going on, there are no alternatives for you.

11. **Right to Refuse** - You may not do this study for me if you don’t want to, or you can stop doing this study at any time. This will not get you in trouble with the guards or anybody at all. It is completely up to you.

12. **Privacy**: Nobody, and I mean nobody, will know what you answer. I will just put a participant number on the form, and I will not even write your name down. After we finish the whole study, I will even destroy the form that tells me which person belongs to which tests. This means that your identity will not be revealed at all.

13. **Release of Information**: I will have to look through your chart to get some information about you like your age, arresting charge, diagnosis, etc.

14. **Signatures**: I understand that this person has discussed this with me and all my questions have been answered. I understand that if I have any more questions, I can call the people listed above. Also, I can contact the Vice Chancellor of the LSU Office of Research and Economic Development at 388-5833. I agree to all of this, and I have been given a copy of this form.

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<td>Investigator(s)</td>
<td>Date</td>
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I certify that I have read this consent form to the subject and explained that by completing the signature line above, the subject has agreed to participate.

| Signature of Reader | Date |

* = validation study  
** = cross validation study
Appendix B - Instructions to Control Condition Participants
Instructions to Control Condition Participants

Study Participants: As I said before, I am trying to see how people in a mental hospital or prison score on this test. You are supposed to answer all the questions honestly. Tell me how you really feel. If you answer all of the questions honestly and thoughtfully, and I don’t think you’re faking it, I will give you $2.00 to put in your account for your time after you complete the other part, and after I finish scoring your tests. The tests contain items which can detect if you’re not telling the truth. If I do think that you’re trying to fake me out, then you won’t get any money. I will give this money to your social worker to put in your account after I finish scoring the tests. OK?

Now tell me in your own words what you are supposed to do?

Thanks for taking our tests. You did a great job and were a really big help. Do you have questions? If you have any questions, you can call Jill Hayes, Dr. Hale, or you can contact your social worker. Their numbers are on that sheet that I gave to you. OK? See you next week. Remember, I’ll give your social worker the $2.00 after you take those tests to the best of your ability, and I finish scoring them.
Instructions to Fake Good Condition Participants

Study Participants: Like I told you last week, I am trying to see how people in a mental hospital or prison score on this test. This week, I need for you to answer all the questions like the answers you give will determine whether or not you will be released the very next day. That is, I want you to convince me that you are a mentally healthy person who can be trusted to be back in the real world. So, I want you to fake good. Convince me that you have no mental problems whatsoever. If you answer all of the questions like you are faking good, and I really think you are trying, I will give your social worker $2.00 to put into your account for your time. However, if I don’t think you’re trying to follow the directions, then you won’t get any money. I will give this money to your social worker after I finish scoring your tests. This should take about a week. OK?

Now tell me in your own words what you are supposed to do?
Appendix D - Instructions to Control Group Cross Validation Participants
Instructions to Control Group Cross Validation Participants

Validation Subjects: As I said before, I am trying to see how people in a mental hospital or prison score on this test. You are supposed to answer all the questions honestly. Tell me how you really feel. If you answer all of the questions honestly and thoughtfully, and I don’t think you’re faking it, I will give you $2.00 to put in your account for your time after I finish scoring the test. This will take about a week. The test contains items which can detect if you’re not telling the truth. If I do think that you’re trying to fake me out, then you won’t get any money. I will give this money to your social worker to put in your account after I finish scoring the test. OK?

Now tell me in your own words what you are supposed to do?
Appendix E - Instructions to Fake Good Cross Validation Participants
Instructions to Fake Good Cross Validation Participants

Validation Subjects: I am trying to see how people in a mental hospital or prison score on this test. I need for you to answer all the questions like the answers you give will determine whether or not you will be released the very next day. That is, I want you to convince me that you are a mentally healthy person who can be trusted to be back in the real world. So, I want you to fake good. Convince me that you have no mental problems whatsoever. If you answer all of the questions like you are faking good, and I really think you are trying, I will give you $2.00 for your time. However, if I don't think you're trying to follow the directions, then you won't get any money. I will give this money to your social worker when I finish scoring the test. This should take about a week. OK?

Now tell me in your own words what you are supposed to do?
Appendix F - Post Test Questionnaire
Post Test Questionnaire

1. Please tell me what you were asked to do for me?

2. Please tell me how hard you tried to follow the instructions.

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<td>A little bit</td>
<td>Average</td>
<td>Pretty Hard</td>
<td>Very Hard</td>
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3. Please tell me how good of a job you did at convincing me.

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<td>A little bit</td>
<td>Average</td>
<td>Pretty Successful</td>
<td>Very Successful</td>
</tr>
</tbody>
</table>

4. Do you think that if you were offered more money you would have worked harder? Yes  No

*** The following two questions are only to be read when the participant is in the fake good condition.

5. Do you think you were able to convince me that you were mentally healthy? Yes  No

6. Do you think that if you really were about to get out of the hospital that you would have worked harder? Yes  No
Appendix G - Debriefing Statement
Debriefing Statement

As I said before, I was trying to see how people in a mental hospital or prison score on a new test that I developed. By your participating in this study, you really helped me out. If you would like to know the results of my study, you can contact your social worker, and he/she will let me know.

After I finish scoring the test(s), if I see that you tried your hardest, I am going to give your social worker $2.00 to put in your account for you to spend as you please. This should take about a week.

Do you have any questions for me?
Appendix H - Demographic Questionnaire
Demographic Questionnaire

Participant Number: __________________________

Age: ________________________________

Education: __________________________

Marital Status: ________________________

Race: ________________________________

Psychiatric Diagnoses:

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Arresting Charge(s):

________________________________________________________________________

________________________________________________________________________

Number of Times the Instructions were read: ________________________________

________________________________________________________________________

<table>
<thead>
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<th>PRE</th>
<th>POST</th>
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<tbody>
<tr>
<td>ADS:</td>
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<tr>
<td>L:</td>
<td></td>
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<td>F:</td>
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<td>K:</td>
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<td>F-K:</td>
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<td>M/C:</td>
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BLOCS: ____________________  ____________________

TRAILS A: ____________________  ____________________

TRAILS B: ____________________  ____________________

L (Left out 1): ________________  ____________________

K (Left out 2): ________________  ____________________

M/C (Left out 8, 19, 24): ______  ____________________

** If cross validation subject, then only the ADS summary scores will be completed in addition to the demographic information.
Vita

Jill Hayes was born in Charleston, South Carolina, and was raised in Savannah, Georgia. Her parents are Barbara and Bobby Hayes, and she has two brothers, Wallace and Robert. She is the granddaughter of Elizabeth Blackwell Shaw and Wallace Purvis. She attended Armstrong State College, where she obtained her bachelor of arts degree in June of 1990, and then received her master of science degree from Augusta College in 1992, after interning at the Medical College of Georgia and Armstrong State College. She went on to begin working as an instructor at Armstrong State College and as a psychological assistant at Savannah Psychological Consultants. In 1993, she was accepted into the Medical/Clinical/Neuropsychology program at Louisiana State University and is a student of Dr. William Drew Gouvier. She completed her master of arts degree in December of 1995, and hopes to complete the requirements for the doctor of philosophy in psychology degree in the Summer of 1998. After graduating from Louisiana State University, she hopes to begin working at a university/private practice/state hospital soon after.
DOCTORAL EXAMINATION AND DISSERTATION REPORT

Candidate: Jill Suzanne Hayes

Major Field: Psychology

Title of Dissertation: A Validation Study of the Assessment of Dissimulation Scale Using Criminal and Civilly Committed Participants

Approved:

[Signatures]

Major Professor and Chairman

Dean of the Graduate School

EXAMINING COMMITTEE:

[Signatures]

Date of Examination:

January 22, 1998