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PERFORMANCE OF THE PERSONALITY INVENTORY FOR YOUTH VALIDITY SCALES

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Response sets as well as cognitive and academic deficits compromise the validity of child and adolescent self-report of emotional adjustment. Three studies using clinical and asymptomatic samples of 4th to 12th grade students detail applications of the four validity scales of the Personality Inventory for Youth (PIY), namely, (a) Validity (*VAL*) a scale of six highly improbable statements, (b) Inconsistency (*INC*) consisting of pairs of highly correlated statements, (c) Dissimulation (*FB*) constructed of statements that were infrequent and characteristic of intentional distortion, and (d) Defensiveness (*DEF*) an extension of the Lie scale of the parent-report Personality Inventory for Children. The effects of minimizing, malingering, and random response sets on the PIY validity scales are reported. The importance of such validity scales derived from child and adolescent response is discussed.

Keywords: Adolescents, defensiveness, malingering, dissimulation, random response, adjustment inventory, adolescent personality assessment

The objective assessment of child and adolescent adjustment has received increased attention from researchers and clinicians over the past two decades (Lachar, 1993, 1998). This is evidenced by growing clinical use and research application of instruments such as the Child Behavior Checklist (Achenbach, 1991), the Conners' Rating Scales (Conners, 1997), the Behavior Assessment System for Children (Reynolds & Kamphaus, 1992), and

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the Personality Inventory for Children-Revised (PIC-R; Wirt, Lachar, Klinedinst, & Seat, 1984). A challenge unique to the assessment of children and adolescents is the need to incorporate the observations of multiple observers including parents, teachers, and clinicians, in addition to the direct report of the child.

Development of child and adolescent self-report measures has lagged behind the development of parent-report scales because children's reports of their own behavioral problems have not traditionally been seen as valuable. This limitation reflects the reality that children are seldom self-referred and may therefore be unwilling participants in the evaluation process (Algozzine, 1977; Loeber, Green, & Lahey, 1990). More recently, children have been considered primary sources of information regarding symptoms of depression and anxiety (Stavrakaki, Williams, Walker, Roberts, & Kotsopoulos, 1991), social adjustment (John, Gammon, Prusoff, & Warner, 1987), and problems about which parents may be unaware, such as delinquent behaviors and internalizing symptoms.

The need for an objective measure of child and adolescent self-report as a companion to the PIC resulted in the development of the Personality Inventory for Youth (PIY; Lachar & Gruber, 1993, 1995). This questionnaire consists of 270 items mainly derived from the PIC and then rewritten into first-person format. Most of these items are grouped into nine non-overlapping clinical scales: Cognitive Impairment, Impulsivity and Distractibility, Delinquency, Family Dysfunction, Reality Distortion, Somatic Concern, Psychological Discomfort, Social Withdrawal, and Social Skill Deficits. These nine clinical scales are further subdivided into 24 "factor guided" subscales, derived through a combination of factor and content analysis. Available norms are derived from 2,327 students in 4th through 12th grade regular education classrooms. Psychometric study of the nine PIY clinical scales generated median coefficient alphas of .85 and .80 and median test-retest correlation coefficients of .82 and .85 for clinical and regular education samples, respectively. Comparable study of the 24 short subscales resulted in median coefficient alphas of .74 and .68 and median test-retest correlation coefficients of .73 and .80, respectively. The nine substantive scales that achieve at least 60*T* and their 24 subscales that achieve at least 65*T* are interpreted to be of clinical significance. Several validation studies are presented in the PIY manual in the form of correlations with the PIC-R, clinician-assigned symptoms and adjective self-description, as well as other published measures of child and adolescent adjustment. Substantial differences have also been demonstrated between admission PIY profiles of adolescents who obtain discharge diagnoses of major depression compared to conduct disorder (Lachar, Harper, Green, Morgan, & Wheeler, 1996).

Concern about the motivation of children and adolescents asked to complete the PIY and the presence of problematic reading comprehension often found in referred children, led to the construction of four PIY scales designed to be sensitive to these conditions: Dissimulation, Inconsistency, Validity, and Defensiveness.

Exaggeration or Malingering

"Fake bad" and dissimulation are terms commonly applied to a response set in which the respondent produces a pattern of results that suggest an exaggeration of current symptoms or presentation of maladjustment not consistent with clinical presentation and history. Studies of the Minnesota Multiphasic Personality Inventory (MMPI; Hathaway & McKinley, 1967) or MMPI-2 (Butcher, Dahlstrom, Graham, Tellegen, & Kaemmer, 1989) demonstrated that when adolescents are asked to present themselves as emotionally disturbed, they have difficulty generating a profile that resembles one from a psychiatric patient (Archer, Gordon, & Kirchner, 1987; Herkov, Archer, & Gordon, 1991). Lanyon (1993) noted that respondents attempting to "fake bad" on personality inventories may do so through one of two strategies: In some cases they may simply over-endorse symptoms, resulting in a high number of various symptoms being endorsed. Such a response style has typically been identified on the MMPI by the use of the F-K Index (Lachar, 1974). The second strategy involves endorsement of more specific symptoms that appear representative of the respondents' concepts of mental illness (Lanyon, 1993). Such items

represent an "erroneous stereotype" in that they reflect face valid content by naíve informants, but demonstrate no empirical validity (Lanyon, 1997). Gallucci (1984) noted that this second approach is less common in malingering adults. Even when normal adults are given both specific symptom information on disorders as well as monetary motivation to simulate these specific disorders, this "faking" strategy could still be detected through elevations on the typical validity indicators such as the *F* scale and F-K Index (Wetter, Baer, Berry, Robison, & Sumpter, 1993). One might expect that a lack of psychological sophistication or knowledge in younger patients would result in an even lower use of the more specific symptom strategy. Archer and his associates (1987) demonstrated that adolescents instructed to fake bad or simulate pathology endorsed multiple exaggerated symptoms, similar to the more common adult "fake-bad" patterns.

Validity scales such as the MMPI *F* scale detect exaggerated symptomatology through observing how often the patient responds to items in the direction that is infrequently endorsed by the general population. Application of this adult-based approach in examining the MMPI responses of adolescents has been problematic, due to the relatively high *F* scale elevations produced by adolescents. Gallucci (1987), for instance, has noted that elevations of the *F* scale and F-K Index are not likely to be indicative of exaggeration of psychopathology in adolescents. Research associated with the development of the Minnesota Multiphasic Personality Inventory–Adolescent (MMPI-A; Butcher, Williams et al., 1992) revealed that many of the original *F* scale items were endorsed by more than 20% of adolescents in the normative sample (Archer, 1992), thus failing to qualify as "infrequent" items in younger populations. The item frequency approach therefore seems less useful with children or adolescents for whom the frequency of certain items written for adults may vary simply due to developmental factors. These results demonstrate the need to construct validity scales using the population to which they will be applied. Development of the MMPI-A, for example, has included a new *F* scale developed using the responses of adolescents. Performance of this updated measure of adolescent malingering has been mixed, with the identification of directed malingering of normals effective (Stein, Graham, & Williams, 1995), while the attempted exaggeration of symptoms by chemically dependent youth resulted in problematic frequency of false positive classification (Rogers, Hinds, & Sewell, 1996). Recent efforts to interpret the MMPI-2 *F* scale have incorporated item endorsement rates in clinical samples (Arbisi & Ben-Porath, 1995).

To document this negative response set, the PIY Dissimulation scale (*FB* for "fake bad") was constructed through item analysis of protocols from adolescents in regular education classrooms who were first directed to describe themselves accurately (N = 132) and then to deliberately distort this description so as to appear emotionally disturbed. Item response rates were also reviewed from a clinically referred sample (N = 288). The 42 *FB* items were selected to minimize response in the scored direction for both accurate (11%) and clinical (18%) protocols, while maximizing response in dissimulated protocols (83%). Demonstrating initial scale validity, a *FB* cutoff score greater than 19 (raw score) correctly identified 99% of accurate, 98% of fake bad, and 96% of clinical PIYs (Lachar & Gruber, 1995).

Inconsistent Responding: Deliberate inattention or lack of comprehension

Greene's (1989) model of validity assessment suggests that it is first necessary to determine the consistency of item endorsement before evaluating the accuracy of item endorsement. Consistency is independent of specific item content or "content nonresponsivity" (Nichols, Greene, & Schmolck, 1989). Inconsistent response can result from random responding, "systematic stimulus avoidance" (e.g., marking rows, pages, or sets of items all true), disabilities that interfere with consistent response, such as intellectual or academic limitations, and miscellaneous errors or tactics including losing one's place or "guessing." Among adolescents inconsistent response sets were sometimes difficult to detect with adult-derived MMPI validity scales because adolescents frequently produced profiles with elevated *F* scales. Inconsistency due to limited reading comprehension is a particular concern in

adolescents and children, because limitations in literacy are more often characteristic than they are for adults similarly evaluated (Krakauer, Archer, & Gordon, 1993).

Two measures of response inconsistency were developed for the MMPI-2 and repeated on the MMPI-A. The *VRIN* scale consists of 50 pairs of inventory items with similar or opposite content. When item pairs are responded to in an inconsistent fashion, a point is added to *VRIN*. *TRIN* is a measure of indiscriminate true responses. It consists of items that are semantically opposite in content. *TRIN*, when elevated, can either represent an acquiescent or nay-saying attitude, and thus the direction of response inconsistency must be specified. There is limited information available about the application of *VRIN* and *TRIN* with adolescents. For example, low elevations on *TRIN* may not imply that an adolescent has not responded randomly. Indeed, *TRIN* may still appear within normal limits in the randomly generated profiles of adolescents (Archer, 1992).

Two PIY scales were developed to identify inconsistent or haphazard response. Inconsistency (*INC*) consists of 35 pairs of highly correlated items such that endorsement of each item pair in an inconsistent manner adds one point to the *INC* raw score as a measure of semantic inconsistency (Tellegen, 1988). Demonstrating scale utility, an *INC* raw score greater than 11 correctly identified 90% of clinical protocols (n = 288) and 93% of random protocols (Lachar & Gruber, 1995). A second scale, Validity (*VAL*) incorporates improbable behaviors or beliefs that obtain highly infrequent endorsement (2% to 12%) in regular education and referred samples. Three *VAL* items are scored True (e.g., "My teachers are trying to poison me.") and three are scored False (e.g., "I sometimes talk on the telephone."), generating a random response pattern with a *VAL* average raw score of 3. Scores of 3 or greater occurred in only 1.9% of the regular education protocols and in 3% of the clinical protocols (Lachar & Gruber, 1995).

Underreporting or Positive Self-Presentation

A third major category of response styles affecting personality inventory reporting has typically been referred to as a "fake-good" response pattern. This involves either intentional or unconscious efforts to underreport symptoms or present oneself in an unduly favorable manner. Such items represent inaccurate knowledge in the form of overendorsement (Lanyon, 1997). Although the opportunities for children and adolescents to minimize or deny problems abound in clinical practice, few studies of this phenomena have been conducted, even for the handful of adjustment measures with a defensiveness scale (e.g., Dadds, Perrin, & Yule, 1998). Development of the MMPI-A included refinement of the two traditional MMPI scales associated with defensive or "fake-good" styles. The MMPI-A Lie scale generally reflects denial of common faults, such as swearing, lying, or gossiping, in an effort to appear particularly virtuous. The *K* (Defensiveness) scale has traditionally been viewed as representing a more subtle form of positive self-presentation, including such items as "I have very few quarrels with members of my family (T)." Consistent with the adult literature, adolescents who obtain elevations on this scale have been described as defensive and unable or resistant to participate in treatment (Archer, 1992). Unlike its implications for adults, younger patients who have some elevation on the *K* scale are not necessarily more resilient or effective in terms of coping (Gallucci, 1993).

It has been noted that adolescents with psychiatric symptoms may produce normal-limits MMPI and MMPI-A profiles that also include normal-limits validity scale elevations. For example, Dorfman, Pilger, and Leonard (1998) and Lachar, Klinge, and Grisell (1976) provide rates of MMPI and MMPI-A classification in which 25% of each clinical sample obtain unelevated profiles. Archer et al. (1987) instructed a small group of adolescent psychiatric inpatients to complete the MMPI as it would be completed by a teenager who is well-adjusted. Of importance, about half of these inpatients were able to produce an unelevated profile with normal-limits elevations on scales *L*, *F*, and *K*. Archer et al. reported that these "fake-good" profiles were quite similar to profiles that might be produced by a rather guarded adolescent with no apparent psychiatric disturbance.

The PIY measure of underreporting is the 24-item Defensiveness (*DEF*) scale. Constructed from the literal translation of 14 PIC Lie scale items, the additional 10 PIY items were selected on the basis of their correlation with the first stage scale. Application of a *DEF* cutoff score greater than 59*T* in a hospitalized adolescent sample resulted in an average of only 0.79 scale and 1.45 subscale clinical elevations in defensive profiles (n = 33) compared to an average of 3.42 scale and 5.94 subscale clinical elevations in the remaining nondefensive profiles (n = 98). In a second application within an alternative education sample (N = 58), *DEF T* scores increased from a mean of 49*T* in honest responding to 62*T* when instructed to minimize symptomotology (Lachar & Gruber, 1995).

Studies of PIY Validity Scales

The three following studies investigated either the ability of the four PIY validity scales to detect response sets or the correlates of these scales. In Study 1 the effectiveness of the PIY Defensiveness scale was studied through the response of adolescent psychiatric patients requested to "fake good" (i.e., to minimize or deny their problems). Study 2 was conducted to identify evaluative dimensions of self-report that were associated with the two PIY scales constructed to measure exaggerated symptom status and to measure denial of problems. Items from an experimental adjective checklist administered to child and adolescent psychiatric inpatients following the PIY as part of admission screening served as potential independent correlates. Using the methodology of Wetter, Baer, Berry, Smith, and Larsen (1992), Study 3 investigated the ability of the PIY validity scales to detect different degrees of malingering (moderate or severe), and random responding generated by a group of high school students.

Study 1: Validation of the Defensiveness Scale

Method

The effectiveness of *DEF* was studied through the response of adolescent psychiatric patients requested to "fake good," that is to minimize or deny their problems.

Participants

Thirty inpatients (63% female; ages 12-17 years, M = 14.6 years, SD = 1.55 years) from varied cultural backgrounds (Caucasian = 57%, African American = 17%, Hispanic = 23%, Asian = 3%) were recruited from those patients who had generated non-defensive (*DEF* < 60*T*) PIY protocols as part of a routine admission assessment. These individuals were representative of patients evaluated and treated on this acute short-term public sector psychiatric teaching unit. For 83% of the inpatients this was their first hospitalization, with length of stay averaging 17.7 days (SD = 12.54 days, 80% stayed from 12-25 days). The majority of these patients received only one *DSM-IV* (*Diagnostic and Statistical Manual of Mental Disorders*; American Psychiatric Association, 1994) diagnosis at discharge (one = 57%, two = 30%, three = 13%) with depression being the dominant diagnosis (major depression = 30%, other depression = 27%). Thirty percent received a disruptive behavior disorder diagnosis (Conduct, Oppositional Defiant, Impulse-Control), 13% received a bipolar disorder diagnosis, and 20% received a diagnosis of substance abuse.

Procedure

Patients successfully recruited into this study were given a PIY administration booklet and answer sheet and provided the following directions:

> A few days ago you completed this questionnaire to describe your current problems. Sometimes people do not want to describe their problems, or want to look like they have no problems. I am asking you to complete this questionnaire a second time. Describe yourself as though you were a person who had no need for counseling and wanted others to think that you had been doing just fine.

Results

PIY profile scales and subscales were scored for admission and study (fake-good) conditions. Of the nine substantive clinical scales, an average of 3.7 scales (SD = 2.07) were clinically elevated upon admission, while only an average of 0.4 scales (SD = 1.16) were elevated in the fake-good condition. These figures represented a substantial

and statistically significant difference (repeated measures t test = 9.28, $p < .0001$). Similar analysis of the occurrence of clinical elevations within the 24 PIY subscales also obtained significant results (M = 6.8, SD = 4.49 elevated subscales at admission; M = 0.5, SD = 1.66 elevated subscales on the fake-good condition; repeated measures t test = 8.10, $p < .0001$).

A repeated measures multivariate analysis of variance was conducted separately for validity scales, clinical scales, and clinical subscales. Results for each were highly significant (validity scales, Wilks's lambda = 0.1198, $F(4, 26) = 47.75$, $p < .0001$; clinical scales, Wilks's lambda = 0.1239, $F(9, 21) = 16.50$, $p < .0001$; clinical subscales, Wilks's lambda = 0.0119, $F(24, 6) = 20.84$, $p < .0001$). Scale and subscale means and standard deviations at admission and fake-good administrations, the statistical significance of obtained differences, and the proportion of each variable that obtained a clinically elevated score are presented in Table 1.

Table 1 documents the effect of a directed defensiveness response set on PIY scale and subscale scores. All clinical scale and subscale elevations were dramatically reduced. The greatest effect was most clearly demonstrated for those scales and subscales most often elevated at admission in this sample: Delinquency, Family Dysfunction, and Psychological Discomfort. The average Defensiveness scale T score increased from 41.9T at admission to 70.5T in response to fake-good directions. The Defensiveness scale never reached the clinical range at admission (reflecting recruitment criterion). In contrast, *DEF* was clinically elevated (> 59T) 90% of the time in response to fake-good directions.

Study 2: Adjective Checklist Correlates of the Dissimulation and Defensiveness Scales

Methods

Participants

232 children and adolescents (59% female, ages 8-17 years, M = 14.4 years, SD = 1.67 years, 79% were from 13-16 years) newly admitted to a short-term psychiatric unit (M length of stay = 19.6 days, SD = 11.47 days, 93% stayed from 7-29 days) completed the PIY as part of routine diagnostic evaluation. For the majority (85%) this was their first psychiatric hospitalization. This sample was culturally diverse (52% Caucasian, 22% African American, 23% Hispanic, 3% Asian/other). Discharge *DSM-IV* diagnoses reflected both the degree of disability and multiple handicaps currently associated with demonstrated need for hospitalization. More than half (n = 126) received two Axis I diagnoses. A majority (65%) received a depression-related diagnosis (more than half received a Major Depression diagnosis), 26% received a disruptive behavior disorder diagnosis (Conduct, Impulse-Control, Intermittent Explosive, Disruptive Behavior, Oppositional Defiant, Attention-Deficit/Hyperactivity), 6.5% received a Bipolar diagnosis, 12% received a diagnosis reflecting psychosis, and 29% obtained a diagnosis of problematic adjustment secondary to substance abuse.

Procedure

Study participants were screened in two steps. All participants obtained a PIY Inconsistency scale value under 70T, demonstrating adequate response to PIY item content. English language competence was then evaluated by application of the revised Peabody Picture Vocabulary Test (PPVT-R; Dunn & Dunn, 1981). All participants obtained a standard score greater than 69 and a derived mental age greater than 95 months (at least 8 years-0 months). The resulting sample obtained a mean PPVT-R standard score of 93.4 (SD = 15.5) and an average mental age of 170.5 months (SD = 60.9 months; M = 14.2 years).

The experimental adjective checklist (entitled "Adjective Personality Survey") consisted of 214 items presented in alphabetic order. Approximately half (47%) of these items were manifestly positive in content (e.g., agreeable, considerate, energetic, gentle, kind, orderly, patient, satisfied, wise), while the remainder represented a problematic emotional and behavioral adjustment (e.g., afraid, confused, dishonest, grouchy, hostile, lonely, rebellious, sad, worried). Checklist administration directions were as follows:

Table 1
PIY Scale and Subscale T Scores at Admission and in Response to Fake-Good Directions

	Admission			Fake-good			
Scale/subscale	*M*	*SD*	%	*M*	*SD*	%	*p*
Validity	56.2	11.2	0	50.5	11.2	0	.02
Inconsistency	48.1	6.8	0	36.0	7.0	0	.0001
Dissimulation	53.3	9.9	3	41.7	5.3	0	.0001
Defensiveness	41.9	7.0	0	70.5	9.1	90	.0001
Cognitive Impairment	54.1	8.7	27	37.2	5.9	3	.0001
Poor Achievement/Memory	57.7	9.0	23	36.8	7.9	3	.0001
Inadequate Abilities	48.4	11.4	17	41.4	3.2	0	.003
Learning Problems	53.8	11.0	7	46.5	6.4	0	.0001
Impulsivity/Distractibility	57.9	11.5	47	42.1	8.6	7	.0001
Brashness	51.3	10.3	7	43.6	5.6	0	.0001
Distract/Overactivity	57.6	11.8	23	47.6	8.4	3	.0001
Impulsivity	58.1	10.7	37	39.7	8.2	3	.0001
Delinquency	64.3	11.3	60	39.6	8.1	3	.0001
Antisocial Behavior	67.8	14.4	57	43.8	7.1	7	.0001
Dyscontrol	58.2	12.9	23	41.3	8.2	3	.0001
Noncompliance	61.4	8.8	33	38.1	6.2	0	.0001
Family Dysfunction	64.6	11.2	67	41.2	7.0	7	.0001
Parent-Child Conflict	64.4	10.4	60	42.7	6.9	3	.0001
Parent Maladjustment	61.1	12.9	27	43.3	5.0	0	.0001
Marital Discord	61.2	9.8	47	41.6	7.3	3	.0001
Reality Distortion	55.2	14.3	40	39.5	5.2	0	.0001
Feelings of Alienation	54.0	12.9	30	39.3	6.1	0	.0001
Hallucinations/Delusions	56.2	14.1	23	43.2	3.5	0	.0001
Somatic Concern	56.1	10.8	30	39.1	7.1	0	.0001
Psychosomatic Syndrome	55.9	10.6	20	41.4	6.0	0	.0001
Muscular Tension/Anxiety	56.7	12.0	37	39.0	6.3	0	.0001
Preoccupation With Disease	50.6	9.4	17	44.1	7.5	7	.0001
Psychological Discomfort	63.0	11.0	70	37.7	8.2	7	.0001
Fear and Worry	57.9	9.6	33	37.2	6.5	0	.0001
Depression	61.7	13.3	53	43.7	9.7	7	.0001
Sleep Disturbance	62.9	10.3	50	41.0	5.6	0	.0001
Social Withdrawal	50.2	8.6	10	41.4	7.5	7	.0001
Social Introversion	47.4	8.5	7	42.3	6.9	0	.003
Isolation	54.7	8.5	20	43.5	7.2	3	.0001
Social Skill Deficits	50.6	10.5	17	40.0	5.9	0	.0001
Limited Peer Status	48.5	10.3	10	39.0	6.9	3	.0001
Conflict With Peers	53.7	12.6	17	44.4	4.8	0	.0001

Note. PIY = Personality Inventory for Youth; % = percentage of patients obtaining a clinically elevated scale score; *p* = repeated measures *t* test; *N* = 30.

> People often use the following words and phrases to describe themselves. Carefully read each item, and then circle the ONE option that best describes you over the last month.

The four response options were: N (*does not describe me*); S (*sometimes/somewhat describes me*); U (*often/usually describes me*); and ? (*do not understand the word*). Selection of this last option was treated as missing data in the present analysis.

Because of the exploratory nature of this study, all checklist items were correlated with *FB* and *DEF*. Care was taken to minimize the possibility of chance results by selecting a minimum correlation of .35 ($p < .00001$) to demonstrate that an adjective was significantly associated with PIY scale elevation.

Results

FB T scores ranged from 37 to 99 ($M = 56.1$, $SD = 11.3$) with 15% exceeding 69T. *DEF T* scores ranged from 28 to 77 ($M = 45.6$, $SD = 10.8$) with 13% exceeding 59*T*. Table 2 lists in order of descending magnitude of correlation the 30 adjective checklist correlates selected for *FB* and the 37 adjective checklist correlates selected for *DEF*. The remarkable contrast in manifest content between these two lists is clearly evident (Note that when "not" appears before the correlate this represents a negative correlation). The majority (87%) of *FB* correlates present negative content and represent a broadly defined negative self-evaluation dimension. All four (13%) positively worded adjectives correlated negatively with *FB*. In sharp contrast, the *DEF* correlates incorporated seven (19%) positively worded adjectives and the denial of 30 adjectives that, for the most part, represent problematic undercontrolled behaviors.

Study 3: The Effects of Random Response and Malingering on PIY Validity Scales

Methods

Participants

Midwest suburban regular education high school students (67 females and 41 males) who were taking a psychology class as an elective part of their curriculum completed the PIY after written permission was obtained from their parents.

Procedure

Four high school psychology classes were surveyed in this study. Each class responded to one of the Wetter et al. (1992) directions for questionnaire completion: fake-moderate ($n = 25$, 17 females and 8 males); fake-severe ($n = 25$, 20 females and 5 males); random response ($n = 28$, 14 females and 14 males); and accurate response ($n = 30$, 18 females and 12 males). Students in the accurate response, fake-moderate, and fake-severe groups received a consent form, sheet of instructions reflecting their assigned condition, a PIY administration booklet, and a PIY answer sheet. Students in the random response group received all of the materials as the other groups except for a test booklet. All test materials were coded with an experimental number to assure student anonymity. Students in the accurate response group were read standard test instructions. Students in the fake-moderate and fake-severe groups were given the instructions detailed in Wetter et al.

Fake-Moderate Instructions:

> We are interested in how well people can create a bad impression on this test by pretending to be psychologically or emotionally disturbed. Please complete the test as if you were trying to create a bad impression. Imagine that you are attempting to appear sufficiently disturbed so as to obtain money for your psychological problems, such as in a lawsuit against a person or company you claim hurt you psychologically or for mental disability from Social Security funds. At the same time, however, try not to appear so severely disturbed that psychiatric hospitalization would be required.

Fake-Severe Instructions:

> We are interested in how well people can create a bad impression on this test by pretending to be psychotic ("crazy"). Please complete the test as if you were trying to create a very bad impression. Imagine that you are attempting to appear sufficiently disturbed

Table 2
Adjective Checklist Correlates (r > .34) for the PIY Validity Scales Dissimulation and Defensiveness

Dissimulation (*FB*)		Defensiveness (*DEF*)	
Correlate	*r*	Correlate	*r*
unwanted	.50	(not) rebellious	.52
miserable	.46	(not) disobedient	.48
upset	.44	(not) violent	.47
worthless	.44	(not) stubborn	.46
isolated	.43	(not) rude	.45
unimportant	.43	(not) cruel	.44
lonely	.42	(not) harsh	.44
unpopular	.42	(not) mean	.43
unsure	.41	(not) pushy	.43
(not) at ease	.40	(not) demanding	.42
insecure	.40	(not) grouchy	.42
depressed	.38	honest	.41
rejected	.38	(not) impatient	.41
(not) comfortable	.37	(not) irritated	.41
dizzy	.37	obedient	.40
hurt	.37	(not) reckless	.40
(not) important	.37	(not) wild	.40
sad	.37	(not) forceful	.39
unhappy	.37	peaceful	.39
(not) cheerful	.36	(not) sly	.38
hopeless	.36	(not) blaming others	.37
insensitive	.36	cooperative	.37
alone	.35	disciplined	.37
exhausted	.35	(not) fighting	.37
ignored	.35	(not) greedy	.37
stupid	.35	(not) hostile	.37
suffering	.35	respectful	.37
tired	.35	(not) selfish	.37
violent	.35	(not) stingy	.37
worried	.35	(not) furious	.36
		(not) hot-tempered	.36
		patient	.36
		(not) argumentative	.35
		(not) daring	.35
		(not) disagreeable	.35
		(not) dishonest	.35
		(not) rough	.35

Note. N = 232. PIY = Personality Inventory for Youth; The inclusion of (not) with an adjective represents a negative correlation with the scale.

so as to appear as if you were not responsible for your own actions, such as avoiding prosecution for a crime or attempting to get into a psychiatric ward for some reason. In other words, we want you to fake serious mental illness.

Results

The following summarizes the scale means for each group, associated post hoc group analyses, and the frequency of clinical elevations for each validity scale obtained in these four study groups. As presented in Table 3, the fake-moderate, fake-severe, and random response groups obtained elevated mean *VAL* and *FB T* scores when compared to the accurate response group. *VAL* mean values for each study group differed significantly from all other study groups, with the highest elevated mean *T* scores and the largest percentage of clinically elevated scores obtained by the fake-severe and random groups. *FB* obtained elevated mean scale values and substantial scale elevations in the two fake-bad conditions and the random condition. The random instructions generated the highest mean elevated *T* score for *INC*; this value was greater than for the other three study groups, with a relatively low cutoff score of 64*T* correctly identifying 27 of 28 random protocols. Concurrent elevation of *INC* and *FB* characterized most (25 of 28, almost 90%) random profiles. *DEF*, as expected, obtained lower *T* scores than *VAL*, *INC*, and *FB*. The simulated pathology groups (fake moderate and fake severe) obtained significantly lower *T* scores on *DEF* than did the accurate and random groups, which obtained average mean *T* scores (48.5, 51.7). It should be noted, however, that only one student in each group obtained an elevated (> 59*T*) *DEF* score.

Discussion

The importance of type and degree of motivation and the presence of prerequisite intellectual and academic competence in the psychometric self-report assessment of child and adolescent adjustment demands consistent and careful attention to the accuracy of such test results. Measures of behavioral and emotional adjustment often fail to incorporate validity scales designed specifically with, and for, younger clients. The four scales examined in these three studies provide the concurrent assessment of exaggerated, inconsistent, and defensive response styles that often attenuate inventory validity. *VAL*, for example, is unique in that the frequency rates for item endorsement are actually based on the responses of asymptomatic and clinically referred children and adolescents, rather than those of adults. While past efforts to tap dissimulation or "fake-bad" response styles in adolescents have focused on infrequent responses, there appears to be a need for alternate strategies,

Table 3
Personality Inventory for Youth Validity Scale T Scores to Four Response Sets

	Response set								
	Accurate[a]		Fake-moderate[b]		Fake-severe[c]		Random[d]		
Scale	*M*	%	*M*	%	*M*	%	*M*	%	*p*
VAL	47.9	3.3	70.2	20.0	114.1	87.5	98.6	78.6	.001
INC	60.8	30.0	58.0	24.0	57.7	8.3	76.8	96.4	.001
FB	46.9	0.0	81.4	80.0	111.4	100.0	80.8	92.9	.001
DEF	48.5	3.3	39.0	4.0	33.8	4.2	51.7	3.6	.001
INC + FB		0.0		20.0		8.0		89.3	

Note. % = Percentage of participants receiving a clinically elevated score (VAL > 2 raw; INC > 64*T*; FB > 69*T*; DEF > 59*T*). VAL = Validity; INC = Inconsistency; FB = Dissimulation; DEF = Defensiveness.
[a]n = 30. [b]n = 25. [c]n = 24. [d]n = 28.

as developmental differences may influence the response of younger individuals. The development of *FB* was unique in that child and adolescent infrequent responses in referred and nonreferred samples only identified potential items, while adolescents actually identified the final items which for them represented a "fake-bad" strategy.

INC seems particularly important in younger samples, where a deliberate lack of attention or inadequate comprehension may be prevalent. This scale, by detecting items that are scored in an inconsistent manner, quite successfully separated protocols generated randomly from those produced by adolescents presumably responding under supervision to provide an accurate description of themselves.

Adolescents with psychiatric symptoms often produce very normal looking personality profiles that remain undetected by validity indicators developed based on the adult responses. *DEF* should support the differentiation of normal limits profiles that are the product of "honest" responses from those unelevated profiles resulting from the systematic minimization of current symptoms. Indeed, the demonstrated lack of correspondence between youth and adult description of student adjustment (Achenbach, McConaughy, & Howell, 1987) is likely due in part to undetected student denial and defensiveness (Lachar, 1998).

Although further studies along these lines are desirable, at present it appears that the PIY validity scales will also assist investigators to identify potentially inaccurate protocols. These data suggest that *INC* scores greater than 64*T* and *DEF* scores greater than 59*T* are potential valid cutoff scores, while *VAL* scores greater than 2 (raw) is seen as an indicator to carefully review the other three validity scales. *FB* scores that range from 70*T* to 79*T* may also be used to exclude protocols, although it must be kept in mind that an isolated elevation of *FB* may reflect exaggerated psychopathology or the accurate description of severe emotional and social maladjustment. It is also suggested that concurrent elevation of *INC* and *FB* suggests the influence of a random response set.

Validity scales have also demonstrated their ability to measure personality dimensions or traits that may generalize beyond the PIY. The results of Study 2 suggest that *FB* and *DEF* significantly relate to other measures of self-description. These PIY scales may suggest when non-PIY measures also have been influenced by a problematic response set. These results also suggest that *DEF* and *FB* may incorporate an evaluative component that could be demonstrated through correlation with other independent observations (such as parent, teacher, and clinician ratings). For example, some degree of *DEF* elevation may relate to the presence of behavioral compliance and the absence of disruptive behaviors as reported by parents and teachers. *FB* elevation may also relate within certain *T*-score ranges to severity of emotional and behavioral disturbance. Additional studies integrating external ratings and diagnostic classification will be necessary to clarify these interpretive applications of the PIY validity scales.

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