JOURNAL OF PERSONALITY ASSESSMENT, *74*(2), 282–295

Development of an Infrequency-Psychopathology Scale for the MMPI–A: The *Fp-A* Scale

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This article describes the development and initial validation of the Infrequency-Psychopathology scale, *Fp-A*, for the MMPI–A (Butcher et al., 1992). The scale parallels the Infrequency-Psychopathology scale, *F(p)*, that has been developed for the MMPI–2 (Butcher, Dahlstrom, Graham, Tellegen, & Kaemmer, 1989). Results demonstrated that the 40-item *Fp-A* scale is superior to the *F* scale at discriminating between faking-bad and accurate reports of psychopathology, although the improvement over *F* was modest, particularly when compared to the improvement found for the *F(p)* scale. The difference seemed to reflect the superiority of the MMPI–A *F* scale to the MMPI–2 *F* scale. Even so, the findings suggest that the identification of overreporting on the MMPI–A could potentially be enhanced by using *Fp-A* as an adjunct to the *F* scale.

The *F* scale of the Minnesota Multiphasic Personality Inventory (MMPI; Hathaway & McKinley, 1983) consists of 64 items that were endorsed in the keyed direction by 10% or fewer of the participants in the original normative sample. It was developed to identify profiles rendered invalid by inconsistent responding (e.g., because of random or careless responding), and research has substantiated its capacity to do so (e.g., Berry et al., 1992; Wetter, Baer, Berry, Smith, & Larsen, 1992).

Scores on the *F* scale can be elevated by other factors as well, however. Because most items on the scale reflect clinical symptoms, scores on the *F* scale increase in response to the overreporting of psychopathology (Wetter et al., 1992). Overreporting can occur either because of self-deception, when respondents perceive themselves as more maladjusted than they actually are, or because of an active attempt at malingering or faking bad (see Paulhus, 1984). Scores on the *F* scale are also elevated by yea-saying or nay-saying (Greene, 1991). Finally, because most of the items in the scale reflect correlates of severe psychopathology that were unusual in the original normative sample, scores on the *F* scale may be elevated by an accurate portrayal of serious psychopathology. For example, Arbisi and Ben-Porath (1995) found that some *F*-scale items were endorsed in the keyed direction by over 60% of adult inpatients. The variety of factors that can produce high scores on the *F* scale complicates the interpretation of the scale.

Despite these problems, the authors of the revised version of the inventory, the Minnesota Multiphasic Personality Inventory–2 (MMPI–2; Butcher et al., 1989), elected to retain the *F* scale with minor revisions for the sake of consistency with the original version. They did, however, provide a partial solution to the interpretive problems associated with the *F* scale. The True Response Inconsistency (*TRIN*) scale was developed to identify cases of yea-saying or nay-saying, and the Variable Response Inconsistency (*VRIN*) scale was developed to identify careless or random responding; however, the problem of distinguishing between overreporting and accurate reports of severe distress remained unresolved.

Recently, Arbisi and Ben-Porath (1995) developed the Infrequency-Psychopathology, or *F(p),* scale specifically to address this final interpretive issue. The *F(p)* scale consists of 27 items that were endorsed in the keyed direction by fewer than 20% of participants in each of five samples consisting of male or female nonclinical adults (N = 2,600) or psychiatric patients (N = 1,123). The authors found that the *F(p)* scale was elevated by accurate reports of psychopathology less than was the *F* scale, a finding that they have since replicated (1997). Several studies have also demonstrated the superiority of the new scale as a predictor of faking bad when compared to the *F* scale (Arbisi & Ben-Porath, 1995, 1998; Simcox, Berry, & Kelley, 1997).

The original MMPI was used extensively for the evaluation of adolescents (Archer, Maruish, Imhof, & Piotrowski, 1991), even though it was developed for adults and its appropriateness for adolescents was questionable. In particular, adolescents demonstrated a very high rate of elevated scores on the *F* scale (Archer,

1984; Ehrenworth & Archer, 1985), and Gallucci (1987) questioned the effectiveness of *F* as a predictor of invalid responding in adolescents. In recognition of these and other concerns, a new version of the MMPI specifically for adolescents (MMPI–A; Butcher et al., 1992), was developed. The only traditionally scored scale that was completely revised for the MMPI–A was the *F* scale. A new 66-item *F* scale was developed, consisting of items endorsed by 20% or fewer of the new adolescent normative sample.

Two subscales of *F* were also developed as part of the revision process. *F1* consists of 33 items from the first 236 items in the MMPI–A booklet. This subscale parallels the MMPI–2 *F* scale in purpose, and the item overlap between the two scales is quite high. *F1* can be used to evaluate invalid response to the items in the traditional clinical and validity scales, which are all included among the first 350 items in the MMPI–A booklet. The *F2* scale is similar to the MMPI–2 Infrequency-Back (*Fb*) scale, which is an indicator of response in an uncommon manner to items in the "back" of the MMPI–2 booklet that are required for scoring the new validity and content scales. *F2* includes 33 items from the second half of the MMPI–A booklet. *VRIN* and *TRIN* scales were also developed for the MMPI–A.

Little research is yet available on the MMPI–A validity scales, but the new *F* scale seems to be a valid indicator of faking bad (Stein, Graham, & Williams, 1995). Even so, the selection of items for the MMPI–A *F* scale based on the normative sample alone means that scores can be elevated by accurate reports of severe psychopathology. Butcher et al. (1992) even commented that "the correlates … for *F* and its component scales demonstrate how these scales are confounded with serious maladjustment" (p. 40).

This article describes the development of an Infrequency-Psychopathology scale for the MMPI–A, called the *Fp-A* scale, specifically designed to enhance the discrimination between accurate reporting and overreporting. Initial data concerning the construct validity of the *Fp-A* scale are also provided. A series of hypotheses developed by Arbisi and Ben-Porath (1995, 1997) to evaluate the validity of the *F(p)* scale was examined. First, if *Fp-A* is less sensitive to the accurate portrayal of severe psychopathology than the traditional *F* scale, *T* scores in a clinical sample should be lower for the *Fp-A* scale than for the *F* scale. This should be true both for patients overall and within diagnostic categories. Second, *Fp-A* should correlate less with traditional MMPI indicators of distress than does the *F* scale.[1] Third, we would expect differences on *Fp-A* between clinical patients and nonclinical respondents to be smaller than similar differences on the *F* scale. Fourth, we

[1]Arbisi and Ben-Porath (1995) examined both the *F* and *Fb* scales when testing the first two hypotheses. Because the MMPI–A *F* scale incorporates both *F1* and *F2*, the comparison of *Fp-A* to the MMPI–A *F* scale is equivalent to comparing the new scale to both of the standard MMPI–2 infrequency scales simultaneously.

would expect *Fp-A* to offer incremental validity over *F* as a predictor of faking bad in nonclinical adolescents.

METHOD

Participants

Four data sets were used in this study. In each case, exclusionary criteria were consistent with those employed by Arbisi and Ben-Porath (1995). The first data set was the normative sample collected during the development of the MMPI–A (Butcher et al., 1992). This sample consisted of 1,620 high school students (815 girls, 805 boys) from eight states between the ages of 14 and 18 (M = 15.6, SD = 1.2). Ethnicity data were roughly comparable to that of the general adolescent population. The MMPI–A manual indicates that participants were excluded if they omitted more than 35 items or achieved a raw score greater than 25 on the MMPI–2 *F* scale.

The second data set consisted of 475 inpatient adolescents at a private psychiatric hospital, who were administered the MMPI–A as part of the standard intake procedure. This sample was used for the derivation of the *Fp-A* scale. Patients were eliminated from the sample if they omitted more than 15 items. Ages ranged from 14 to 18, with a mean of 15.4 years (SD = 1.1). The sample consisted of 258 girls and 217 boys. Ethnicity data were not available for this sample, but the adolescent population at the facility where data were gathered is approximately 62% White, 18% Black, 14% Hispanic, and 6% other. Primary discharge diagnoses fell into six general categories: major depression (33.4%); other depressive conditions, such as dysthymia (26.2%); psychotic disorders, including schizophrenia (9.8%); conduct disorder (7.2%); bipolar disorder (5.5%); and oppositional defiant disorder (3.9%).

The third data set consisted of 356 subsequent admissions to the same psychiatric facility (194 girls, 162 boys). This sample was used for the construct validation of the scale. Patients who omitted more than 15 items or had *T* scores of 100 or greater on *TRIN* or of 80 or greater on *VRIN* were eliminated from the sample. These criteria were used for consistency with the cross-validation samples used by Arbisi and Ben-Porath (1995). Ages ranged from 14 to 17, with a mean age of 15.2 years (SD = 1.0). Primary discharge diagnoses fell into five general categories: major depression (26.7%); bipolar disorder (18.9%); other depressive conditions, such as dysthymia (18.2%); psychotic disorders, including schizophrenia (9.7%); and oppositional defiant disorder (3.8%).

The fourth data set was collected by Stein et al. (1995) to examine faking bad on the MMPI–A. After eliminating four cases based on the item omission and validity scale criteria described earlier, the sample consisted of 140 high school students (81 girls, 59 boys) between the ages of 14 and 17, with a mean age of 15.6 years

(*SD* = .6). The sample was 91% White and 4% African American. Additional demographic information for a slightly different subset of the original sample was provided by Stein et al.

Procedure

For the sake of comparability between the MMPI–2 and MMPI–A Infrequency-Psychopathology scales, we tended to use the same selection criteria and statistical analyses employed by Arbisi and Ben-Porath (1995, 1997) in their studies. The normative sample completed Form TX, an experimental paper-and-pencil version of the MMPI that contained all the items that were later included in the MMPI–A. Participation occurred either in return for payment or as part of a school assignment. The inpatient adolescents completed the paper-and-pencil version of the MMPI–A under standard instructions at the time of admission. Participants in the Stein et al. (1995) sample completed the paper-and-pencil version of the MMPI–A twice, approximately 1 week apart, once under standard instructions and once under the following fake bad instructions:

> This is the Minnesota Multiphasic Personality Inventory for Adolescents. It is a widely used test for looking at psychological and emotional adjustment. Respond to the items to give the impression that you have very serious emotional problems and that your problems may include being unhappy or nervous, school problems, family difficulties, or problems with your friends. Respond to the items to give the impression that you have these serious psychological problems and need hospital treatment where you can talk with a counselor, psychologist, or other doctor about your emotional problems. (Stein et al., 1995, p. 420)

The order of the two administrations was counterbalanced so that half of the sample completed the inventory first under standard instructions and half completed it first under fake bad instructions. Students were paid for their participation.

RESULTS

Endorsement of *F*-Scale Items by Inpatients

The first set of analyses compared the rate of endorsement for items from the MMPI–A *F* scale in inpatient adolescents and in the normative sample. As expected, many of the *F*-scale items (25 of 66) were endorsed in the keyed direction by more than 20% of the inpatients in the derivation sample. Table 1 lists the nine items with the highest rates of endorsement in the inpatient sample. The rates of en-

TABLE 1
F Scale Items With the Highest Endorsement Frequencies in the Inpatient Derivation Sample

		Endorsement in the Keyed Direction (%)	
Item No.	*MMPI–A Item*	*Inpatient*	*Normative*
80	I have been suspended from school one or more times for bad behavior. (T)	49	15
57	My parents do not like my friends. (T)	41	19
63	It would be better if almost all laws were thrown away. (T)	33	11
6	My father is a good man, or (if your father is dead) my father was a good man. (F)	33	12
173	There is something wrong with my mind. (T)	32	12
120	I believe in law enforcement. (F)	30	10
297	I get anxious and upset when I have to make a short trip away from home. (T)	30	15
69	I think school is a waste of time. (T)	29	17
86	I love my father, or (if your father is dead), I loved my father. (F)	29	10

Note. MMPI–A = Minnesota Multiphasic Personality Inventory–Adolescent; T = true; F = false. Keyed direction is indicated in parentheses after the item. MMPI–A items and scoring direction of items reprinted from *MMPI–A Manual for Administration, Scoring, and Interpretation,* by J. N. Butcher, C. L. Williams, J. R. Graham, R. P. Archer, A. Tellegen, Y. S. Ben-Porath, and B. Kaemmer, 1992, Minneapolis: University of Minnesota Press. Copyright 1992 by the Regents of the University of Minnesota. Adapted with permission.

dorsement for the inpatient and normative samples are provided. Review of the items suggests that they reflect attitudes or experiences that are not uncommon in a pathological population.

Adolescent inpatients, however, did not endorse MMPI–A *F*-scale items in the keyed direction as frequently as adult inpatients endorsed MMPI–2 *F*-scale items. Arbisi and Ben-Porath (1995) found that some MMPI–2 *F*-scale items were endorsed in the keyed direction by over 60% of their adult inpatient sample. In contrast, none of the MMPI–A *F*-scale items were endorsed by as many as 50% of the adolescent inpatients. The data suggest that scores on the MMPI–A *F* scale are less likely to be elevated by the accurate report of psychopathology than is true of the MMPI–2 *F* scale.

Furthermore, the elevated rate of endorsement did not inflate adolescent inpatients' *F*-scale scores by much. Where Arbisi and Ben-Porath (1995) found a mean MMPI–2 *T* score on Scale *F* among their inpatients of 77.3, the mean MMPI–A *T* score for the adolescent inpatients was only 55.8 (SD = 12.7). The difference between these means is significant, $t(1,162) = 84.48$, $p < .05$. The results suggest that many items on the MMPI–A *F* scale do not meet criteria for an infrequency-psycho-

pathology scale, which can compromise the validity of the scale when one attempts to discriminate between overreporting and accurate self-reports of psychopathology; however, the presence of these items does not elevate scores as much as their presence does on the MMPI–2 *F* scale.

Development of the *Fp-A* Scale

An item was included in the *Fp-A* scale if it was endorsed in one direction or the other by fewer than 20% of respondents from four samples: boys from the normative sample, girls from the normative sample, boys from the inpatient derivation sample, and girls from the inpatient derivation sample.[2] The resulting scale consisted of 40 items, 31 of which are also included in the MMPI–A *F* scale.

The new scale shares only nine items with the MMPI–2 *F(p)* scale. The *Fp-A* scale includes more somatic items than does the *F(p)* scale, a finding that would not be unexpected, given the good health of most adolescents. The remaining items reflect paranoid ideation or severe family or social problems. The Appendix provides the complete scoring key for the scale, including a *T*-score conversion table based on the MMPI–A normative sample.

Evaluation of the First Hypothesis

Tests of the hypotheses involved two samples, the nonpathological high school students and the inpatient sample not used for the derivation of the scale. The first hypothesis suggested that if *Fp-A* is less sensitive to the accurate portrayal of severe psychopathology than the *F* scale, *T* scores in a clinical population should be lower for the *Fp-A* scale than for *F*. The mean *Fp-A*-scale *T* score was significantly lower than the mean *F*-scale *T* score for the inpatient validation sample as a whole, although the difference was far smaller than that reported by Arbisi and Ben-Porath (1995). Among the adolescent inpatients of the validation sample, the mean *T* score on *F* was 56.6 (SD = 12.4) and the mean *T* score on *Fp-A* was 52.3 (SD = 12.4), $t(355) = 13.0$, $p < .001$.

The analysis was repeated within major diagnostic categories. Where discharge diagnosis was available, inpatients from the validation sample were divided ac-

[2]Although 20% was the criterion used for infrequent responding on both the *Fp* and the MMPI–A *F* scales, we recognized that it is an arbitrary standard and that it is inconsistent with practices associated with the original MMPI (Gynther, Lachar, & Dahlstrom, 1978; Hathaway & McKinley, 1983). To address this issue, we initially developed multiple versions of the scale, setting the criterion at 5%, 10%, and so on, up to 25%. No items met the criterion in all four samples until the criterion was set to 15% or greater. Of the alternative versions developed, construct validity data were strongest for the scale based on the 20% criterion; therefore, this was selected to serve as the *Fp-A* scale.

cording to the five diagnostic categories listed previously: bipolar disorder, major depression, oppositional defiant disorder, other depressions, and psychotic disorders. A 2 × 5 mixed factors analysis of variance was conducted, with Scale (*F* vs. *Fp-A*) as the within-subjects factor and Diagnosis as the between-subjects factor. Table 2 provides means and standard deviations from this analysis.

Neither the interaction between Diagnosis and Scale, $F(4, 241) = 1.42$, nor the main effect for Diagnosis, $F(4, 241) = 1.94$, was significant. The main effect for Scale was significant, $F(1, 241) = 68.2$, $p < .001$, suggesting, as hypothesized, that *Fp-A* scores were consistently lower than *F* scores across all diagnostic groups. In addition to the Scale main effect, Arbisi and Ben-Porath (1997) also found a significant interaction between Diagnosis and Scale in their adult sample. Post hoc analyses suggested that *F*-scale scores were sensitive to the severity of psychopathology but *F(p)* scores were not. The nonsignificant interaction in this study may have occurred for several reasons. Although the *Fp-A* scale is less sensitive to the presence of psychopathology than the MMPI–A *F* scale, both scales may be relatively insensitive to the severity of pathology. Another possibility is that adolescent inpatients demonstrate less diversity in the severity of their pathology, so that diagnosis is not as useful a predictor of severity in this population as it is for the adult population.

Evaluation of the Second Hypothesis

The second hypothesis suggested that if *Fp-A* is less sensitive to the accurate portrayal of severe psychopathology than *F*, it should correlate less with traditional MMPI indicators of distress. Table 3 provides correlations between the *F* and *Fp-A* scales and the commonly scored MMPI–A scales for adolescent inpatients, as well

TABLE 2
F and *Fp-A T* Scores Across Diagnostic Categories

	Diagnostic Category				
Scale	*Bipolar Disorder*[a]	*Major Depression*[b]	*Other Depression*[c]	*Oppositional Defiant Disorder*[d]	*Psychotic Disorders*[e]
F					
M	58.22	55.25	55.69	58.25	61.00
SD	12.70	12.36	11.24	16.97	11.55
Fp-A					
M	53.02	50.40	50.62	57.58	56.23
SD	12.79	11.75	10.61	19.41	10.41

Note. Only the main effect for Scale was significant.
[a]$n = 60$. [b]$n = 85$. [c]$n = 58$. [d]$n = 12$. [e]$n = 31$.

TABLE 3
Correlations and Item Overlap Between *F* and *Fp-A* Scales and Other MMPI–A Scales in Inpatient Adolescents

	F		*Fp-A*	
Scale	*r*	*Item Overlap*	*r*	*Item Overlap*
L[a]	–.02	1	.20	3
K[a]	–.38	1	–.17	0
VRIN[a]	.64		.69	
TRIN	.29		.26	
1 (*Hs*)[a]	.62	1	.55	3
2 (*D*)[a]	.38	2	.31	2
3 (*Hy*)	.25	1	.21	2
4 (*Pd*)[a]	.37	2	.13	1
5 (*Mf*)	.22	0	.24	1
6 (*Pa*)[a]	.67	10	.53	6
7 (*Pt*)[a]	.59	2	.38	1
8 (*Sc*)[a]	.79	17	.60	9
9 (*Ma*)[a]	.36	0	.16	1
0 (*Si*)[a]	.55	0	.44	0
Mdn r	.46		.35	

Note. Correlations are based on the 356 inpatients from the validation sample. Only the clinical scales were used to compute the median *r*s.

[a]Scales for which *t* tests for dependent correlations indicated significant differences between *r*s ($p < .05$), based on a correlation between *F* and *Fp-A* of .87.

as information on item overlap. As predicted, *F* tended to be more highly correlated with MMPI–A indicators of general maladjustment than did the *Fp-A* scales. This was true regardless of which validity scale shared the larger proportion of its items with the clinical scale. Correlations were significantly different in the expected direction for 8 of 10 clinical scales ($p < .05$). Whereas the median correlation between the MMPI–A clinical scales and the *F* scale was .46, the median correlation between the clinical scales and *Fp-A* was .35.

Evaluation of the Third Hypothesis

The third hypothesis suggested that if *Fp-A* is less sensitive to the accurate portrayal of severe psychopathology than *F*, we would expect differences on *Fp-A* between patients and nonclinical respondents to be smaller than differences on *F*. To test this hypothesis, a dummy-coded variable was created on which nonclinical high school students who completed the MMPI–A under standard instructions were coded 1, and patients completing the MMPI–A under standard instructions were coded 2. This variable was then correlated with scores on *F* and *Fp-A*, so a positive correlation would indicate a higher mean score for patients than for nonclinical adoles-

cents. The results of this analysis may be found in the top line of Table 4. Using the *t* test for dependent correlations, it was determined that *F* correlated significantly more highly in the positive direction with group membership than did *Fp-A* ($p < .05$). The results suggest *F* is more elevated by the accurate report of psychopathology than is *Fp-A.*

Evaluation of the Fourth Hypothesis

The fourth hypothesis suggested that *Fp-A* should demonstrate incremental validity over *F* as a predictor of faking bad in nonclinical adolescents. This is, in some ways, the most important of the four hypotheses, and it was evaluated in two ways. First, a second dummy-coded variable was created on which patients responding under standard instructions were coded 1 and nonclinical adolescents responding under fake bad instructions were coded 2. Correlations were then computed with the two validity scales. A positive correlation would indicate a higher mean score for individuals faking bad. If the *Fp-A* scale is more sensitive to faking bad than the *F* scale, one would expect the *Fp-A* scale to discriminate more effectively between these groups than the *F* scale. The results are in the bottom line of Table 4. The hypothesis was supported: *Fp-A* was more strongly related to group membership than *F* ($p < .05$). Again, comparison with Arbisi and Ben-Porath's (1995, Table 7) findings is informative. The two infrequency-psychopathology scales are similar in their ability to identify faking bad; however, the MMPI–A *F* scale was superior to the MMPI–2 *F* scale at this task. Where Arbisi and Ben-Porath reported a correlation of .48 between *F* scores and faking-bad nonclinical respondents and patients, the corresponding correlation for the MMPI–A scale was .68. This difference is significant ($z = 4.66$, $p < .05$), suggesting that the MMPI–A *F* scale was more sensitive to faking bad than the MMPI–2 scale.

The next set of analyses associated with the fourth hypothesis provided a direct test of the incremental validity of the *Fp-A* scale. Two sets of hierarchical regressions were conducted in which group membership was used as the criterion vari-

TABLE 4
Correlations Between *F, Fp-A,* and Group Membership

Group	*F*	*Fp-A*	*F–Fp*	*t*
Standard instruction nonclinical adolescents versus patients	.36	.24	.97	5.64*
Patients and faking-bad nonclinical adolescents	.68	.70	.97	2.40*

Note. $N = 496$. Standard instructions nonclinical adolescents were dummy coded 1 and patients were coded 2 for the first set of analyses; patients were dummy coded 1 and faking-bad nonclinical adolescents were coded 2 for the second set. The third column provides correlations between the two infrequency scales used to compute *t* tests for differences between dependent correlations.

*$p < .05$.

TABLE 5
Regression Analyses Discriminating Between Faking-Bad Nonclinical Adolescents and Inpatients

Variable	*Multiple R*	*Final* β
Entering *F* first		
F	.68	.03
Fp-A	.70*	.67
Entering *Fp-A* first		
Fp-A	.70	.67
F	.70	.03

*Increment in multiple correlation significant at $p < .01$.

able, with inpatients coded 1 and faking-bad students coded 2. In the first set, *F* was entered by itself in the first step, and *F* and *Fp-A* were entered simultaneously in the second step. The second set was the same, except that *Fp-A* was entered by itself in the first step. Table 5 provides results from these analyses.

When *Fp-A* was added to *F*, there was a small but significant increase in the multiple correlation. In contrast, the multiple correlation showed no change when *F* was added to *Fp-A.* In addition, the beta weight for *F* was nearly zero when *Fp-A* was added as a predictor. Again, although the increment in fit is not large, *Fp-A* significantly improved the prediction of faking bad when added to the *F* scale, whereas the *F* scale did not enhance the prediction of faking bad when added to *Fp-A.*

DISCUSSION

The first general conclusion to be drawn from these results is actually incidental to the goals of the study. Several findings suggest that the MMPI–A *F* scale may be superior to the MMPI–2 *F* scale as an indicator of faking bad. The MMPI–A *F* scale was not particularly elevated by the accurate portrayal of psychopathology, and the analyses associated with the last hypothesis suggested that it does a better job of discriminating between those who fake bad and honest respondents.

The difference between the two *F* scales may occur for several reasons. One possibility is that the MMPI–2 *F* scale contains a larger number of items that do not reflect infrequent responding among pathological individuals. It must be remembered that the *F*-scale items were chosen because of infrequent responding in the keyed direction in a normative sample of Minnesotans from the 1930s. Many of these items do not seem to be indicators of infrequent responding in the contemporary general population. Consistent with this hypothesis is Arbisi and Ben-Porath's (1995) finding that some *F*-scale items were endorsed in the keyed direction by as much as 44% of the MMPI–2 normative sample.

On the other hand, Arbisi and Ben-Porath (1995) used both the *F* and *Fb* scales when they tested their first two hypotheses. Although the *Fb* scale was developed using the contemporary normative sample, the results were quite similar for the two MMPI–2 infrequency scales. Outdated items are therefore unlikely to be the sole or even the primary cause for the difference in outcomes between the adult and adolescent *F* scales.

A second hypothesis worth considering is that adolescent inpatients demonstrate less severe disturbance than adults, even when they meet criteria for a diagnosis associated with a severe disturbance in adults, such as schizophrenia. In the absence of a high rate of severe psychopathology, the *F* scale by itself may be expected to do a decent job of identifying faking bad and an infrequency-psychopathology scale might not be expected to improve prediction dramatically.

At this point, it is worth reviewing Arbisi and Ben-Porath's (1995) recommendations concerning the sequential interpretation process for the MMPI–2 *F* scale and associated scales. If *F* is elevated, the first scale to look at is *VRIN*. A *T* score above 80 suggests random responding. If *VRIN* is not elevated, *TRIN* is examined next. A *T* score over 100 would be best interpreted as yea-saying or nay-saying. Elevated scores on either *VRIN* or *TRIN* would render the profile uninterpretable. If neither *VRIN* nor *TRIN* is elevated, Arbisi and Ben-Porath recommended looking at *F(p)*, where an elevated score would suggest overreporting and the interpretation of the profile should therefore be modified in light of the finding. A normal *F(p)* score would suggest that *F* is being elevated by an accurate portrayal of psychopathology.

Given the modest but significant improvement in classification provided by the *Fp-A* scale, further research is needed to assure that the scale can serve the same function for the MMPI–A. Although it is unlikely the scale will demonstrate the same level of incremental validity as the *F(p)* scale, this study offers tentative evidence for the utility of the *Fp-A* scale as an adjunct to the MMPI–A *F* scale as an indicator of overreporting.

ACKNOWLEDGMENT

We gratefully acknowledge the administration of the Four Winds Hospital, Katonah, New York, for its support in the collection of data for this article. We are solely responsible for the content of the article.

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Received May 10, 1999
Revised November 4, 1999

APPENDIX
Scoring Key

	Linear T Scores	
Raw Score	*Boys*	*Girls*
0	40	40
1	42	42
2	44	45
3	46	47
4	48	50
5	50	52
6	52	55
7	54	57
8	56	60
9	58	62
10	60	65
11	62	67
12	64	70
13	66	72
14	68	75
15	70	77
16	72	80
17	74	82
18	76	85
19	78	87
20	80	90
21	82	92
22	84	95
23	86	97
24	88	100
25	90	102
26	92	105
27	94	107
28	96	110
29	98	112
30	100	115
31	102	118
32	104	120
33	106	120
34	108	120
35	110	120
36	112	120
37	114	120
38	116	120
39	118	120
40	120	120

Note. True: 11, 17, 22, 30, 51, 76, 92, 108, 136, 143, 155, 187, 215, 231, 236, 264, 273, 315, 321, 332, 342, 350, 405, 415, 433, 439, 463, 474. False: 48, 74, 84, 98, 104, 182, 193, 198, 243, 258, 374, 450. Boys: $M = 4.95$, $SD = 5.00$. Girls: $M = 4.13$, $SD = 3.98$.