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Validity Study

Using MMPI Special Scale Configurations to Predict Supervisor Ratings of Police Officer Performance

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As part of a special issue of Applied H.R.M. Research on using special scale configurations of the MMPI and MMPI-2 in selecting law enforcement personnel, we investigated the ability of these scale configurations to predict performance problems of 112 police officers in two police departments in small cities in rural Virginia. The performance measures were termination for cause and supervisor ratings of the performance at both the end of the first year and the second year of employment. The results indicated that scores on the Good Cop/Bad Cop scale configuration were significantly related to termination for cause, using both the Blau et al. and the Brewster and Stoloff methods for classifying officers. Several scale configurations were significantly correlated with supervisor ratings but these were not consistent from the first year to the second year.

Participant Characteristics

N	112 officers
Dept	Two medium-size police departments in rural Virginia
Gender	86% were men
Race	94% were white
Age	*M* = 26.58

Use of the MMPI

Most of the officers in this study were administered the MMPI-2 during their first 3 months of employment. MMPI-2 scores were not used to make hiring decisions.

Dependent Variables

Seven dependent variables were used in this analysis:

Termination status was an indication of whether the officer had been terminated for cause (15.7%), or was either still employed or had left the force in good standing (84.3%).

The remaining six dependent variables were supervisor ratings. Three performance measures were used. Ratings were obtained for each measure at the end of the first and at the end of the second year of employment. The dimension COMP was the supervisors' response to the question: "Compared to other officers, what is your overall rating of the officer." Scores were on a 1-7 scale with 1 indicating "superior" and 7 indicating "very poor." The dimension REHIRE, was the supervisors' response to the question "Would you hire this officer (knowing

him/her as you do now) if they were applying for the job now?" Scores were on a 1-7 scale with 1 indicating "would definitely hire" and 7 indicating "would not hire." Overall was the supervisors' overall response rating of the officer with 1 indicating "Exceptional (falls in the top 10-20% of officers)," 2 indicating "Average," and 3 indicating "Much improvement needed (falls in the bottom 10-20%)."

Results

As shown in Table 1, only the Good Cop/Bad Cop special scales (both methods) were significantly related to the officers' termination status.

Table 1
Correlations with termination status (0=Not Terminated; 1 = Terminated with Cause)

Scale Configuration	Mean	SD	Correlation with Termination Status
Good Cop/Bad Cop			
Blau *et. al*. Method	0.23	0.42	.23*
Brewster & Stoloff Method	0.13	0.26	.21*
Husemann Index (F + Pd + Ma)	141.80	12.98	.14
Aamodt Index (F + Ma)	91.34	10.88	.10
Goldberg Index (L+Pa+Sc-Hy-Pt)	57.41	13.40	.16
Gonder Index (Pd + Pt + Mf + Ma + Hs + Hy)	289.84	24.60	- .03
Five-Factor Model			
Factor I (Hs + Pd + Pa + Pt + Sc + Ma)	289.27	24.44	.09
Factor II (Hy + Hs + K – Ma)	110.42	22.01	- .06
Factor III (Si)	43.63	6.67	.02
Factor IV (Pa + MF – L – K)	-26.77	21.68	- .08
Factor V (F-K)	-17.39	10.82	.07

* $p < .05$.

Notes: All of these mean scores represent MMPI T-scores with the exception of the Good Cop/Bad Cop analysis. For the Good Cop/Bad Cop analysis, Blau *et. al*. Method, 0 = Good Cop, 1 = Bad Cop. For the Good Cop/Bad Cop analysis, Brewster & Stoloff Method, 0 = Good Cop, 0.5 = Borderline, 1 = Bad Cop.

As shown in Table 2, several scale configurations were significantly correlated with supervisor ratings, but these were never consistent for both the first and second year evaluations.

Table 2
Correlations with end-of-first year and end-of-second year supervisor ratings

Scale Configuration	First Year			Second Year		
	Comp	Rehire	Overall	Comp	Rehire	Overall
Good Cop/Bad Cop						
Blau *et. al.* Method	.01	.20*	.11	.18	.15	.24*
Brewster & Stoloff Method	- .01	.13	.05	.15	.15	.23*
Husemann Index (F + Pd + Ma)	.10	.19	.01	.13	.13	.12
Aamodt Index (F + Ma)	.05	.09	- .05	.17	.13	.11
Goldberg Index (L+Pa+Sc-Hy-Pt)	.10	.14	.26*	- .12	- .13	- .17
Gonder Index (Pd+Pt+Mf+Ma+Hs+Hy)	.14	.16	.13	.14	.18	.16
Five-Factor Model						
Factor I (Hs+Pd+Pa+Pt+Sc+Ma)	.21*	.26**	.21	.09	.20	.12
Factor II (Hy + Hs + K – Ma)	.17	.11	.26*	- .04	- .03	.01
Factor III (Si)	.12	.06	.06	- .03	.01	.06
Factor IV (Pa + MF – L – K)	- .21*	- .15	- .36**	.10	.11	.11
Factor V (F-K)	- .10	- .08	- .29**	.04	- .03	.00

* p < .05; ** p < .01

Table 3
Correlations among scale configurations

Scale Configuration	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
Good Cop/Bad Cop										
1. Blau et al. method	.94**	.46**	.33**	- .07	.42**	.36**	.02	- .12	.07	.05
2. Brewster & Stoloff		.48**	.34**	- .02	.48**	.43**	.06	- .14	.06	.02
3. Husemann Index			.86**	.02	.62**	.68**	- .22*	- .08	.21*	.37**
4. Aamodt Index				.07	.35**	.43**	- .53**	.00	.27**	.59**
5. Goldberg Index					- .13	.09	.05	- .06	- .48**	- .12
6. Gonder Index						.85**	.40**	- .25**	.12	- .24**
7. Factor I							.34**	- .22*	.00	- .20*
8. Factor II								- .26**	- .53**	- .82**
9. Factor III									.06	.41**
10. Factor IV										.57**
11. Factor V										

* p < .05; ** p < .01

Table 4
Outcome frequencies for the Good Cop/Bad Cop method

GCBC Category	Frequency (Percent)	Percent Terminated for Cause
Blau et al Method		
Bad Cop (1+ problem scales)	26 (24%)	31%
Good Cop (no problem scales)	82 (76%)	11%
Brewster & Stoloff Method		
Bad Cop (2+ problem scales)	4 (4%)	25%
Borderline (1 problem scale)	22 (20%)	32%
Good Cop (no problem scales)	82 (76%)	11%

Appendix
Correlations between individual MMPI-2 scales and supervisor ratings

MMPI-2 Scale	Mean	SD	Term	First Year			Second Year		
				Comp	Rehire	Overall	Comp	Rehire	Overall
L	60.03	11.73	.10	.19*	.14	.36**	- .07	- .07	-.10
F	42.79	5.07	.06	.11	.11	.02	.07	- .01	.02
K	60.18	8.35	- .05	.20*	.17	.36**	- .01	.03	.01
Hs	48.62	6.98	.01	.17	.16	.21*	.02	- .02	.03
D	45.45	6.09	.12	.22*	.14	.26*	.03	.05	.10
Hy	50.18	6.99	- .01	.13	.07	.13	.07	.08	.11
Pd	50.46	6.61	.10	.12	.23*	.10	- .02	.04	.05
Mf	44.99	9.63	- .22*	- .12	- .11	- .09	.11	.07	.10
Pa	48.45	6.30	.17	.08	.13	.00	.05	.18	.10
Pt	47.04	6.52	.00	.25*	.21*	.27*	.07	.27**	.12
Sc	46.15	5.93	- .04	.17	.19	.32**	- .02	.07	-.01
Ma	48.55	8.21	.10	.00	.06	- .07	.18	.17	.13
Si	43.63	6.67	.02	.12	.06	.06	- .03	.01	.06

* $p < .05$; ** $p < .01$