

## Validity Study

### Relationship Between IQ and First-year Overall Performance as a Police Officer

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*The Full Scale IQ (FSIQ), Verbal IQ (VIQ), and Performance IQ (PIQ) of 71 new police officers was correlated with their supervisors' ratings of their overall performance at the end of their first year of service. The results indicated that FSIQ and VIQ were significantly related to overall performance. ( $r$ 's = .38 and .43, respectively). Performance IQ was not significantly correlated with overall performance as a police officer ( $r$  = .19)*

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#### Sample

|           |   |
|-----------|---|
| N         | 71 new police officers                          |
| Gender    | 85% men, 15% women                              |
| Race      | 93% Caucasian, 6% African American, 1% Hispanic |
| Age       | Mean = 26.3, $SD$ = 4.4                         |
| Education | Mean = 14.4 years, $SD$ = 1.5                   |

#### Location

The data for this study were collected from newly hired police officers and their supervisors, employed at police departments in two small cities in Virginia located within 15 miles of each other.

#### Predictor Information

The predictors in this study were the officers' Full Scale, Verbal and Performance IQs. The IQs were obtained by administration of the Wechsler Adult Intelligence Scale-Revised and the Wechsler Adult Intelligence Scale-III. The tests were administered and scored and IQs were calculated using standardized procedures contained in the administration manuals. The 71 officers obtained the following mean IQ scores:

|                |   |
|----------------|---|
| Full Scale IQ  | = 106.25 ( $SD$ = 10.72, range = 84 – 128)  |
| Verbal IQ      | = 107.03 ( $SD$ = 10.82, range = 87 – 133)  |
| Performance IQ | = 104.17 ( $SD$ = 11.20, range = 76 – 128). |

All of these means are above the mean for the normative sample, which is 100 ( $SD$  = 15).

### Criterion Information

The criterion measure was a supervisor rating of overall job performance, obtained near the end of each officer's first year of service as a police officer. Each officer was rated by his or her direct supervisor. The overall rating score was assigned according to the following scale:

#### Overall Performance Rating

3 = Exceptional (falls in the top 10-20% of officers)

2 = Average

1 = Much Improvement Needed (falls in the bottom 10-20%)

Thirty-eight percent of the 71 officers were placed in the Exceptional category by their supervisors, 56% were rated as Average, and 6% were placed in the Much Improvement Needed category.

### Validity Information

Table 1 presents the correlations of the three predictor measures with the criterion measure. There were significant correlations between both Full Scale IQ and Verbal IQ and the overall performance rating. There was no significant relationship between the Performance IQ and the overall performance rating.

**Table 1: Correlation between IQ and performance ratings**

| IQ Scale               | Reliability from Manual |          | Correlation with overall performance rating |
|------------------------|-------------------------|----------|---|
|                        | Test-retest             | Internal |   |
| Full Scale             | .96                     | .98      | .38*  |
| Verbal                 | .96                     | .97      | .43*  |
| Performance            | .91                     | .94      | .19   |
| Demographic            |                         |          |   |
| Years of education     |                         |          | .00   |
| Sex (1=male, 2=female) |                         |          | -.02  |

### Author Notes

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