

**Horst-Hilsch/Hypermax Rotations for Three Classic Data Sets:  
Loadings and Factor Intercorrelations**

These results show that HH and hypermax produced exactly the same solutions for these problems. This will be the case whenever the same hyperplane elements are identified by the two procedures.

TABLE 1  
HH and Hypemax Rotations  
for Thurstone's 10 PMA

<i>HH/Hypermax Factors</i> *			
<i>Variable</i>	<i>I</i>	<i>II</i>	<i>III</i>
<i>Reading</i>	1.000	<b>-.201</b>	<b>-.032</b>
<i>Vocabulary</i>	.768	<b>.220</b>	<b>-.084</b>
<i>Coding</i>	.513	.405	<b>.162</b>
<i>Cubes</i>	<b>.040</b>	.732	<b>-.016</b>
<i>Flags</i>	<b>-.078</b>	.924	<b>-.045</b>
<i>Number code</i>	<b>.091</b>	.437	.559
<i>Addition</i>	<b>-.105</b>	<b>.054</b>	.779
<i>Subtraction</i>	<b>.069</b>	<b>-.155</b>	.843
<i>Multiplication</i>	<b>-.138</b>	<b>.020</b>	.870
<i>Division</i>	<b>.118</b>	<b>.125</b>	.612
<i>Factor intercorrelations:</i>			
I	1.000		
II	.225	1.000	
III	.400	.276	1.000

\*Loadings and factor correlations are identical for the two solutions.

*Note.* The method of extraction was maximum likelihood. Highlighted elements are in the interval [-.25, +.25].

TABLE 2  
 HH and Hypermax Rotations  
 for Eight Physical Variables

---

*HH/Hypermax Factors\**

---

<i>Variable</i>	<i>I</i>	<i>II</i>
<i>Height</i>	.885	<b>.060</b>
<i>Arm span</i>	.959	<b>-.035</b>
<i>Forearm length</i>	.929	<b>-.051</b>
<i>Lower leg length</i>	.884	<b>.030</b>
<i>Weight</i>	<b>-.006</b>	.946
<i>Bitrochantric diam.</i>	<b>-.016</b>	.808
<i>Chest girth</i>	<b>-.075</b>	.797
<i>Chest width</i>	<b>.097</b>	.649

*Factor intercorrelations:*

<i>I</i>	1.000	
<i>II</i>	-.485	1.000

---

\*Loadings and factor correlations are identical for the two solutions.

*Note.* The method of extraction was unweighted least-squares. Highlighted elements are in the interval [-.10, +.10].

TABLE 3  
 HH and Hypermax Rotations for Holzinger's  
 Nine Psychological Tests

---

*HH/Hypermax Factors\**

---

<i>No.</i>	<i>I</i>	<i>II</i>	<i>III</i>
<i>1</i>	.957	<b>-.067</b>	<b>-.038</b>
<i>2</i>	.790	<b>.120</b>	<b>-.044</b>
<i>3</i>	.844	<b>-.021</b>	<b>.070</b>
<i>4</i>	<b>.021</b>	.980	<b>-.061</b>
<i>5</i>	<b>.112</b>	.781	<b>.020</b>
<i>6</i>	.191	.721	<b>.052</b>
<i>7</i>	<b>-.052</b>	<b>.117</b>	.567
<i>8</i>	<b>.049</b>	<b>-.031</b>	.784
<i>9</i>	<b>.015</b>	<b>-.111</b>	.926

*Factor intercorrelations:*

<i>I</i>	1.000		
<i>II</i>	.633	1.000	
<i>III</i>	.465	.521	1.000

---

\*Loadings and factor correlations are identical for the two solutions.

*Note.* The method of extraction was maximum likelihood. Highlighted elements are in the interval [-.15, +.15]. Hyperfit required the "double iteration" for this problem.