

**Table 1: Analysis of the Predictive Validities of the CAS Based on Data of a Military Sample of German Air Force, 1996**

<b>Tests</b>	<b>Predictors</b>	<b>Sample Size</b>	<b>Criteria</b>	<b>Multiple R<sup>TC</sup></b>
<b>Test 1</b>	<b>Psychomotor Coordination: Compensatory Tracking</b>			
	• 3 Factors	56	Total Points : Practical Training	0.456
	• All Categories	56	Total Points : Practical Training	0.472
<b>Test 3.1</b>	<b>Information Processing: Accuracy</b>			
	• All Categories	56	Total Points : Practical Training	0.598
<b>Test 3.2</b>	<b>Information Processing: Complexity</b>			
	• All Categories	56	Total Points : Practical Training	0.658

**Table 2: Analysis of the Predictive Validities of the CAS Based on Data of a Military Sample of German Air Force, 1997**

Tests and Predictors	Nr. of Items	Sample Size	Criteria	Multiple RTC	Multiple RTC (optimized)
<b>CAS Overall Values for Test 1 and Test 3</b>		63	Total Points : Practical Training	0.937	0.924
		65	Points: Theory I	0.863	0.851
		65	Points: Theory II	0.876	0.854
Test 1: Psychomotor Capabilities: Compensatory Tracking	32	83	Total Points : Practical Training	0.517	0.506
		95	Theory I	0.539	0.518
		95	Theory II	0.521	0.511
Test 3: Itemblock 01: Information Processing/ Accuracy	16	82	Total Points : Practical Training	0.480	0.466
		90	Theory I	0.506	0.487
		90	Theory II	0.446	0.432
Test 3: Itemblock 03: Information Processing/ Complexity	24	81	Total Points : Practical Training	0.477	0.469
		88	Theory I	0.466	0.439
		88	Theory II	0.501	0.482
Test 3: Itemblock 05 Psychomotor Capabilities: Pursuit Tracking/ Deadtime	16	82	Total Points : Practical Training	0.492	0.471
		90	Theory I	0.556	0.537
		90	Theory II	0.517	0.494

**Table 3: Predictive Validities of the Overall Values for the Tests 1 to 4  
 Data of a Civil Sample (NLS, The Netherlands, 1999)**

Test	Sample Size	Criteria	Multiple R <sup>TC</sup>	Ex- plained Variance	Explained Variance Adjusted	p
Ov.all 1 to 4	136	Grades of PPL A1-licence	0.553	0.306	0.199	0.000
Ov.all 1 to 4	148	Overall mean of results of PPL examination	0.619	0.383	0.302	0.000
Ov.all 1 to 4	129	Grades of PPL A2-licence	0.660	0.435	0.343	0.000
Ov.all 1 to 4	130	Overall mean of gradings of all flight sessions after the 25 hours check till PPL A2-licence	0.681	0.464	0.329	0.000
Ov.all 1 to 4	91	Grades of VKA2-licence	0.475	0.475	0.294	0.001
Ov.all 1 to 4	91	Overall mean of gradings of all flight sessions after the 25 hours check till the CPL/IR (BR/IR-licence)	0.691	0.477	0.294	0.000
Ov.all 1 to 4	91	Grades of B3IR-licence	0.696	0.485	0.347	0.000
Ov.all 1 to 4	128	Overall results of grading on a fixed base simulator	0.713	0.509	0.370	0.000
Ov.all 1 to 4	138	Overall mean of gradings of all flight sessions till the 25 hours check	0.730	0.534	0.424	0.000
Ov.all 1 to 4	114	Overall results of 25 hours check	0.737	0.544	0.421	0.000
Ov.all 1 to 4	91	Overall mean of gradings of all flight sessions after the CPL/IR (BR/IR-licence) till VKA2-licence	0.758	0.574	0.482	0.000
Ov.all 1 to 4	139	Overall mean of results of ATPL examination	0.812	0.659	0.505	0.000