

Path analysis:

[https://en.wikipedia.org/wiki/Path_analysis_\(statistics\)](https://en.wikipedia.org/wiki/Path_analysis_(statistics))

Knihy

<https://www.amazon.com/Latent-Variable-Models-John-Loehlin/dp/113891607>

<https://books.google.cz/books?id=q9zhGIIYw7kC>

<https://onlinelibrary.wiley.com/doi/book/10.1002/9781118619179>

<https://www.enbook.cz/catalog/product/view/id/399613?gclid=EAIaIQobChMI9>

Plán práce:

korelace

jednoduchá regrese (2 proměnné)

vícenásobná regrese (3 proměnné)

parciální korelace

faktorová analýza (1 faktor)

faktorová analýza (2 a více faktorů)

v Excelu

v dalších softwarech

explorační vs. konfirmační FA

strukturní modelování

2

[}N2Mv4yR9gIVVOJ3Ch1PeA5KEAQYASABEgJojvD_BwE](#)

i	pohl (P)	vyska (V)	hmot (H)	mV - Vi	mH - Hi	zVi	zHi	zVi * zHi
1	0	172	87	-1.33333	11.66667	-0.11572	0.604136	-0.06991
2	1	169	61	-4.33333	-14.3333	-0.3761	-0.74222	0.279148
3	0	170	63	-3.33333	-12.3333	-0.2893	-0.63866	0.184767
4	1	166	85	-7.33333	9.66667	-0.63647	0.50057	-0.3186
5	0	183	77	9.66667	1.66667	0.838984	0.086305	0.072409
6	0	168	58	-5.33333	-17.3333	-0.46289	-0.89757	0.415475
7	1	170	65	-3.33333	-10.3333	-0.2893	-0.53509	0.154805
8	0	190	90	16.66667	14.66667	1.446524	0.759485	1.098613
9	1	165	63	-8.33333	-12.3333	-0.72326	-0.63866	0.461917
10	1	152	51	-21.3333	-24.3333	-1.85155	-1.26005	2.333055
11	0	187	82	13.66667	6.66667	1.186149	0.34522	0.409483
12	0	185	125	11.66667	49.66667	1.012567	2.571892	2.604212
13	0	193	97	19.66667	21.66667	1.706898	1.121966	1.915082
14	0	163	61	-10.3333	-14.3333	-0.89684	-0.74222	0.66566
15	1	150	44	-23.3333	-31.3333	-2.02513	-1.62254	3.285852
16	1	173	68	-0.33333	-7.33333	-0.02893	-0.37974	0.010986
17	1	165	58	-8.33333	-17.3333	-0.72326	-0.89757	0.64918
18	1	171	65	-2.33333	-10.3333	-0.20251	-0.53509	0.108363
19	0	185	90	11.66667	14.66667	1.012567	0.759485	0.769029
20	0	172	72	-1.33333	-3.33333	-0.11572	-0.17261	0.019975
21	1	168	63	-5.33333	-12.3333	-0.46289	-0.63866	0.295627
22	0	194	113	20.66667	37.66667	1.793689	1.950496	3.498583
23	1	174	83	0.666667	7.666667	0.057861	0.397004	0.022971
24	0	175	87	1.666667	11.66667	0.144652	0.604136	0.08739

m 173.3333 75.33333 -9.5E-15 4.74E-15
sd 11.52188 19.31133

průměr 173.3333 75.33333
smoch 11.52188 19.31133

rVH

rVH

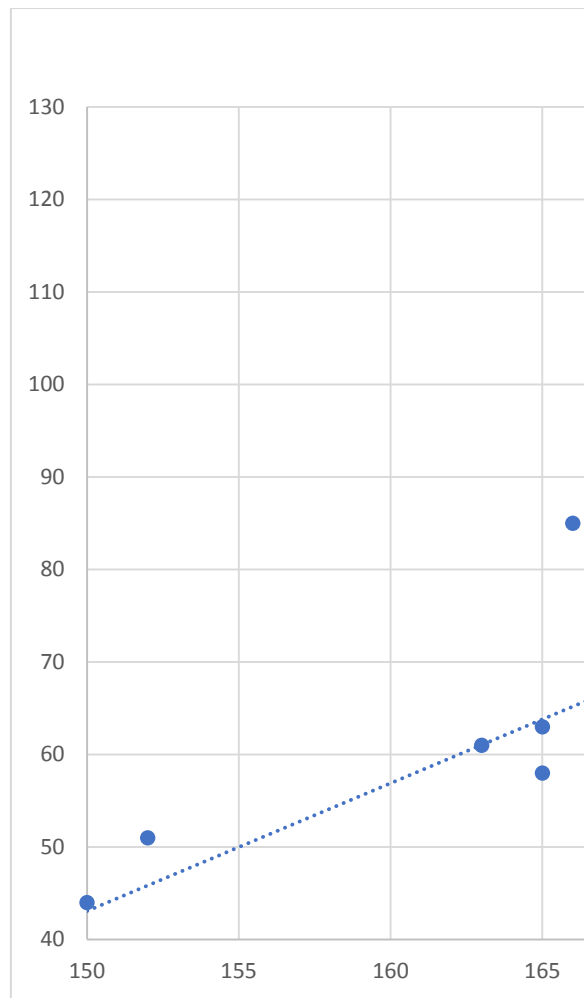
rPV

rPH

statistická \

$$t = \frac{r\sqrt{n}}{\sqrt{1-r^2}}$$

H.stř	e
73.49170306	13.50829694
69.34803493	-8.348034934
70.72925764	-7.729257642
65.20436681	19.79563319
88.68515284	-11.68515284
67.96681223	-9.966812227
70.72925764	-5.729257642
98.35371179	-8.35371179
63.8231441	-0.823144105
45.86724891	5.132751092
94.21004367	-12.21004367
91.44759825	33.55240175
102.4973799	-5.497379913
61.06069869	-0.06069869
43.10480349	0.895196507
74.87292576	-6.872925764
63.8231441	-5.823144105
72.11048035	-7.110480349
91.44759825	-1.447598253
73.49170306	-1.491703057
67.96681223	-4.966812227
103.8786026	9.12139738
76.25414847	6.745851528
77.63537118	9.364628821

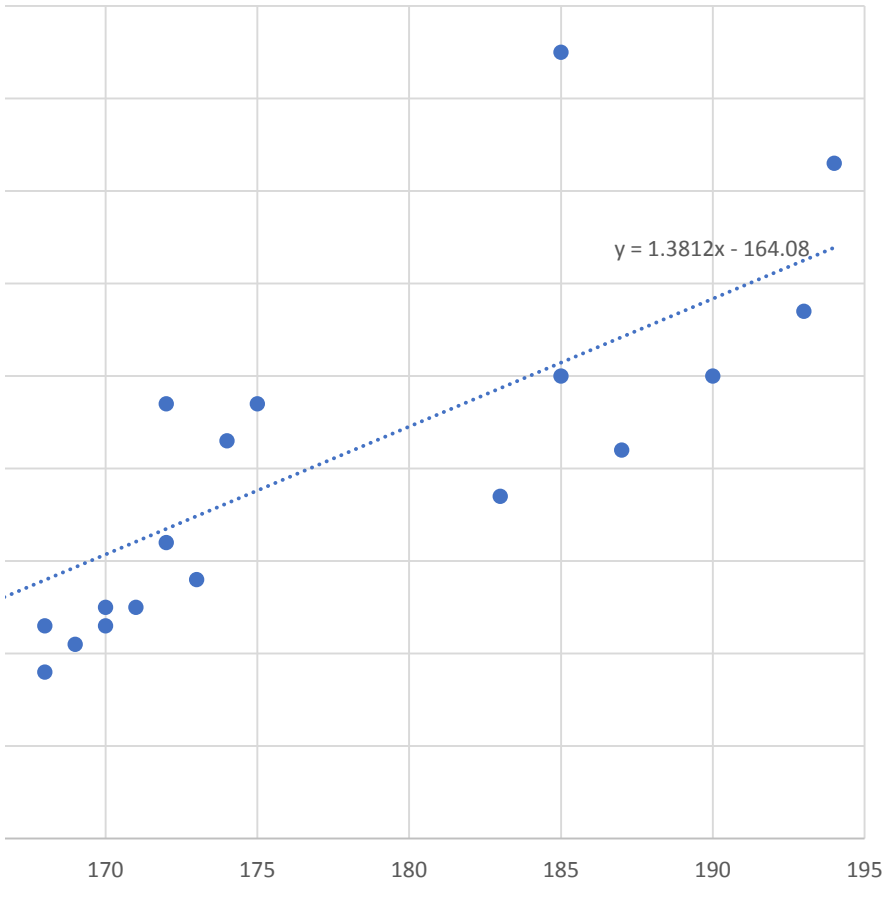


koeficient determinace		Matematický model	
0.824090059		H.stříška.i = a + b * V.i	
0.824090059	0.679124425	a	-164.079
-0.62030168	0.384774178	b	1.381223
-0.54261029	0.294425922		

významnost korelace

$\bar{-2}$	t	6.823665
$\bar{-r^2}$	df	22
	p	8.3E-07

hmot (H)



i	pohl (P)	vyska (V)	hmot (H)	mV - Vi	mH - Hi	zVi	zHi	zVi * zHi
1	0	172	87	-1.33333	11.66667	-0.11572	0.604136	-0.06991
2	1	169	61	-4.33333	-14.3333	-0.3761	-0.74222	0.279148
3	0	170	63	-3.33333	-12.3333	-0.2893	-0.63866	0.184767
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6	0	168	58	-5.33333	-17.3333	-0.46289	-0.89757	0.415475
7	1	170	65	-3.33333	-10.3333	-0.2893	-0.53509	0.154805
8	0	190	90	16.6667	14.6667	1.446524	0.759485	1.098613
9	1	165	63	-8.33333	-12.3333	-0.72326	-0.63866	0.461917
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11	0	187	82	13.6667	6.66667	1.186149	0.34522	0.409483
12	0	185	125	11.6667	49.6667	1.012567	2.571892	2.604212
13	0	193	97	19.6667	21.6667	1.706898	1.121966	1.915082
14	0	163	61	-10.3333	-14.3333	-0.89684	-0.74222	0.66566
15	1	150	44	-23.3333	-31.3333	-2.02513	-1.62254	3.285852
16	1	173	68	-0.33333	-7.33333	-0.02893	-0.37974	0.010986
17	1	165	58	-8.33333	-17.3333	-0.72326	-0.89757	0.64918
18	1	171	65	-2.33333	-10.3333	-0.20251	-0.53509	0.108363
19	0	185	90	11.6667	14.6667	1.012567	0.759485	0.769029
20	0	172	72	-1.33333	-3.33333	-0.11572	-0.17261	0.019975
21	1	168	63	-5.33333	-12.3333	-0.46289	-0.63866	0.295627
22	0	194	113	20.6667	37.6667	1.793689	1.950496	3.498583
23	1	174	83	0.66667	7.66667	0.057861	0.397004	0.022971
24	0	175	87	1.66667	11.6667	0.144652	0.604136	0.08739

m 173.3333 75.33333 -9.5E-15 4.74E-15
sd 11.52188 19.31133

průměr 173.3333 75.33333
smoch 11.52188 19.31133

rVH

rVH

rPV

rPH

statistická v

$$t = \frac{r\sqrt{n}}{\sqrt{1-r^2}}$$

H.stř	e			
73.6	13.4			
64.7	-3.7			
71	-8	a	-150	
60.8	24.2	b1	1.3	
87.9	-10.9	b2	-5	
68.4	-10.4			
66	-1			
97	-7	Kritéria		
59.5	3.5			
42.6	8.4	R	0.822961	R ²
93.1	-11.1			
90.5	34.5	SS	2908.4	
100.9	-3.9			
61.9	-0.9			
40	4			
69.9	-1.9			
59.5	-1.5			
67.3	-2.3			
90.5	-0.5			
73.6	-1.6			
63.4	-0.4			
102.2	10.8			
71.2	11.8			
77.5	9.5			

koeficient determinace Matematický model
0.824090059 H.stříška.i = a + b1 * V.i + b2 * P.i

0.824090059 0.679124425
-0.62030168 0.384774178
-0.54261029 0.294425922

významnost korelace

$\frac{-2}{-r^2}$	t	6.823665
	df	22
	p	8.3E-07

0.677265