

A17

Sunday, 10. November 2019 13:48

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How many regular and how many partial correlation coefficients are there with 4 attributes?

How many are there with 5 attributes?

Note: not every attribute has to be used as a control attribute or control variable!

vwxyz without putting back, ignore order

$$\begin{pmatrix} \begin{matrix} 1 & 2 & 3 & 4 \\ 1 & 2 & 3 & 4 \\ 1 & 2 & 3 & 4 \\ 1 & 2 & 3 & 4 \end{matrix} \end{pmatrix} \left| \begin{matrix} \text{regular } (n^2) \\ \binom{4}{2} \cdot (2^2 - 1) = 18 \text{ partial} \end{matrix} \right.$$

$$\begin{pmatrix} 4 \\ 3 \end{pmatrix} \cdot 2 = n! / 2$$

5 var 10 regular

swap every var on & off

removing if 1 & 4

$$\begin{pmatrix} n \\ 2 \end{pmatrix} (2^{n-2} - 1) = 10 \cdot 7 = 70 \text{ partial}$$

remove 0

vwxy

vw.x, vw.y, vw.xy

wx.v, wx.y, wx.vy

xy.v, xy.w, xy.xw

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