

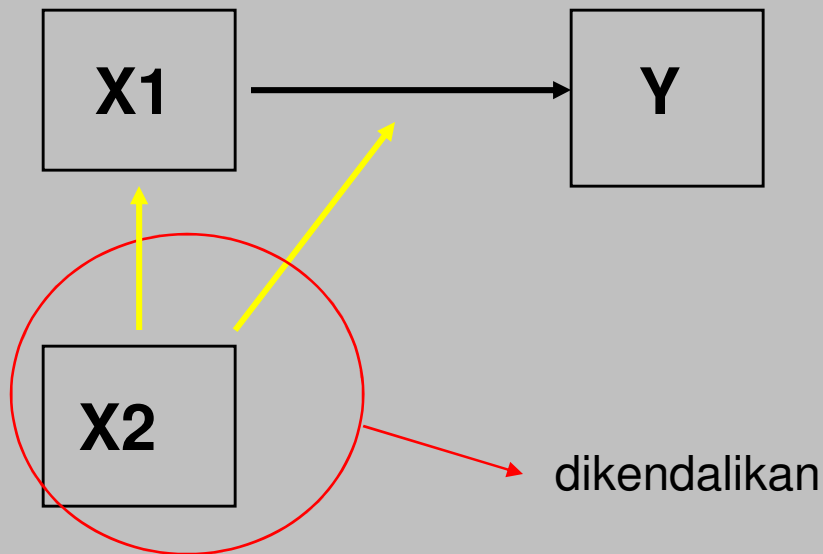


ANALISIS KORELASI PARSIAL

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Konsep

- Hubungan murni antara 2 variabel, yang mengendalikan variabel yang lain
- 1 variabel terikat dgn 1 variabel bebas, dikendalikan 1 atau lebih variabel bebas (karena diduga mempengaruhi hubungan kedua variabel tersebut)





Rumus

- 1 variabel terikat (Y)
- 2 variabel bebas (X_1 dan X_2)

$$r_{x_1.y-x_2} = \frac{r_{x_1.y} - (r_{x_2.y}) \cdot (r_{x_1.x_2})}{\sqrt{[1 - (r_{x_2.y})^2] [1 - (r_{x_1.x_2})^2]}}$$

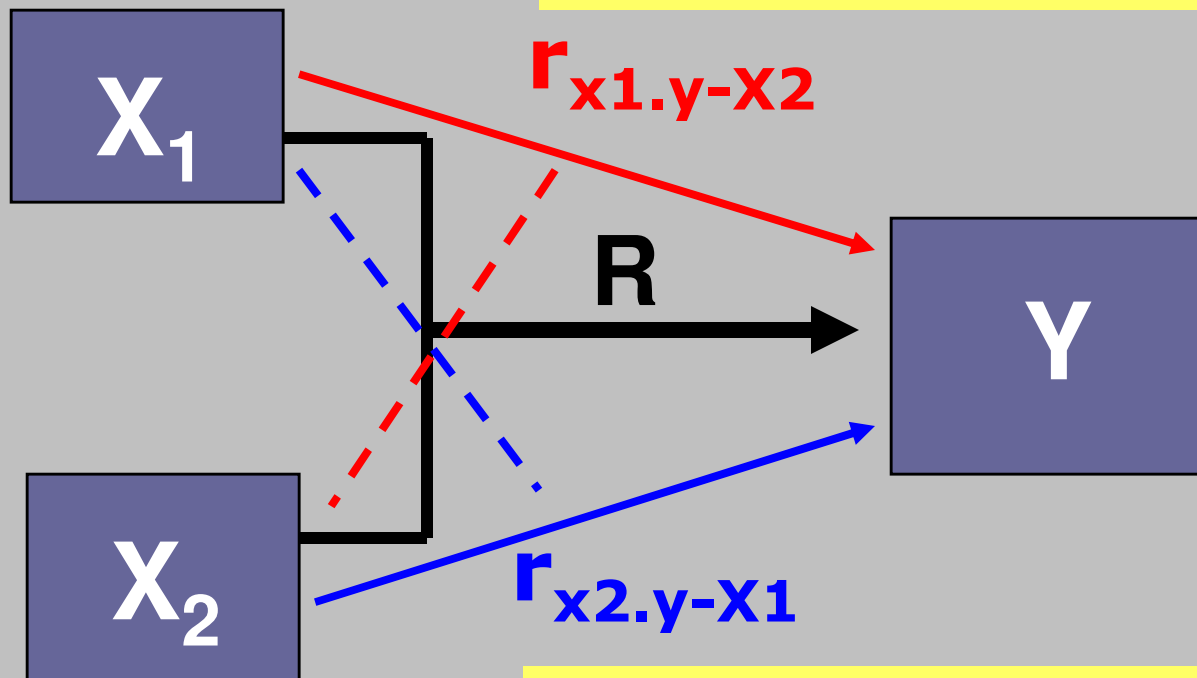
$r_{x_1.y}$ = koefisien korelasi X_1 dgn Y
 $r_{x_2.y}$ = koefisien korelasi X_2 dgn Y
 $r_{x_1.x_2}$ = koefisien korelasi X_1 dgn X_2

$$r_{x_2.y-x_1} = \frac{r_{x_2.y} - (r_{x_1.y}) \cdot (r_{x_1.x_2})}{\sqrt{[1 - (r_{x_1.y})^2] [1 - (r_{x_1.x_2})^2]}}$$

$r_{x_1.y-x_2}$ = koefisien korelasi parsial X_1 dgn Y, mengendalikan X_2
 $r_{x_2.y-x_1}$ = koefisien korelasi parsial X_2 dgn Y, mengendalikan X_1

Konsep hubungan

$$r_{x1.y-X2} \neq r_{x1.y} - r_{x1.x2}$$



$$r_{x2.y-X1} \neq r_{x2.y} - r_{x1.x2}$$



Contoh

Bagaimana hubungan murni antara X1 dan X2 terhadap Y

Subyek	X1	X2	Y
1	10	7	23
2	2	3	7
3	4	3	15
4	6	4	17
5	8	6	23
6	7	5	22
7	4	2	10
8	6	2	14
9	6	4	20
10	7	3	19



Jawab

- o Diperoleh

$$r_{x_1x_2} = 0,7682 \quad r_{x_2y} = 0,7898 \quad r_{x_1y} = 0,9029$$

- o Perhitungan

$$r_{x_1.y-x_2} = \frac{r_{x_1.y} - (r_{x_2.y}) \cdot (r_{x_1.x_2})}{\sqrt{[1 - (r_{x_2.y})^2][1 - (r_{x_1.x_2})^2]}}$$

$$r_{x_1.y-x_2} = \frac{0,9029 - (0,7898) \cdot (0,7682)}{\sqrt{[1 - (0,7898)^2][1 - (0,7682)^2]}}$$

$$r_{x_1.y-x_2} = \frac{0,9029 - 0,6067}{\sqrt{[1 - 0,6238][1 - 0,5901]}}$$

$$r_{x_1.y-x_2} = \frac{0,2962}{\sqrt{[0,3762][0,4099]}}$$

$$r_{x_1.y-x_2} = \frac{0,2962}{\sqrt{0,1542}} = \frac{0,2962}{0,3927} = 0,7543$$

$$r_{x_2.y-x_1} = \frac{r_{x_2.y} - (r_{x_1.y}) \cdot (r_{x_1.x_2})}{\sqrt{[1 - (r_{x_1.y})^2][1 - (r_{x_1.x_2})^2]}}$$

$$r_{x_2.y-x_1} = \frac{0,7898 - (0,9029) \cdot (0,7682)}{\sqrt{[1 - (0,9029)^2][1 - (0,7682)^2]}}$$

$$r_{x_2.y-x_1} = \frac{0,7898 - 0,6936}{\sqrt{[1 - 0,8152][1 - 0,5901]}}$$

$$r_{x_2.y-x_1} = \frac{0,0962}{\sqrt{[0,1848][0,4099]}}$$

$$r_{x_2.y-x_1} = \frac{0,0962}{\sqrt{0,0757}} = \frac{0,0962}{0,2752} = 0,3495$$