UDS

Mi Universidad

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Nombre de la materia: estadística inferencial
Nombre de la licenciatura :nutrición.
4 cuatrimestre
UNIDAD: 3

Persona	(consumo de proteina) (g)	(masa muscular) (kg)
1	80	60
2	100	65
3	90	62
4	85	61
5	110	67
6	95	63

$$= \frac{\sum (x_1 - \bar{x})(y_1 - \bar{y})}{\sqrt{\sum (x_1 - \bar{x})^2 \sum (y_1 - \bar{y})^2}}$$

$\bar{x} = 80 + 100 + 90 + 85 + 110 + 95 = 93.33$

$\bar{y} = 60 + 65 + 62 + 61 + 67 + 63 = 63$

x_1	y	$x_1 - \bar{x}$	$y_1 - \bar{y}$	$(x_1 - \bar{x})(y_1 - \bar{y})$	$(x_1 - \bar{x})^2$	$(y_1 - \bar{y})^2$
80	60	-13.33	-3	39.99	177.68	9
100	65	6.07	2	13.34	44.48	1
90	62	3.33	-1	-3.33	11.08	1
85	61	-8.33	-2	16.66	69.38	4
110	67	16.07	4	66.08	277.88	16
95	63	1.07	0	0	2.78	0
				$\sum 140$	$\sum 585.28$	$\sum 34$

$\dfrac{583.28 \times 34}{19,831.52}$

$\sqrt{19.831.52}$
$\downarrow$
140.82

$\dfrac{140.82}{140.82}$

140.82

0.994176933

99.41769633 Norte

$y = B_0 + B_1 x$

$B_1 = \dfrac{\sum (x_1 - \bar{x})(y_1 - \bar{y})}{\sum (x_1 - \bar{x})^2}$

$B_0 = \bar{y} - B\bar{x}$

$B_1 \quad 140 + 583 = 0.24$

$40.01 + 0.24 (80) = 59.01$

$40.01 + 0.24 (100) = 64.01$

$B_0 = 63 - 0.24 (93.33)$

$B_0 = 63 - 22.39$

$B_0 = 40.01$

$Y = 40.01 + 0.24$

Persona	(Consumo de agua)(L)	(Perdida de Peso)(kg)
1	2.0	0.5
2	2.5	0.7
3	1.8	0.4
4	3.0	0.9
5	2.2	0.6
6	2.7	0.8

x_i	y_i	$(x_i - \bar{x})$	$(y_i - \bar{y})$	$(x_i - \bar{x})^2$	$(y_i - \bar{y})^2$	Suma de los dos x
2.0	0.5	-0.367	-0.15	0.35	0.0225	0.006
2.5	0.7	0.133	0.05	0.0177	0.0025	0.066
1.8	0.4	-0.567	-0.25	0.3214	0.0625	0.1134
3.0	0.9	0.633	0.25	0.4006	0.0625	0.158
2.2	0.6	-0.167	-0.05	0.0278	0.0025	0.0084
2.7	0.8	0.333	0.15	0.1109	0.0225	0.10109
		-0.0017	0	1.013389	0.1775	0.4025

$$\bar{x} - \bar{y} = x_i - y_i$$

$$\Sigma(x_i - \bar{x})(y_i - \bar{y}) = \frac{\Sigma x_i}{N} - \frac{\Sigma y_i}{N}$$

$$r = \frac{0.4025}{\sqrt{(1.03389)(0.1775)}} = \frac{0.4025}{\sqrt{0.18352}}$$

• Hipotesis nula es rechazada

$$r = \frac{0.4025}{0.4283} = 0.939$$

• positiva ya que es $r = 0.9$

Genero	vegetales	proteinas	carbohidratos
masculino	18	10	40
Femenino	12	13	40
Total	30	23	80

$FA = \dfrac{40(27)}{80} = \dfrac{1080}{80} = 13.5$

$FA = \dfrac{40(30)}{80} = \dfrac{1200}{80} = 15$

$FA = \dfrac{40(23)}{80} = \dfrac{920}{80} = 11.5$

$(0 - 21) = (12 - 13.3) = (-1.3)^2 = 1.69/13.3 = 0.12706 7$

$(18 - 15) = (3)^2 = 9/15 = 06/15 = 0.04$

$(10 - 11.5)(=1.5)^2 = 2.25/11.5 = 0.19565$

$(15 - 13.3) - 1.7)^2 = 289/13.3 = 0.217293$

$(12 - 15) = (3)^2 = 9/15 = 0.6/15 = 0.04$

$(13 - 11.5)^2 = (1.5)^2 = 2.25/11.5 = 0.19565$

$\qquad v^2 = 1.9289 //$

4

Actividad Físico	Baja Frecuencia	Media Frecuencia	Alta Frecuencia	Total
Sedentario	20	15	5	40
moderado	15	25	15	50
activo	5	20	25	50
	36	60	45	140

Total

10	17.14	12.857	39.997
12.5	21.42	16.07	49.99
12.5	21.42	16.07	49.99
35	59.98	44.997	139.977

$$K = (3-1)(3-1) = 4 \times 7.2\%$$

$$Fe = \frac{40(35)}{140} = 10 \qquad F = \frac{50(35)}{140} = 12.5$$

$$Fe = \frac{40(60)}{140} = 17.14 \qquad F = \frac{50(60)}{140} = 21.42$$

$$Fe = \frac{40(45)}{140} = 12.857 \qquad F = \frac{50(45)}{140} = 16.07$$

$$X^2 = \frac{(20-10)^2}{10} + \frac{(15.17)^2}{4} + \frac{(5-12.857)^2}{12.857} +$$

$$\frac{(10-12.5)}{12.5} + \frac{(25-21.42)^2}{21.42} + \frac{(15-16.07)^2}{16.07} +$$

$$\frac{(5-12.5)^2}{12.5} + \frac{(20-21.42)^2}{21.42} + \frac{(25-16.07)^2}{16.07}$$

$$X = 10 + 0.267 + 4.80 + 0.5 + 0.598 + 0.07$$
$$4.5 + 0.09 + 4.9 = 25.725.$$