

Berkeley Data: M:F Comparative parameters Odds Ratio (OR), Risk Ratio (RR) and Risk Difference (RΔ)

		E	\bar{E}	(Using KKM table 17.16 notation)													
D		a	b		m_1												
\bar{D}		c	d		m_0												
		n_1	n_0		n	for RΔ			for OR			for RR			for RΔ		
Faculty		a/ n_1	b/ n_0		R	$\frac{a \cdot d}{b \cdot c}$	$\frac{a \cdot d}{n}$	$\frac{b \cdot c}{n}$	$\frac{a \cdot n_0}{b \cdot n_1}$	$\frac{a \cdot n_0}{n}$	$\frac{b \cdot n_1}{n}$	var(R)*	w = 1/var	w•R			
A	Admitted? Y	512	89		601	0.62	0.82	-0.20	0.35	10.4	29.9	0.75	59.3	78.7	1.63E-3	614	-125
	N	313	19		332												
	All	825	108		933												
B	Y	353	17		370	0.63	0.68	-0.05	0.80	4.8	6.0	0.93	15.1	16.3	9.12E-3	110	-5
	N	207	8		215												
	All	560	25		585												
C	Y	120	202		322	0.37	0.34	+0.03	1.13	51.1	45.1	1.08	77.5	71.5	1.10E-3	913	26
	N	205	391		596												
	All	325	593		918												
D	Y	138	131		269	0.33	0.35	-0.02	0.92	42.5	46.1	0.95	65.3	69.0	1.14E-3	879	-16
	N	279	244		523												
	All	417	375		792												
E	Y	53	94		147	0.28	0.24	+0.04	1.22	27.1	22.2	1.16	35.7	30.7	1.51E-3	661	25
	N	138	299		437												
	All	191	393		584												
F	Y	22	24		101	0.06	0.07	-0.01	0.83	9.8	11.8	0.84	10.5	12.5	3.41E-4	2935	-33
	N	351	317		668												
	All	373	341		769												
All	Y	1198	557		1755	0.44	0.30	+0.14	1.84			1.47					
	N	1493	1278		2771												
	All	373	341		4526												
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						: 145.8 161.1			263.4 278.7			6113			-129		
						OR _{MH} = $\frac{145.8}{161.1} = \mathbf{0.91}$			RR _{MH} = $\frac{263.4}{278.7} = \mathbf{0.94}$			R _w = $\frac{w \cdot R}{w} = \frac{-129}{6113} = \mathbf{-0.02}$					

* var(R) = Sum of 2 binomial variances

