An Experimental Investigation of the Effect of Age and Sex/Gender on Pain Sensitivity in Healthy Human Participants
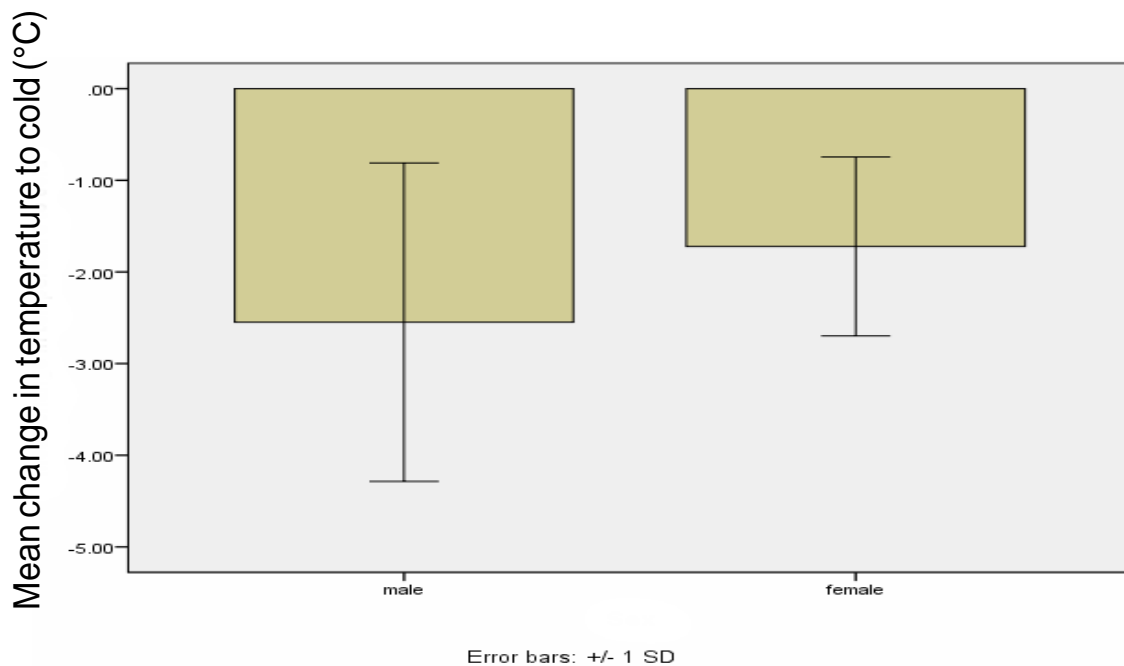
Hanan El-Tumi[1,2], Mark I. Johnson[1] and Osama A. Tashani [1,2,*]

[1]*Centre for Pain Research, School of Clinical and Applied Sciences, Leeds Beckett University, City Campus, Leeds LS1 3HE, United Kingdom*
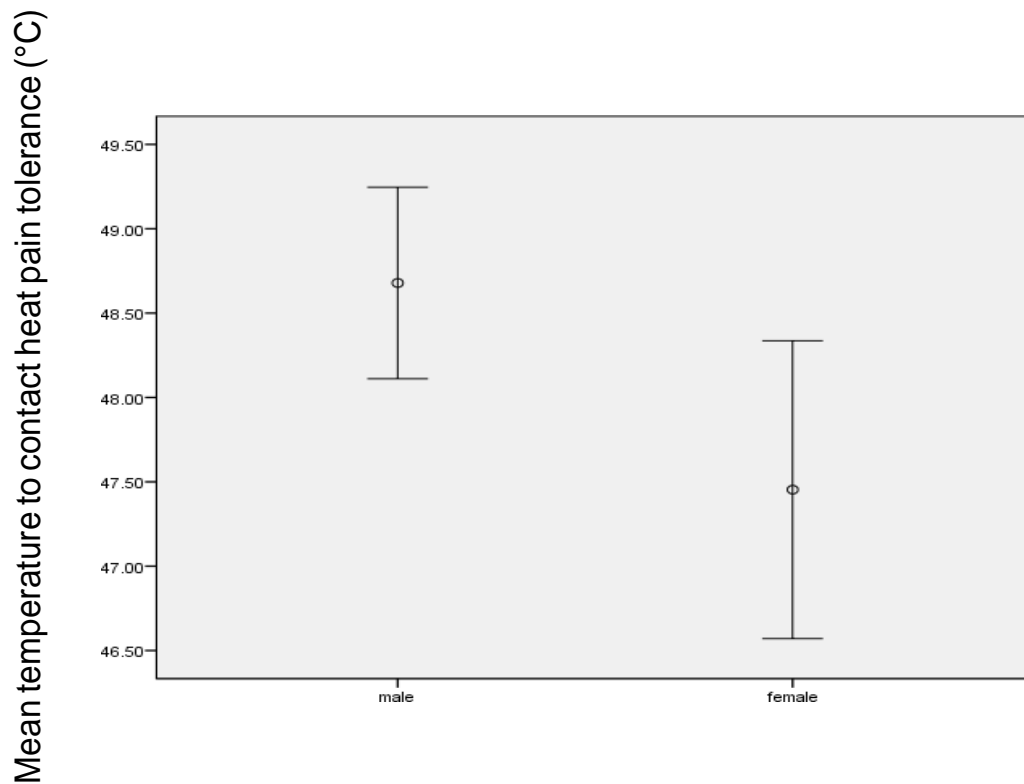[2]*Department of Physiology, University of Benghazi, Benghazi, Libya*
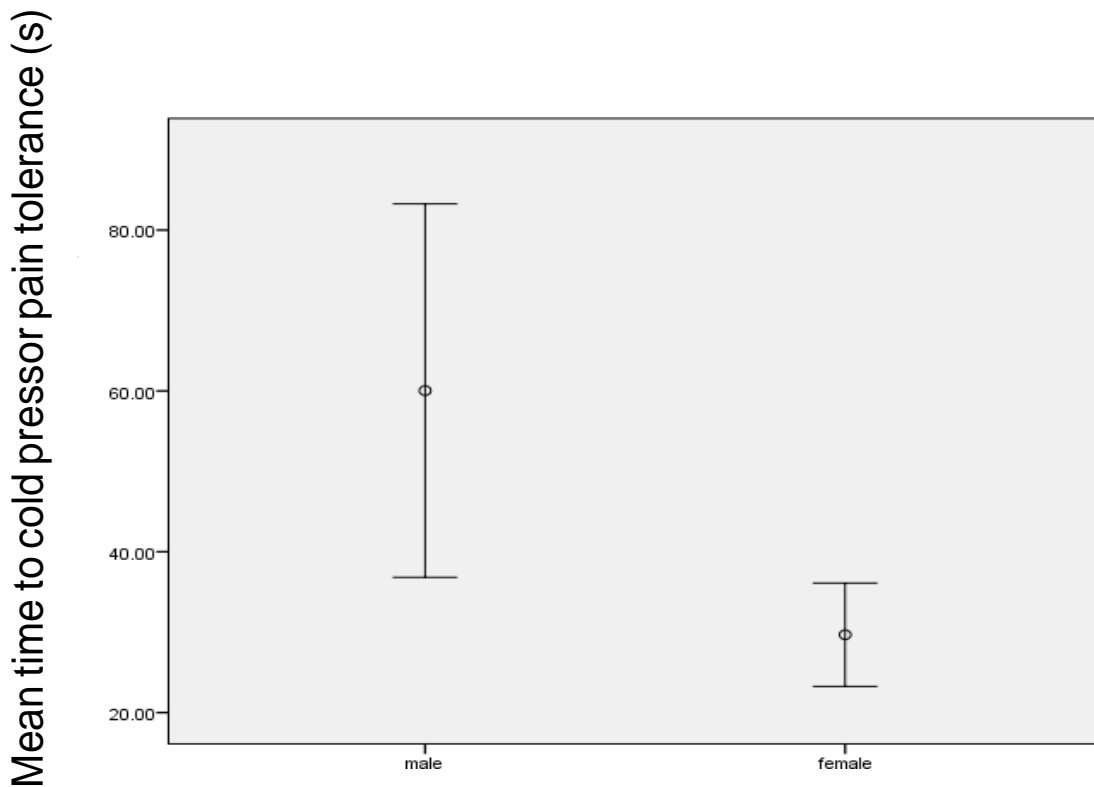
SUPPLEMENTARY TABLES AND FIGURES

Supplemental Figure 1. Mean and standard deviation of cold detection threshold of men and women.
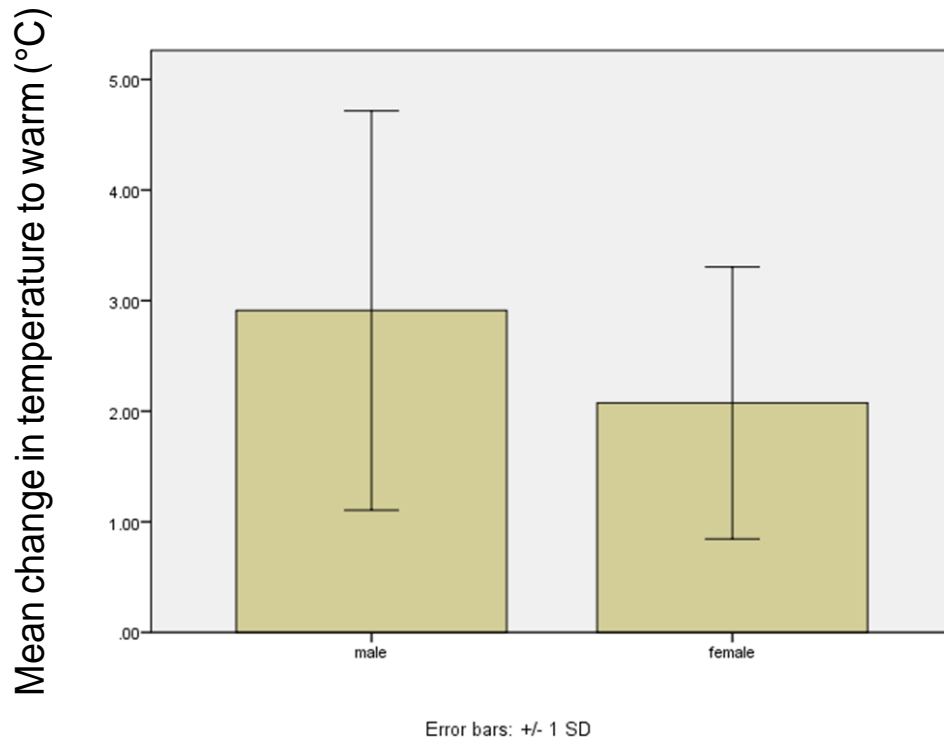
Supplemental Figure 2. Mean and standard deviation of warm detection threshold of men and women.

Supplemental Figure 3. Mean and 95% confidence intervals for contact heat pain tolerance of men and women.

Supplemental Figure 4. Mean and 95% confidence intervals for cold pressor pain tolerance for men and women

Supplemental Table 1.

	All (n=56)	Men (n=28)	Women (n=28)	t	*P* value
Age (years)	37.3±10.5	37.4±10.5	37.1±10.6	0.1	0.90
Weight (kg)	75.3±16.5	82.5±15.6	68.1±14.2	3.6	0.001*
Height (cm)	168.7±9.8	175.8±7.7	161.7±5.9	7.7	0.00*
BMI(kg/m²)	26.4±4.8	26.7±4.6	26.03±5	0.5	0.61

Mean ± standard deviation characteristics of study participants.

BMI = body mass index. *P* value calculated using independent t-test men vs women, *statistically significant at *P* < 0.05

Supplemental Table 2.

	Age Group (years, n = 8 in each group)							F	*P* value
	20<25	**25<30**	**30<35**	**35<40**	**40<45**	**45<50**	**50<55**		
Age (years)	21.4±1.4	27.5±0.5	32.5±1.2	36.9±0.99	42.4±1.4	47.5±1.3	52.8±1.8	575.8	0.00*
Weight (kg)	65.6±15.6	67.4±15.3	76.8±16.4	78±18.4	79±4.5	79±22.5	81.5±16.1	1.161	0.34
Height (cm)	172. 4± 10.7	167.2±9.9	170.3±12.3	166.4±11.7	169.3±6.3	167.3± 11.7	168.2±7.2	0.338	0.91
BMI (kg/m²)	21.85±3.0	23.95±4	26.5±5.2	28±5.3	27.7±2.6	27.8±4.8	28.7±4.7	2.648	0.03*

Mean ± standard deviation of characteristics of groups classified according to their age.

BMI = body mass index. *P* values were calculated using one-way

ANOVA across groups, *statistically significant at *P* < 0.05