

Ambiente e salute globale: medicina di genere

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Obiettivi

Formazione (corsi nelle sedi ordinistiche)

Informazione

Creazione di una Rete Nazionale

Cooperazione con Istituzioni politiche

Stimolo alla ricerca

PAN AMERICAN HEALTH ORGANIZATION

Gender and natural disasters

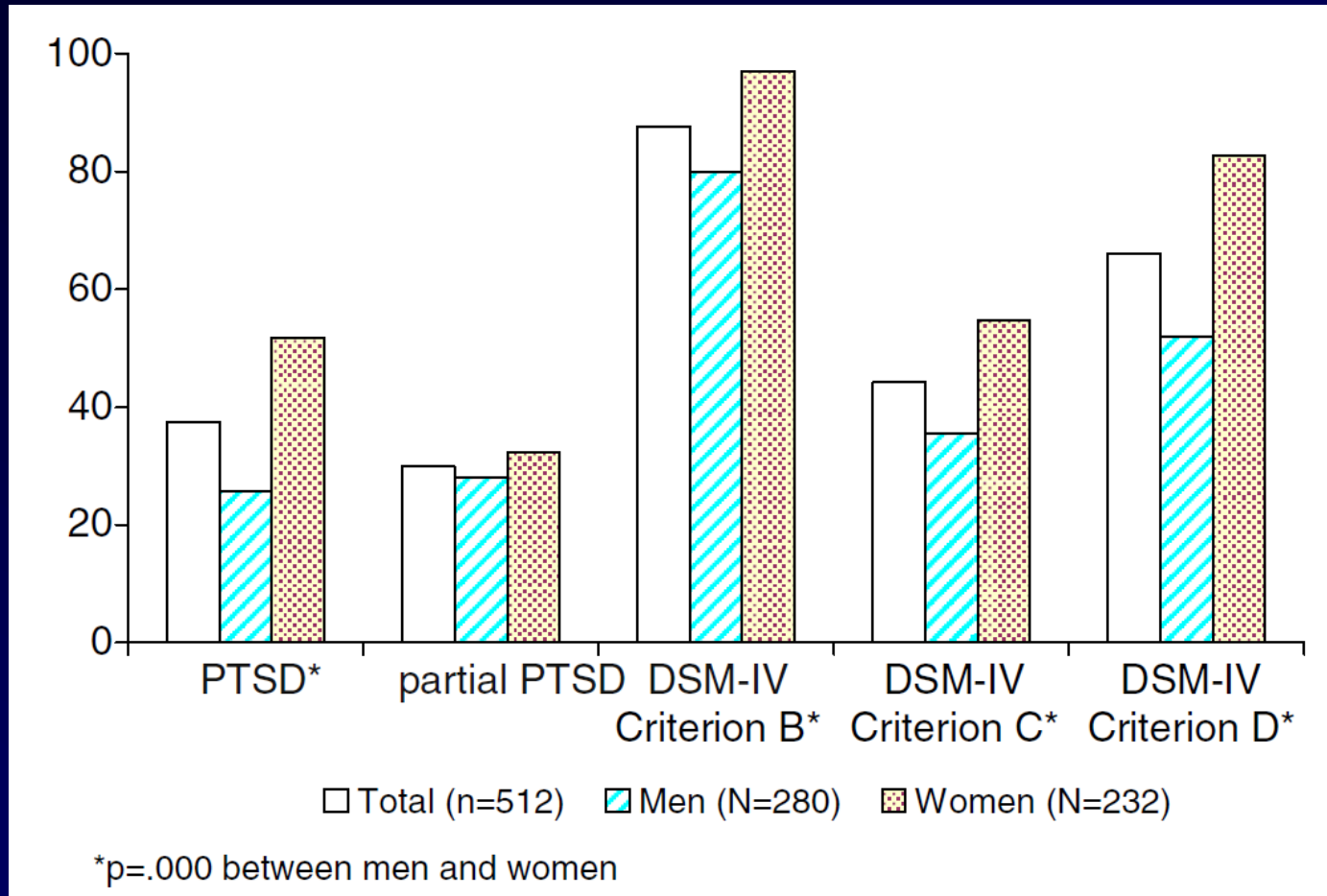
- Human beings have been at the mercy of natural disasters since the beginning of time.
- Floods, fires, earthquakes and tremors, mudslides, volcanic eruptions, hurricanes, tornadoes, tsunami, tropical storms, ice storms, landslides, droughts and famine consistently remind us of how vulnerable we are.
- The recent increase in attention to the effects of natural disasters has resulted in a plethora of different perspectives on the issue.
- In particular, several authors have brought a gender focus to the analysis of disaster mitigation and response, with some very interesting results.
- The image of the suffering woman and child during a disaster is a popular one in the media.
- Women are disproportionately affected by natural disasters, usually as a result of their gendered status in society.
- What the media does not show, however is that women are a vital part of disaster mitigation and response efforts, whether acting within their traditional gender roles, or transcending them.

- **Il 6 aprile 2009 la città de L'Aquila è stata colpita da un terremoto che ha distrutto larga parte della città, causato il ferimento di 1600 persone e la morte di 309**



Full and partial PTSD among young adult survivors 10 months after the L'Aquila 2009 earthquake: Gender differences

PTSD full blown and partial in the total sample (N=512) and divided by gender



PTSD, Post-Traumatic Stress Disorder; DSM-IV, Diagnostic and Statistical Manual of mental disorders IV edition (1994)

Dell'Oso L et al., J Affect Disord, 2011

Full and partial PTSD among young adult survivors 10 months after the L'Aquila 2009 earthquake: Gender differences

IES and TALS-SR domains scores (mean \pm SD) in the sample and by gender

IES		Men (N = 280), mean \pm SD	Women (N = 232), mean \pm SD	p
IES	“Intrusion” Domain	6.42 \pm 6.86	13.70 \pm 9.68	0.000
	“Arousal” Domain	13.82 \pm 5.15	16.48 \pm 5.5	0.000
	Total	14.85 \pm 13.75	26.48 \pm 16.69	0.000
TALS-SR	Domain IV “Reaction to losses or upsetting events”	6.29 \pm 2.95	9.04 \pm 2.93	0.000
	Domain V “Re-experiencing”	2.80 \pm 1.99	4.72 \pm 2.07	0.000
	Domain VI “Avoidance and numbing”	3.22 \pm 2.35	4.99 \pm 2.71	0.000
	Domain VIII “Arousal”	1.65 \pm 1.34	3.09 \pm 1.49	0.000

PTSD, Post-Traumatic Stress Disorder; IES, Impact of Event Scale; TALS-SR, Trauma and Loss Spectrum-Self Report

Full and partial PTSD among young adult survivors 10 months after the L'Aquila 2009 earthquake: Gender differences

TALS-SR Domains VII (Maladaptive coping): gender differences in items response

	Men (N = 274) N (%)	Women (N = 230) N (%)	p
97. ...stop taking care of yourself, for example, not getting enough rest or not eating right?	42 (15.3)	75 (32.6)	.000
98. ...stop taking prescribed medications or fail to follow-up with medical recommendations, such as appointments, diagnostic tests, or a diet?	23 (8.5)	12 (5.2)	NS
99. ...use alcohol or drugs or over-the-counter medications to calm yourself or to relieve emotional or physical pain?	62 (22.7)	27 (11.7)	.002
100. ...engage in risk-taking behaviors, such as driving fast, promiscuous sex, hanging out in dangerous neighborhoods?	62 (22.7)	17 (7.4)	.000
101. ...wish you hadn't survived?	30 (11)	30 (13)	NS
102. ...think about ending your life?	22 (8.1)	15 (6.6)	NS
103. ...intentionally scratch, cut, burn or hurt yourself?	27 (9.9)	12 (5.2)	NS
104. ...attempt suicide?	24 (8.8)	5 (2.2)	.003

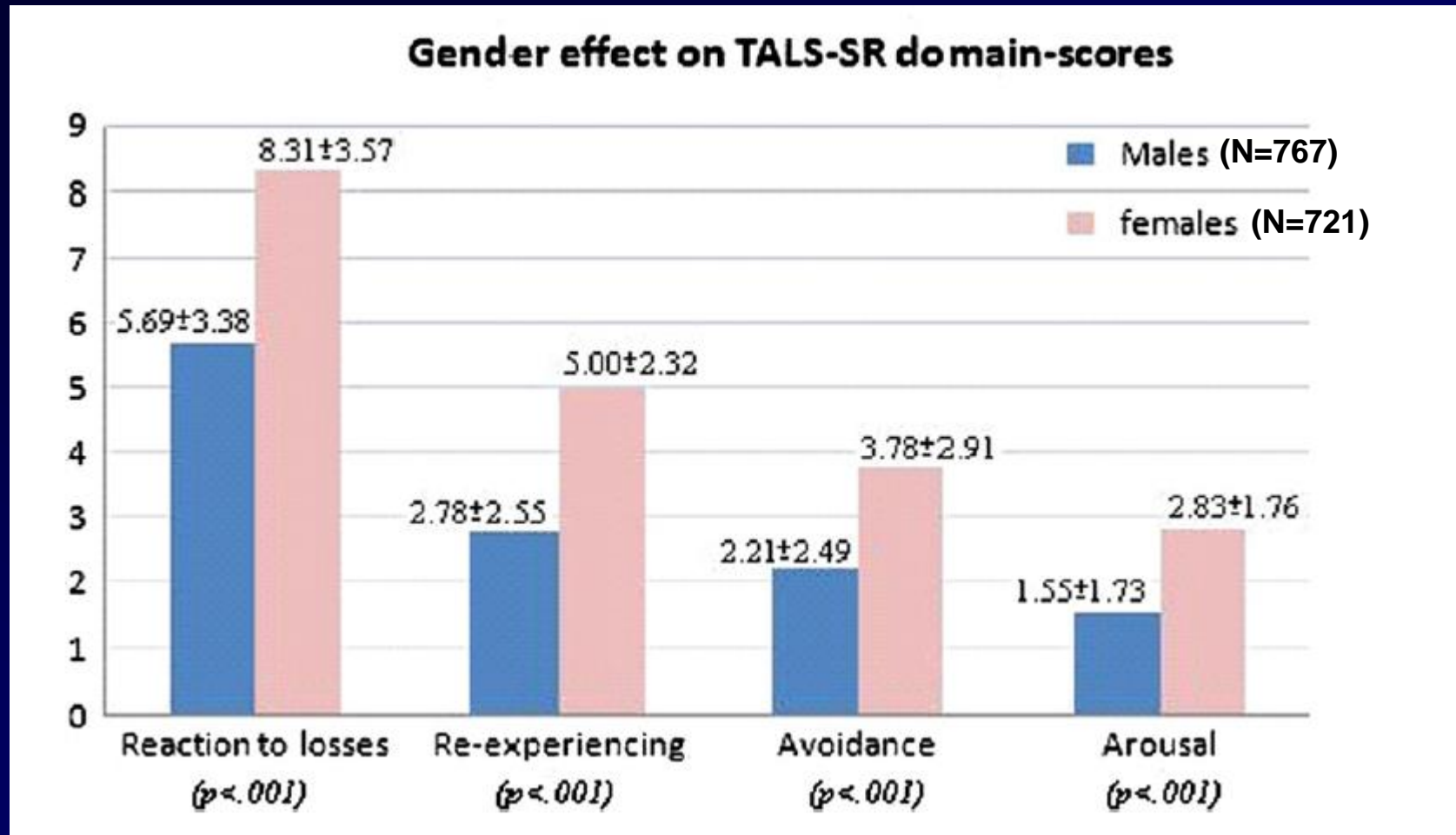
PTSD, Post-Traumatic Stress Disorder; TALS-SR, Trauma and Loss Spectrum-Self Report

Full and partial PTSD among young adult survivors 10 months after the L'Aquila 2009 earthquake: Gender differences

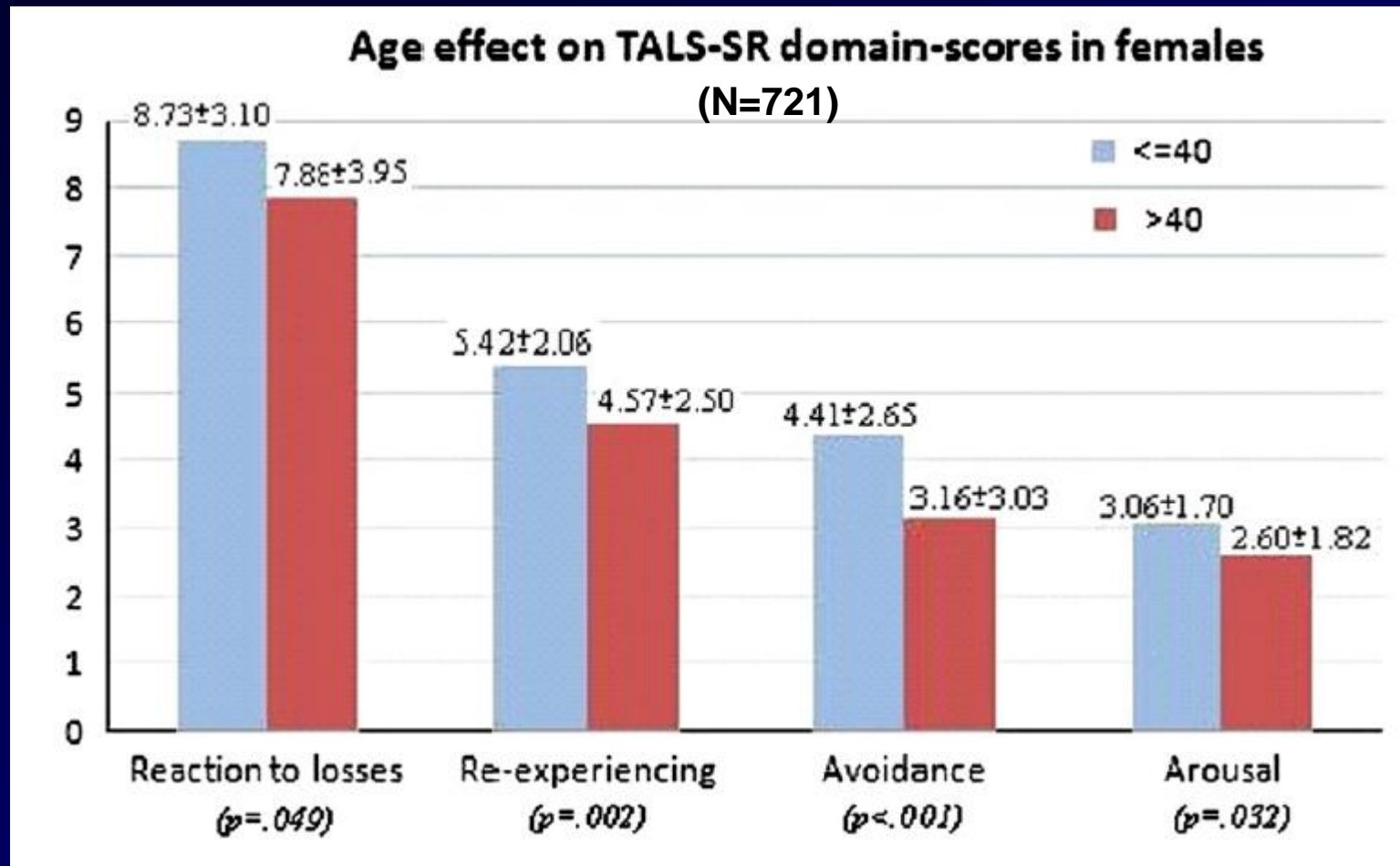
TALS-SR Domain IX (personal characteristics/risk factors): gender differences in items response

	Men (N = 274) N (%)	Women (N = 230) N (%)	p
110. ...are extremely sensitive to stress or loss?	50 (18.3)	110 (48.0)	.000
111. ...are provocative?	86 (31.5)	48 (20.9)	.010
112. ...like being the center of attention?	90 (33)	69 (30)	NS
113. ...often follow your instinct without really thinking about what you are doing	128 (47.1)	137 (59.6)	.007
114. ...usually find exciting what others would find frightening?	117 (42.9)	67 (29.1)	.02
115. ...often engage in reckless or dangerous activities?	104 (38.1)	55 (23.9)	.001
116. ...after the loss or the event you experienced, do you think your personalità changed?	118 (43.5)	140 (61.4)	.000

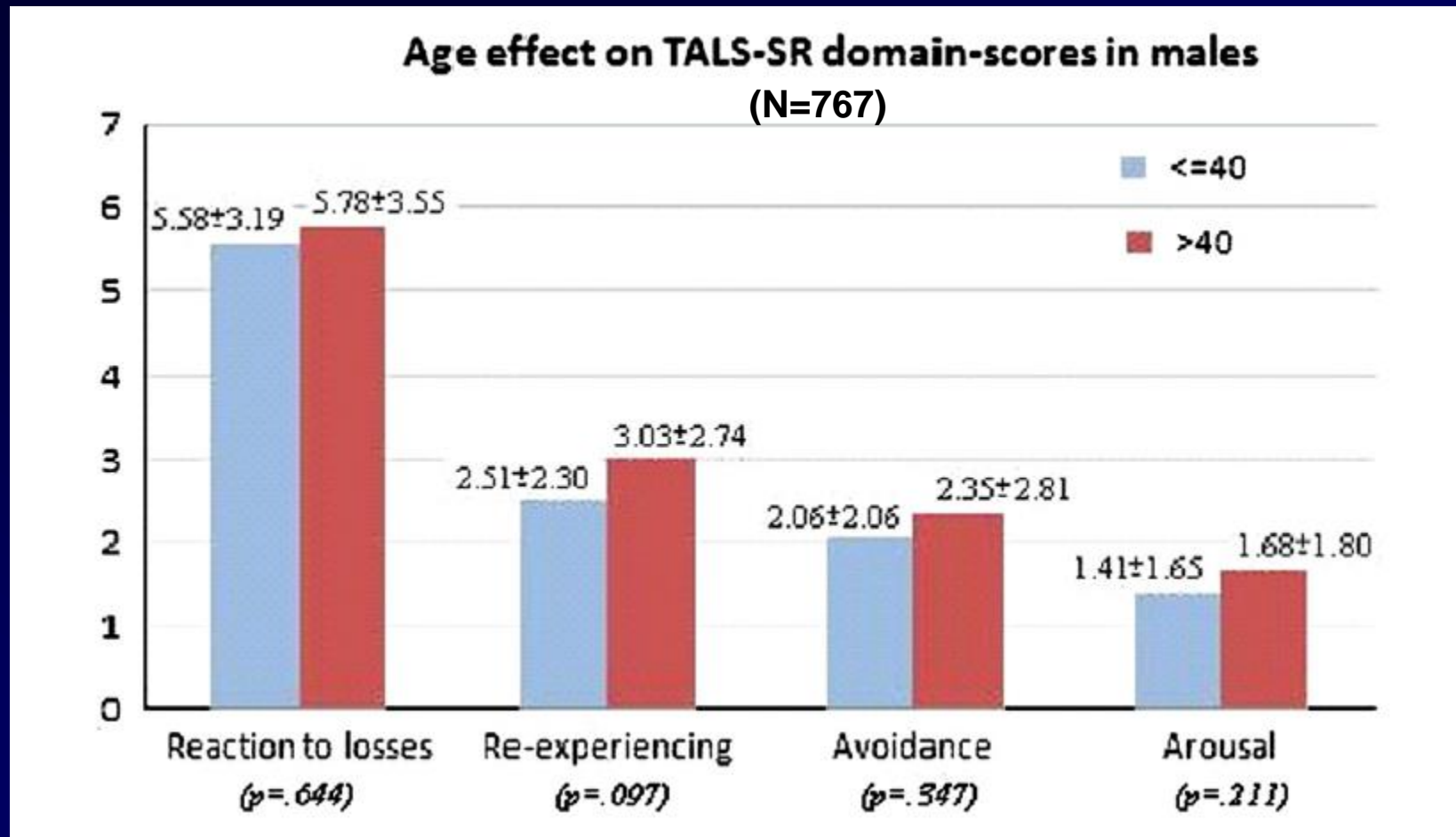
Age, gender and epicenter proximity effects on post-traumatic stress symptoms in L'Aquila 2009 earthquake survivors (n=1488)



Age, gender and epicenter proximity effects on post-traumatic stress symptoms in L'Aquila 2009 earthquake survivors



Age, gender and epicenter proximity effects on post-traumatic stress symptoms in L'Aquila 2009 earthquake survivors



TALS-SR, Trauma and Loss Spectrum-Self Report

New DSM-5 maladaptive symptoms in PTSD: gender differences and correlations with mood spectrum symptoms in a sample of 512 high school students following survival of an earthquake

- **Full data were available for 475 young adults (94.2% of the overall sample (n=512), mean age 17.67 ± 0.78), 203 women and 272 men.**
- **Among the 475 young adults enrolled, 169 (35.6%) subjects presented a diagnosis of PTSD according to DSM-5, with significantly higher rates in females than in males (n=104; 51.2% vs n=65; 23.9%, respectively, $p < .001$).**

New DSM-5 maladaptive symptoms in PTSD: gender differences and correlations with mood spectrum symptoms in a sample of 512 high school students following survival of an earthquake

MOODS-SR domain scores in 475 L'Aquila survivors with DSM-5 PTSD: gender differences

	Total mean \pm SD	Males (n=272) mean \pm SD	Females (n=203) mean \pm SD	p
Mood-depressive	11.36 \pm 5.13	10.25 \pm 5.43	12.06 \pm 4.82	.045
Mood-manic	12.73 \pm 4.96	13.22 \pm 5.62	12.43 \pm 4.49	.558
Energy-depressive	3.93 \pm 2.20	3.55 \pm 2.26	4.17 \pm 2.14	.090
Energy-manic	5.40 \pm 2.58	5.11 \pm 2.80	5.59 \pm 2.42	.320
Cognition-depressive	10.02 \pm 5.48	9.72 \pm 6.29	10.20 \pm 4.93	.434
Cognition-manic	7.20 \pm 4.59	7.78 \pm 5.40	6.84 \pm 3.99	.414
Rhythmicity	12.02 \pm 5.42	10.71 \pm 6.27	12.85 \pm 4.66	.027
Total depressive	25.31 \pm 11.10	23.52 \pm 11.61	26.43 \pm 10.67	.059
Total manic	25.34 \pm 9.96	26.11 \pm 11.20	24.85 \pm 9.13	.643

DSM-5, Diagnostic and Statistical Manual, V edition (2013); PTSD, Post-Traumatic Stress Disorder; MOODS-SR, Mood Spectrum-Self Report

New DSM-5 maladaptive symptoms in PTSD: gender differences and correlations with mood spectrum symptoms in a sample of high school students following survival of an earthquake

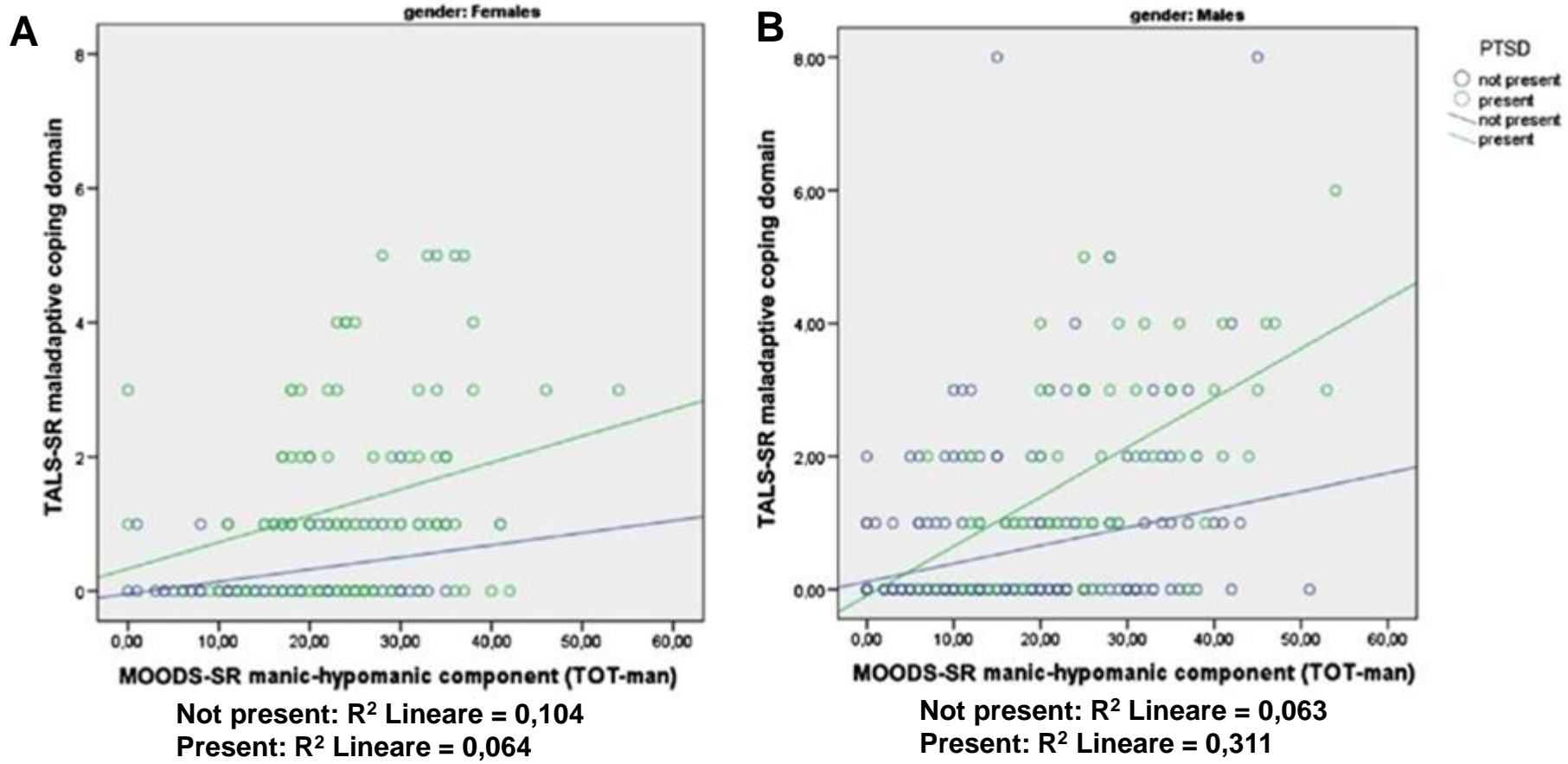
TALS-SR domain scores in 475 L'Aquila survivors with DSM-5 PTSD: gender differences

	Total mean ± SD	Males (n=272) mean ± SD	Females (n=203) mean ± SD	p
Loss events	4.33 ± 1.72	3.85 ± 1.72	4.63 ± 1.67	.004
Grief reactions	12.66 ± 5.37	11.92 ± 5.50	13.12 ± 5.27	.166
Potential traumatic events	4.73 ± 2.54	4.80 ± 2.88	4.68 ± 2.31	.923
Reactions to losses	10.14 ± 3.03	9.12 ± 2.86	10.78 ± 2.96	.001
Re-experiencing	5.08 ± 1.71	4.59 ± 1.78	5.41 ± 1.59	.002
Avoidance and numbing	5.88 ± 1.69	5.64 ± 1.71	6.03 ± 1.67	.096
Maladaptive coping	1.52 ± 1.47	1.85 ± 1.49	1.32 ± 1.42	.012
Arousal	3.34 ± 1.20	2.75 ± 1.22	3.71 ± 1.03	<.001

DSM, Diagnostic and Statistical Manual, 5th edition (2013); PTSD, Post-Traumatic Stress Disorder; TALS-SR, Trauma and Loss Spectrum-Self Report

New DSM-5 maladaptive symptoms in PTSD: gender differences and correlations with mood spectrum symptoms in a sample of high school students following survival of an earthquake

Relationships between MOODS-SR manic-hypomanic component and TALS-SR maladaptive coping domain among females (A) and males (B) with and without DSM-5 PTSD



DMS, Diagnostic and Statistical Manual, edition V (2013); PTSD, Post-Traumatic Stress Disorder; MOOD-S, Mood Spectrum-Self Report; TALS-SR, Trauma and Loss Spectrum-Self Report

Carmassi C et al., Ann Gen Psychiatry, 2014

Conclusions

- **There is a general lack of research on sex and gender differences in vulnerability to and impact of natural disasters.**
- **The limited information available from small scale studies suggests that there is a pattern of gender differentiation at all levels of the disaster process: exposure to risk, risk perception, preparedness, response, physical impact, psychological impact, recovery and reconstruction.**
- **There is a need to provide sex-disaggregated data on disaster-related mortality, morbidity and long-term health consequences for disaster relief programmes and policies**