Recognizing tension in the body in patients with stress-related disorders: The role of early childhood adversity

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Background and aims

A common feature that characterizes patients with medically unexplained pain and fatigue, panic disorder, and emotional exhaustion is that they often report high levels of distress, disability and psychiatric comorbidity. Although acute stress can be regarded as adaptive, **chronic stress** can be considered **maladaptive** (Bogaerts et al., 2016). Previous research has shown that both acute and chronic stress may precede somatic complaints (e.g., van Gils et al. 2014; McEwen, 2000). The present study explores differences between patient groups –that share stress-related physical complaints as common characteristic – in the recognition of distress in the body and how this relates to personality characteristics and early childhood adversity.

As research on this topic is rather scarce, the aim of the study was to explore differences and similarities between these groups in symptom reporting and its relation to traumatic experiences.

The **aim** of the study is twofold:

1) Exploring differences between panic disorder (PD), emotional exhaustion (EE) and Fibromyalgia/CFS (Medically Unexplained pain and fatigue; MUS) in **recognizing bodily distress**
2) Exploring the **role of trauma** (aversive experiences during childhood) in the relation between physical complaints and psychological distress

Methods

Participants. 118 outpatients aged between 18 and 65 years old seeking cognitive-behavioral therapy (CBT) in Tumi Therapeutics (Heusden-Zolder, Belgium), a multidisciplinary expertise center specialized in the prevention, diagnostics and treatment of stress-related disorders, functional syndromes and psychological disorders with a somatic component were invited to complete questionnaires and filling out a self-observation tool. Of these patients, **93 patients** agreed to participate.

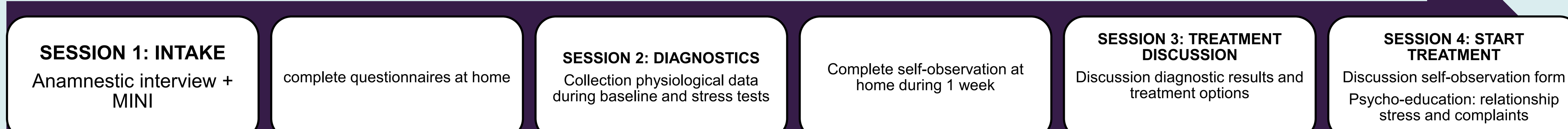
Patients were divided into three groups, dependending on their diagnoses, based on the clinical interview and the MINI (DSM).

		Panic disorder (PD)	Emotional Exhaustion (EE)	Fibromyalgia/CFS (MUS)	F
Sample size	*N*	31	36	26	
Gender	*Female*	18	24	19	(0.71;2)
	Male	13	12	7	
Age	*M(SD)*	33.06(9.06)	39.5(13.43)	41.19(13.80)	(1.46;2)
SES	*Primary School*	0	2	0	(0.37;2)
	Secondary School	5	7	8	
	Higher Education (college/University)	17	23	16	

Measures. Patients completed several **questionnaires** assessing alexithymia (TAS-20), positive and negative affect (PANAS), maladaptive thoughts about possible consequences of anxiety/panic (ACQ), fear of anxiety-related symptoms (ASI), fear of physical sensations experienced during periods of anxiety/panic (BSQ), traumatic experiences (VBE), and the SCL-90.

Additionally, patients completed a **self-observation form**: participants are requested to log which activity they were doing and rate how much psychological distress and physical complaints they were experiencing on a 10-point Likert Scale (0 = none; 10 = extreme) every hour for 1 week. Both stress and physical symptoms were individualized.

Procedure. All patients followed a standardized protocol used at Tumi Therapeutics.

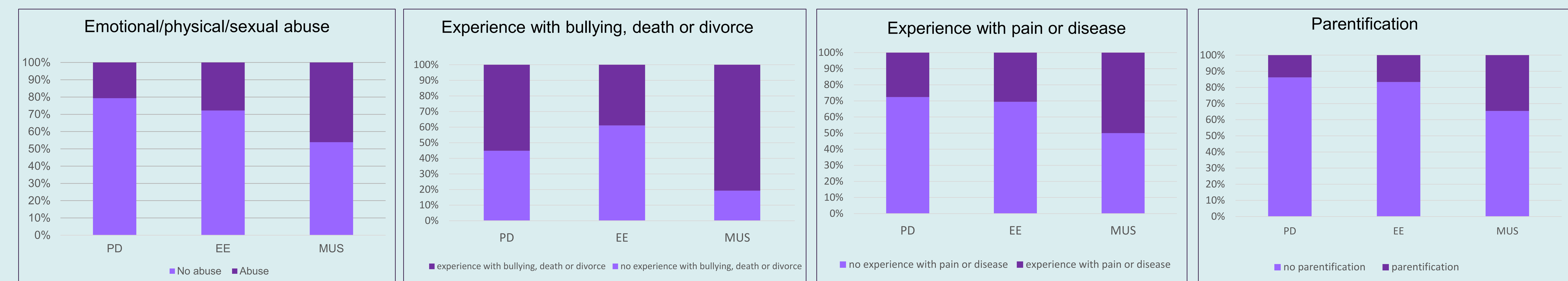


Results

A within-subject correlation (Fisher Z) between self-reported psychological distress and somatic symptoms was calculated using all data points to investigate inter-individual differences in the relationship between psychological distress and somatic symptoms. Trait anxiety and anxiety sensitivity, which were higher in the PD group, were positively correlated with this within-subject correlation. Furthermore, the number of traumatic experiences was higher in the MUS group than in other groups, and was significantly negatively correlated with recognizing distress in the body. The within-subject correlation was not correlated with negative and positive affectivity or alexithymia.

Traumatic Experiences (VBE)

- There is a significant difference between the groups regarding the **total number** of traumatic experiences encountered, χ^2 (2) = 10:43 , p < .01
  - PD(M = 3.15; SD = 3,70) < EE (M = 3.25; SD = 3.35) < MUS (M = 6.84; SD = 4.88)



Link between physical complaints and psychological distress

	variable	1	2	3	4	5	6	7
1	link physical complaints - emotional distress							
2	alexithymia (TAS)	-.14						
	traumatic experiences (VBE)							
3	*total*	-.30***	.13					
4	*bullying, divorce, death*	-.10	.11	.76****				
5	*abuse*	-.22*	.18*	.64****	.37****			
6	*other*	-.29***	.12	.95****	.80****	.42****		
7	anxiety (SCL)	.22**	.18*	.20*	.12	.10	.21*	
8	Somatic complaints (SCL)	-.12	.18*	.25**	.15	.26**	.22**	.58****

- Anxiety/anxiety sensitivity positively associated with being able to see the link between emotional distress and physical complaints
- Traumatic experiences negatively associated with being able to see the link between emotional distress and physical complaints

Discussion

- Differences between patient groups arise in trait anxiety and anxiety sensitivity as well as traumatic experiences
- Patients experiencing medically unexplained pain and/or fatigue are less anxious and often have experienced more early childhood adversity, which in turn relates to a worse recognition of distress in the body than in panic patients or patients experiencing emotional exhaustion
- These findings may have implications for clinical practice: need for tailor-made treatment strategies
- More systematic research is needed to investigate the role of trauma, interoceptive awareness and its impact on the relation between physical complaints and psychological distress

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