Post-traumatic Stress Disorder and Physical Health

Dr Leonhard Kratzer

2nd International Trauma Informed Care online conference: Interventions to reduce core and comorbid trauma symptoms
9th November 2021

epartment of Psychotraumatology of Clinic St Irmingard

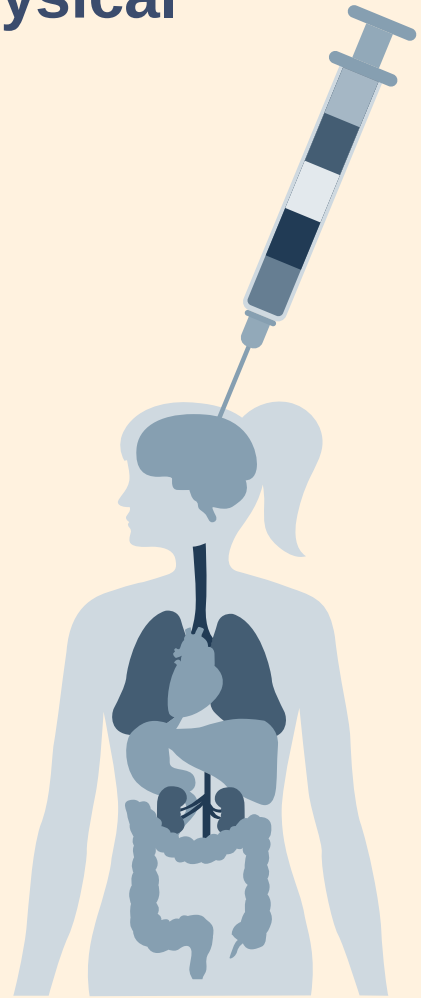
Dr Leonhard Kratzer

- Consultant Clinical Psychologist
- CBT, EMDR, ESTSS, supervisor, …
- Interest in neglected aspects of PTSD: Sexuality, somatic symptoms, domestic violence,

Agenda: Post-traumatic Stress Disorder and Physical Health

Today, I‘d like to talk about

- … why we have to change the way we think about the mind and the body
- … what an unrecognized major feature of PTSD somatic symptoms really are
- … why traditional psychopathology hinders our understanding of the complexity of trauma sequelae and what we can do about it
- … why the medical model of psychotherapy might be particularly insufficient for the treatment of complex disorders
- … how we can effectively treat our patients by adapting a modular, personalized approach to treatment



Somatic Symptoms ?

1

What are “somatic symptoms”?

The term „somatic symptoms“…

- **… includes *indications of diseases* that are linked to traumatic experiences like Hepatitis C or diabetes**
- **… includes “medically unexplained somatic symptoms” (MUSS), “functional disorders”, “somatoform disorders”, “somatization”, …**
  - Defining disorders on the basis of the absence of a feature is problematic and unreliable (Voigt et al., 2010)
  - The notion that symptoms are “medically unexplained” is typically understood by patients as an issue of detection (Gureje & Reed, 2016); also it is misleading as we might have sound psychological explanations
  - To refer to symptoms as “functional” may hamper our understanding of the complex interplay of psychological and somatic factors; e.g., chronic pain is neither a functional nor a mental disorder (Nilges, Rief, Treede, & Zenz, 2021)
  - Stigma, Stigma, Stigma

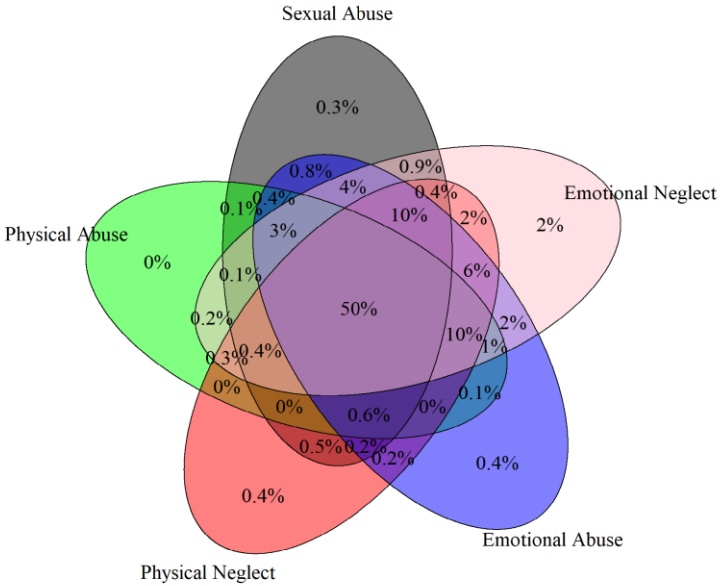
- **… is a helpful concept in patient dialogue as it is focused on the patient’s experience**
- **… allows to pragmatically focus on coping and distress instead of etiology**
- **… allows to avoid the pitfalls of Cartesian dualism (mind vs body)** (McFarlane, 2017)

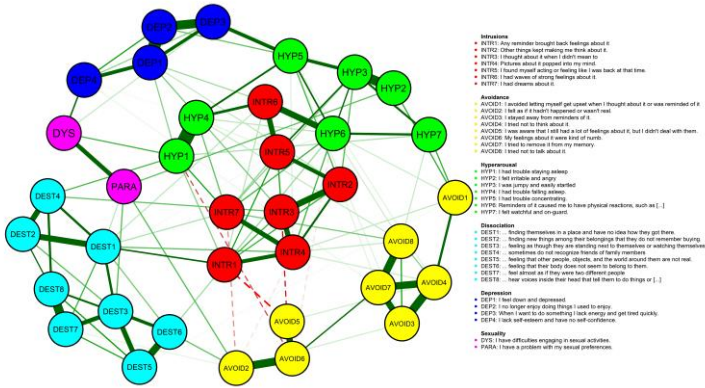
Somatic Symptoms 2

An unrecognized major feature of PTSD?

Our patients (Kratzer et al., 2017; 2018; 2019;2020; in review)

- Severe childhood abuse histories (see Venn diagram) and revictimizations in sex work or IPV
- Chronic and severe PTSD
- Comorbidity
  - 93% affective disorders
  - 45% anxiety disorders
  - 31% obsessive-compulsive disorders
  - 21% eating disorders
  - **37% somatoform disorders, primarily (24%) somatoform pain disorder**
  - 29% dissociative disorder, typically partial dissociative identity disorder
- 44% at least one suicide attempt, 23% multiple
- **63% analgesics**, 68% antidepressants, 33% anxiolytics, 46% antipsychotics
- 88% prior hospitalizations (max=49, median=3)
- 21% full-time job





The case of M.

- 41-year old woman with a history of CSA (father, brother), drugs, sex work, domestic violence, repeated psychiatric hospitalizations, …
- Severe chronic pain, auditory verbal hallucinations, thought insertion, amnesia, flashbacks, self-mutiliation, suicidality etc.
- Dissociative Identity Disorder, Complex PTSD, severe depression, somatic symptom disorder, opioid dependence, …

The case of M.

- Yet, also various somatic diagnoses
  - ICD-10 G25.81
  - ICD-10 E11.90
  - ICD-10 I10.90
  - ICD-10 G47.31
  - ICD-10 K86.1
  - ICD-10 J44.99
  - ICD-10 E66.02
  - ICD-10 E87.1
  - ICD-10 E55.9
  - …
- … and medication!

The case of M. or: >30 pills a day

yet also various somatic

Vormedikation:

Metformin 850-1A Pharma	1 - 0 - 1 - 0 Tabl.	täglich
Melperon-1A Pharma 50mg	0 - 0 - 1 - 0 Tabl.	täglich
Pramip 0,35mg	0 - 0 - 1 - 1 Tabl.	täglich
ROLENIUM 50Mikrogramm/500Mikrogramm	1 - 0 - 1 - 0 Einzeldosis	täglich
Candesartan-1A Pharma 8mg	1 - 0 - 0 - 0 Tabl.	täglich
Pantoprazol-1A Pharma 40mg	1 - 0 - 0 - 0 Tabl.	täglich
Fluvastatin AbZ 80mg	0 - 0 - 1 - 1 Tabl.	täglich
ASS 100 Fair-Med	0 - 1 - 0 - 0 Tabl.	täglich
Levodopa/Benserazid-ratiopharm 100mg/25mg	0 - 0 - 0 - 1 Tabl.	täglich
Torasemid-1A Pharma 20mg	1 - 1 - 0 - 0 Tabl.	täglich
Hydromorphon-1A Pharma 4mg	1 - 1 - 1 - 1 Kaps.	täglich
Hydromorphon-1A Pharma 2mg	0 - 0 - 1 - 1 Kaps.	täglich
Ranexa 375mg	1 - 0 - 0 - 0 Tabl.	täglich
Bisoprolol 5-1A Pharma	1 - 0 - 1 - 0 Tabl.	täglich
Duloxetin-1A Pharma 60mg	1 - 0 - 0 - 0 Kaps.	täglich
Duloxetin-1A Pharma 30mg	1 - 0 - 0 - 0 Kaps.	täglich
Resolor 1mg	1 - 0 - 0 - 0 Tabl.	täglich
MOVICOL aromafrei Beutel	1 - 1 - 0 - 0 Beutel	täglich
Lantus 100Einheiten/ml SoloStar 3ml	0 - 0 - 0 - 30 E.	täglich
Pangrol 40000	1 - 1 - 1 Kaps.	täglich

Our treatment

Intensive, …

- 12 weeks of at least 150‘ of individual trauma-focused psychotherapy provided by a specialist in psychiatry or a clinical psychologist with training in EMDR
- Individual skills training by nurses twice/week
- Individual body / art psychotherapy

… trauma-focused…

- „focus on traumatic memories, not symptoms“
- Reprocessing of 3 to 4 memories with the highest SUD
- Adapted for patients with special needs (e.g., dissociative seizures, severe self-hatred, or voice-hearing)

… and with skills trainings & more

- Antidissociative and emotion regulation skills (DBT), Mindfulness (ACT and DBT), Mentalizing (MBT), Psychoeducation, social skills (CBT)
- Body Psychotherapy, Art Psychotherapy
- Physiotherapy, sports, Trauma-informed Yoga and Qi Gong, …

Are we able to help patients like M.?

- Study 1 (2018) with 150 patients with ICD-10 PTSD following CSA / CPA
  - Large effects on PTSD (ES = 1.8) and depression (ES = 1.1)
  - Moderate effects on fear (ES = 0.6), interpersonal problems (ES = 0.7), mindfulness (ES = 0.5), self-efficacy (ES = 0.6), and **somatic symptoms** (ES = 0.5)

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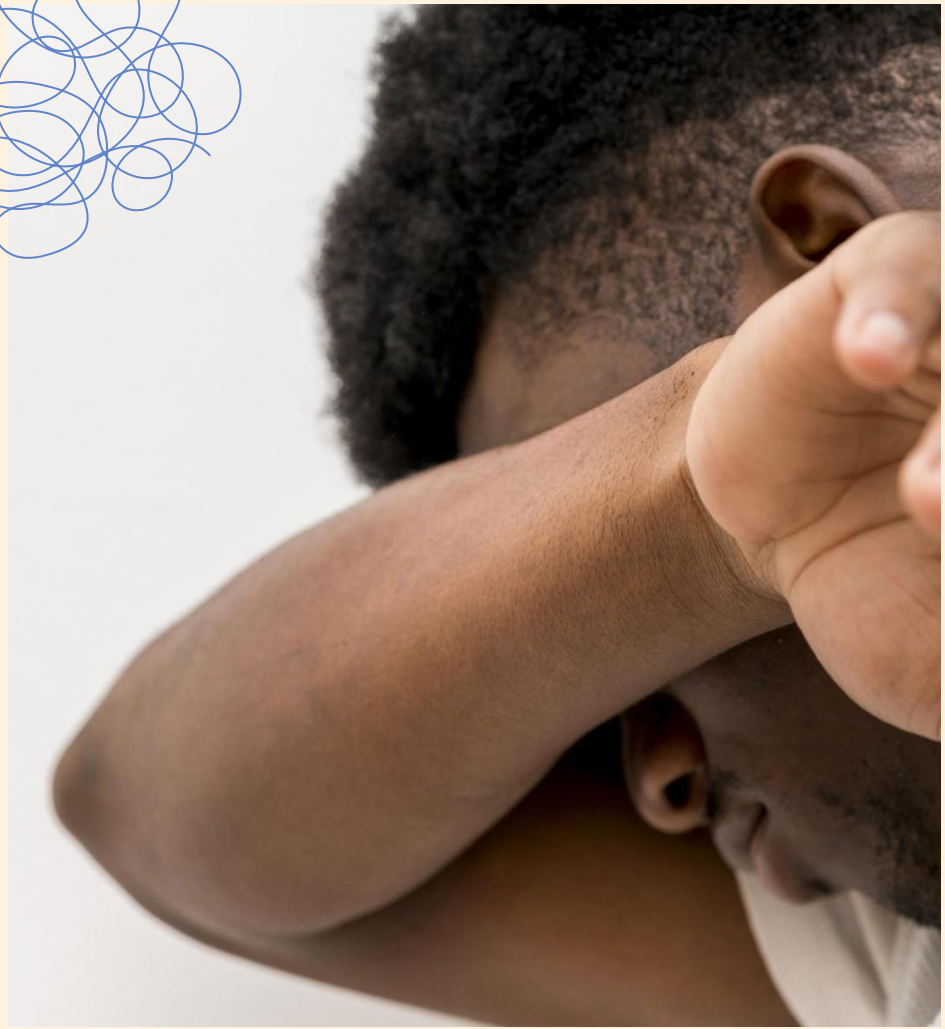
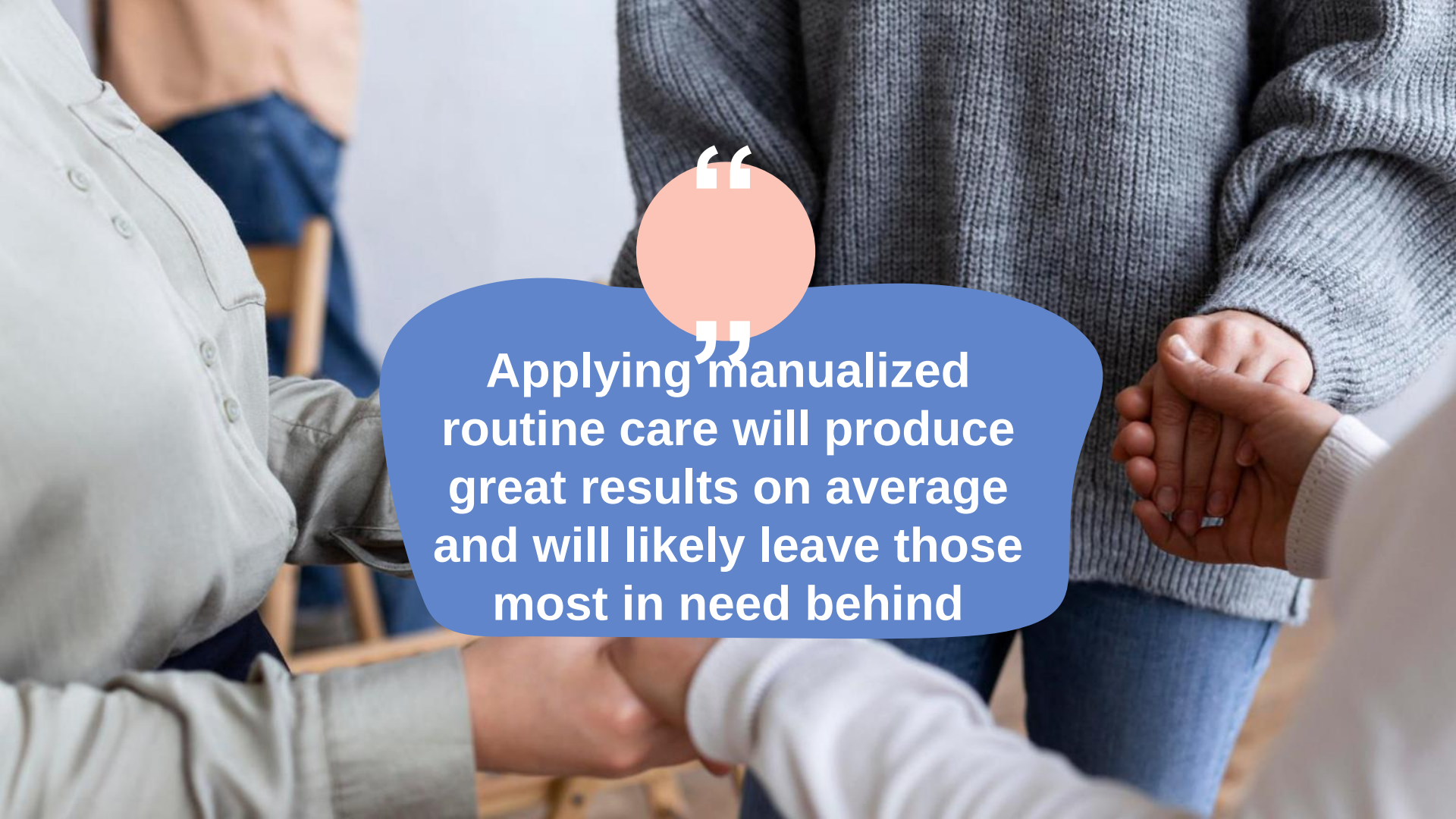
- Yet, looking closer, …
  - **Somatic symptoms at the time of admission are the most important predictor of treatment failure**
  - **Less than 30% of those patients with the most severe somatic symptoms respond in a clinically meaningful way regarding their PTSD symptoms**

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Applying manualized routine care will produce great results on average and will likely leave those most in need behind

Somatic Symptoms in PTSD

3

How can we understand somatic symptoms in PTSD?

Understanding Comorbidity

Traditional Psychopathology

- „Psychiatric disorders are latent variables causing observable symptoms“ (Borsboom, 2008)
- Pitfalls regarding the understanding of heterogeneity and comorbidity (Cramer, Waldorp, Van Der Maas, & Borsboom, 2010)
    - Depression symptoms have to be considered in conceptualizing PTSD (Barbano et al., 2019)
    - 636,120 ways to have PTSD (Galatzer-Levy & Bryant, 2013)

Complex Network Perspective

What has evidence-based psychotherapy to offer for the treatment of medically unexplained somatic symptoms?

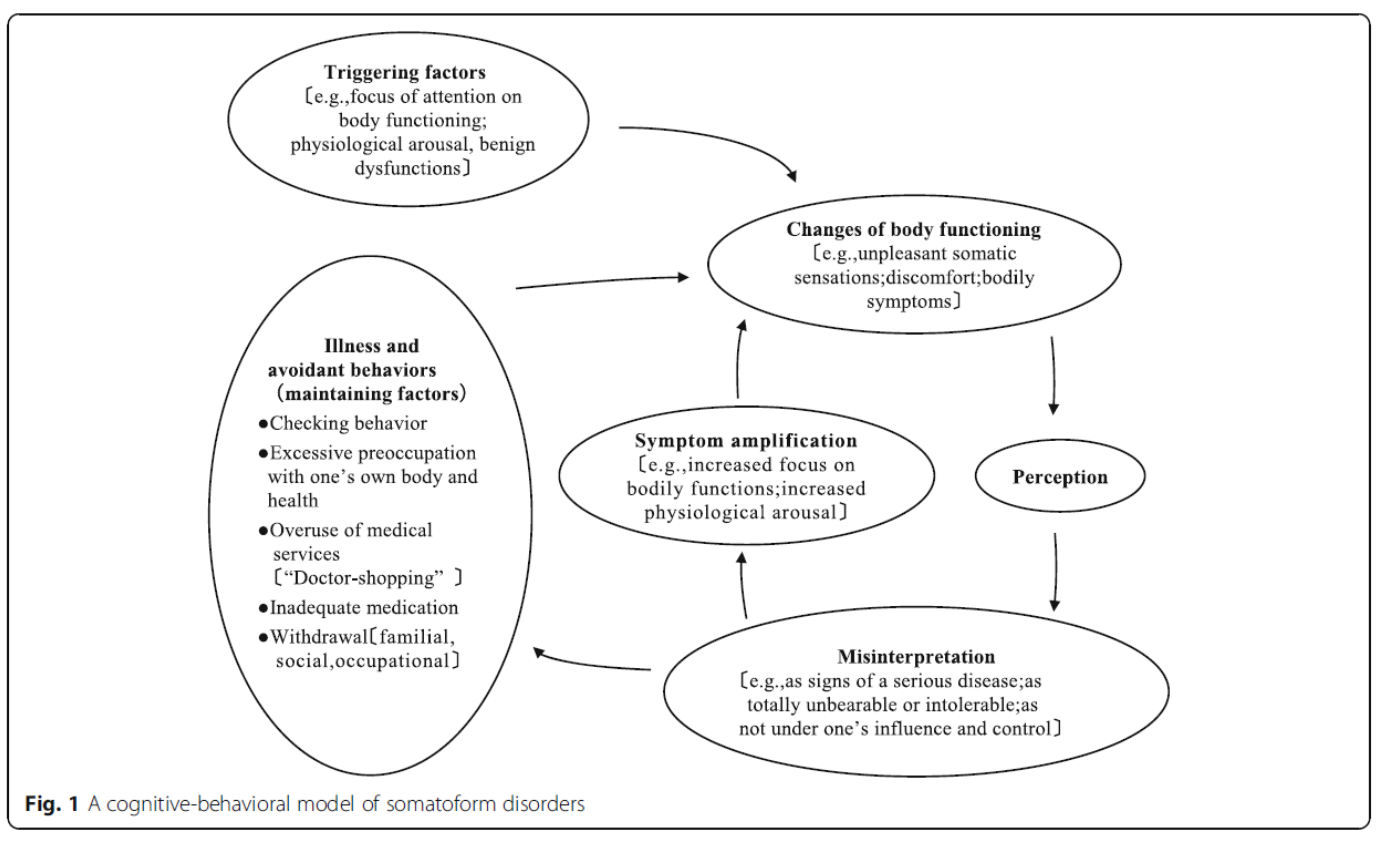

Fig. 1 A cognitive-behavioral model of somatoform disorders

(Seto & Nakao, 2017)

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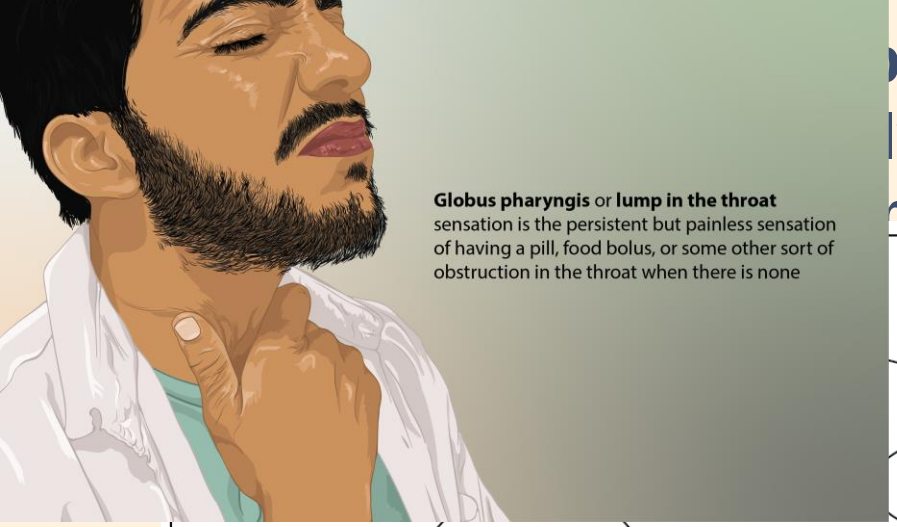

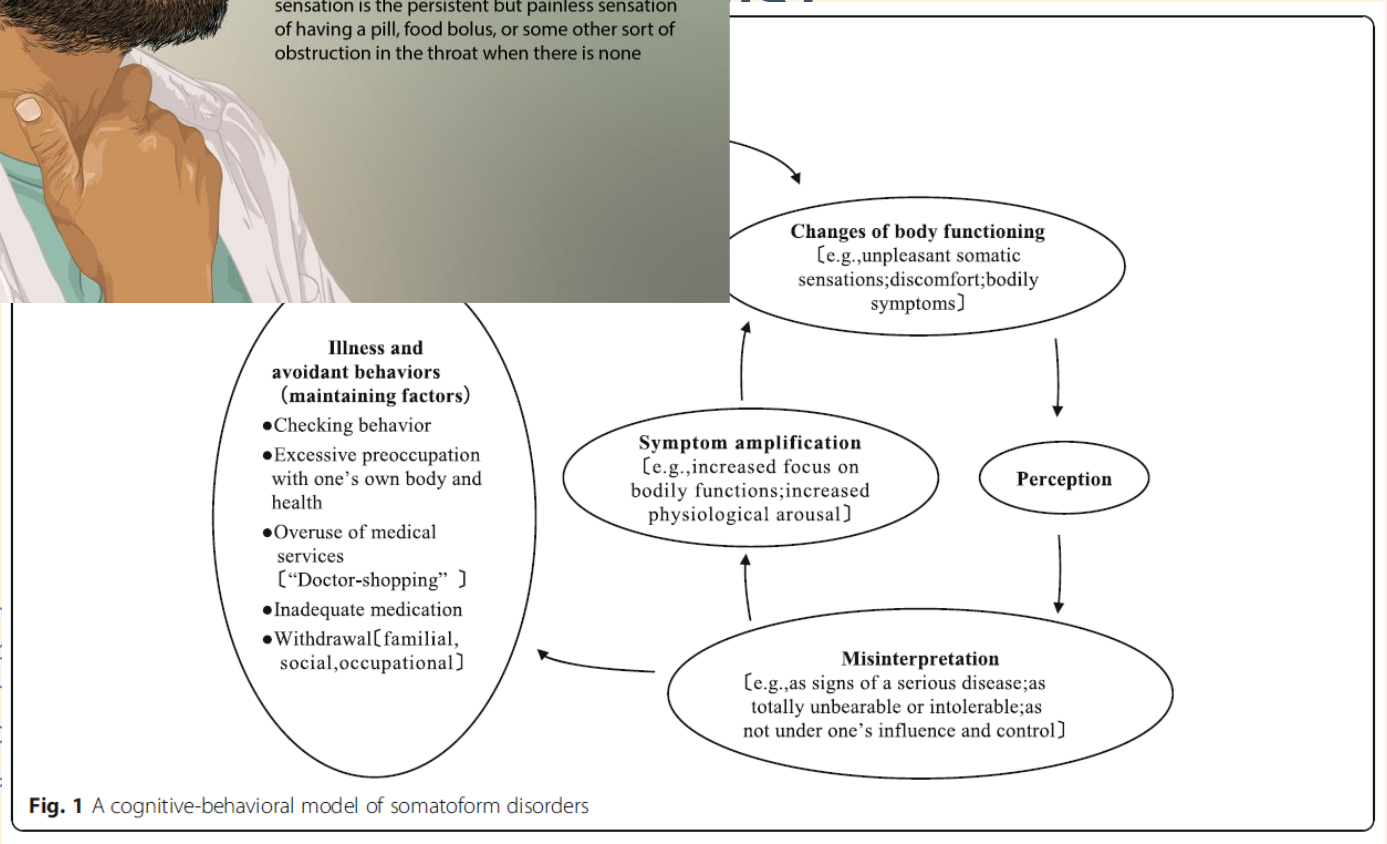

Fig. 1 A cognitive-behavioral model of somatoform disorders

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What has evidence-based psychotherapy to offer for the treatment of ‘’medically unexplained somatic symptoms’’?

- **Likely mechanisms of change: cognitive changes and relaxation**
  Feldmann et al., 2021
- **Effects are negligible to small…**
  Chalder et al., 2021
  Gerger et al., 2015
  Kleinstäuber et al., 2011
- **… and worse in the case of comorbid mood / anxiety disorder, or low self-efficacy**
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  - **CBT of somatic symptoms has negligible effect sizes**
  - **Time is limited – how should integration work? A module?**

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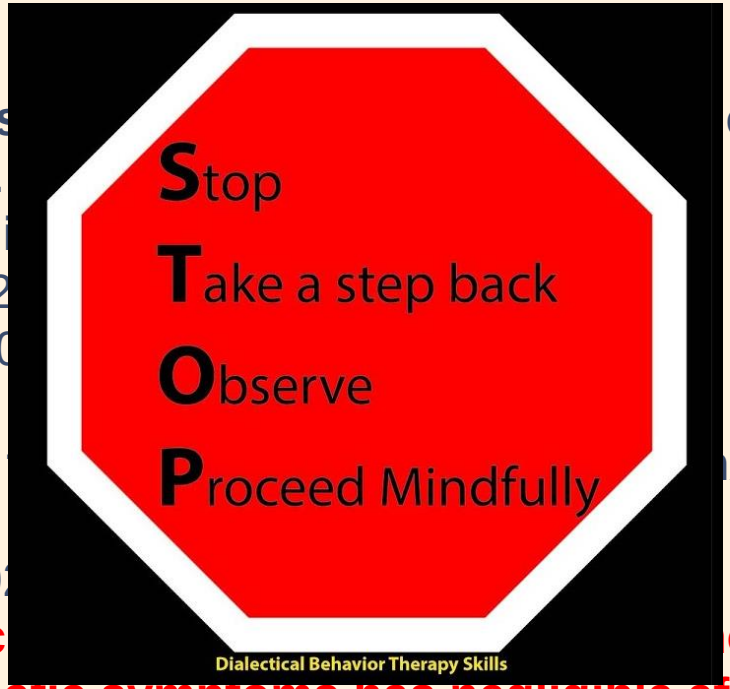

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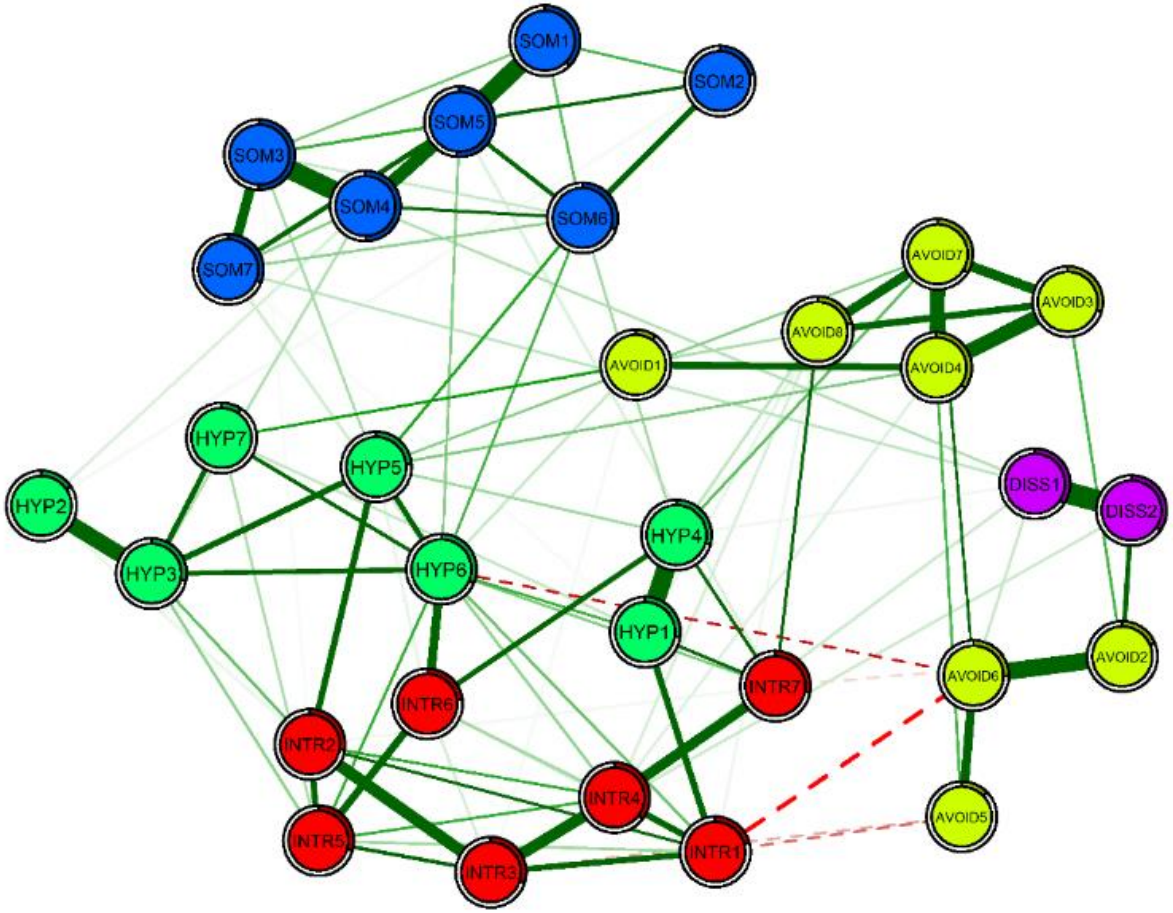
Complex Network Perspective

- „Psychiatric disorders are the result of the causal interplay of symptoms“ (Borsboom & Cramer, 2013)
- Bridge symptoms can explain comorbidity (Cramer et al., 2010)
- Sophisticated focus on symptoms and their associations
- Study 2 (2021) with 655 patients with PTSD and childhood abuse



Intrusions

- INTR1: Any reminder brought back feelings about it
- INTR2: Other things kept making me think about it.
- INTR3: I thought about it when I didn't mean to
- INTR4: Pictures about it popped into my mind.
- INTR5: I found myself acting or feeling like I was back at that time.
- INTR6: I had waves of strong feelings about it.
- INTR7: I had dreams about it.

Avoidance

- AVOID1: I avoided letting myself get upset when I thought about it [...]
- AVOID2: I felt as if it hadn't happened or wasn't real.
- AVOID3: I stayed away from reminders of it.
- AVOID4: I tried not to think about it.
- AVOID5: I was aware that I still had a lot of feelings about it, but [...]
- AVOID6: My feelings about it were kind of numb.
- AVOID7: I tried to remove it from my memory.
- AVOID8: I tried not to talk about it.

Hyperarousal

- HYP1: I had trouble staying asleep
- HYP2: I felt irritable and angry
- HYP3: I was jumpy and easily startled
- HYP4: I had trouble falling asleep.
- HYP5: I had trouble concentrating.
- HYP6: Reminders of it caused me to have physical reactions, such as [...]
- HYP7: I felt watchful and on-guard.

Somatic Symptoms

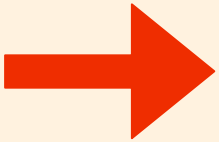
- SOM1: Back pains
- SOM2: Stomach pains or digestive problems
- SOM3: Feeling of weakness in individual body parts
- SOM4: Feeling of heaviness in arms and legs
- SOM5: Pain in your muscles or joints
- SOM6: Headaches or face pains
- SOM7: Numbness or tingling in individual body parts

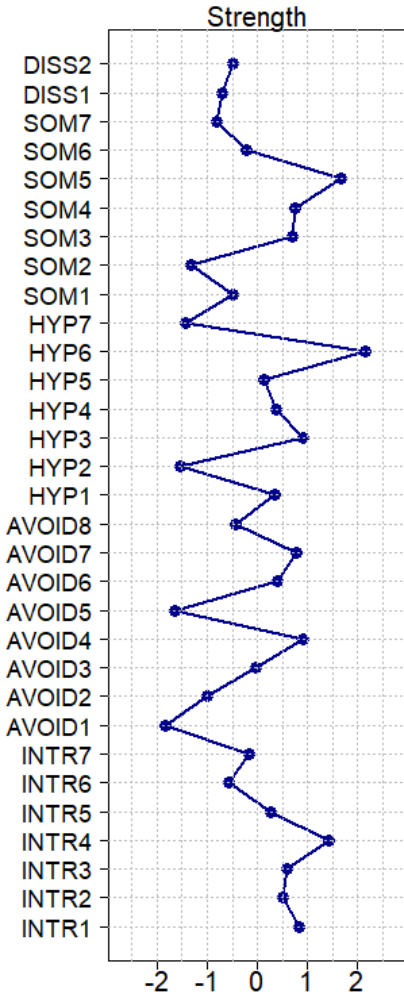
Dissociation

- DISS1: ... feeling as though they are standing next to themselves [...]
- DISS2: ... feeling that other people [...] around them are not real.

Major results

- Physiological reactivation of traumatic memories was…
  - … strength-central in the full network – **the body keeps the score**
  - … one of the bridge symptoms explaining the comorbidity of dissociation, hyperarousal, avoidance, somatic symptoms, and intrusions
- Hyperarousal is linked to somatic symptoms like pain (also see Morina et al., 2018)
- Dissociation is linked to somatic symptoms like feelings of numbness and heaviness



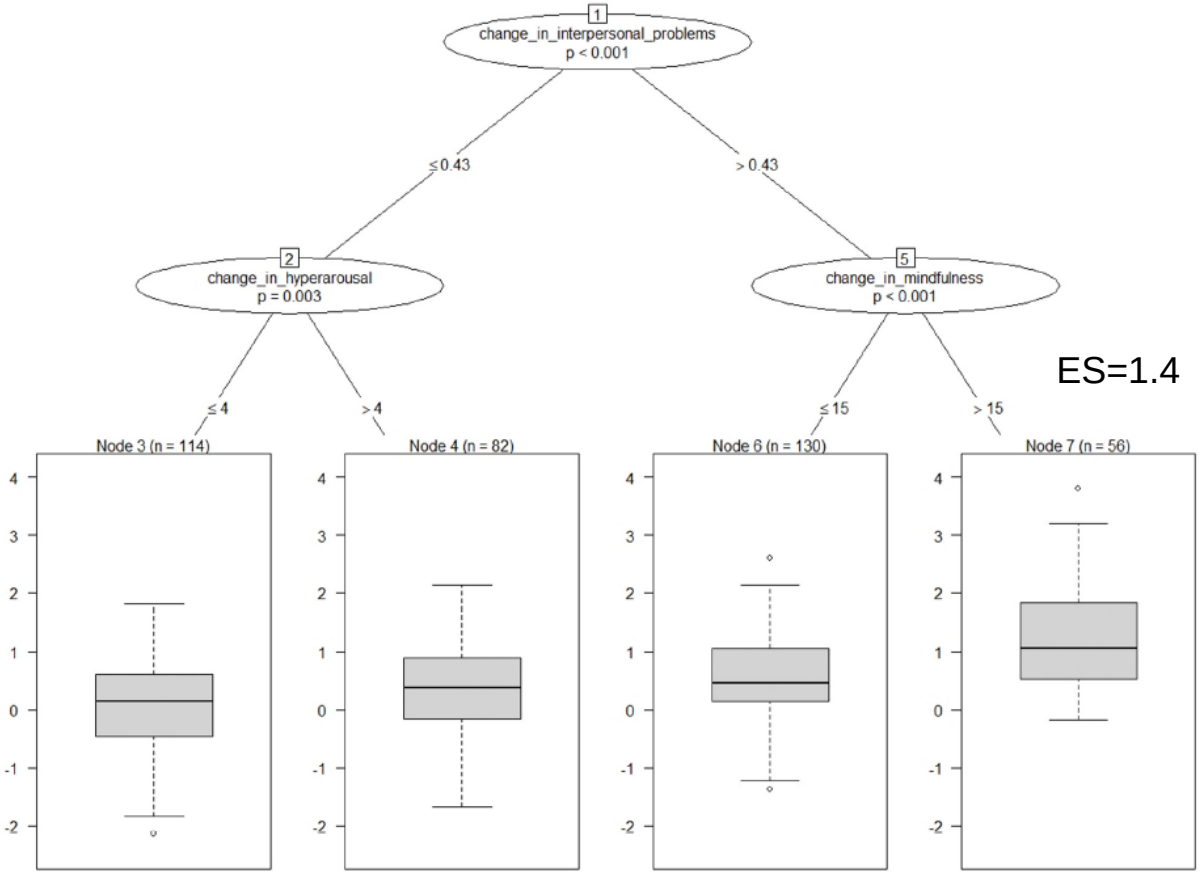


The next step

- If our results are correct, changes in dissociation and hyperarousal should predict the outcome of somatic symptoms

Study 3

- 339 patients with PTSD following childhood abuse
- CART algorithm analysis: Changes in which domains predict treatment outcome of somatic symptoms?
- Confirms importance of hyperarousal and dissociation, or rather its “antidote“ mindfulness
- **Yet, what about interpersonal problems!?**



ES=1.4

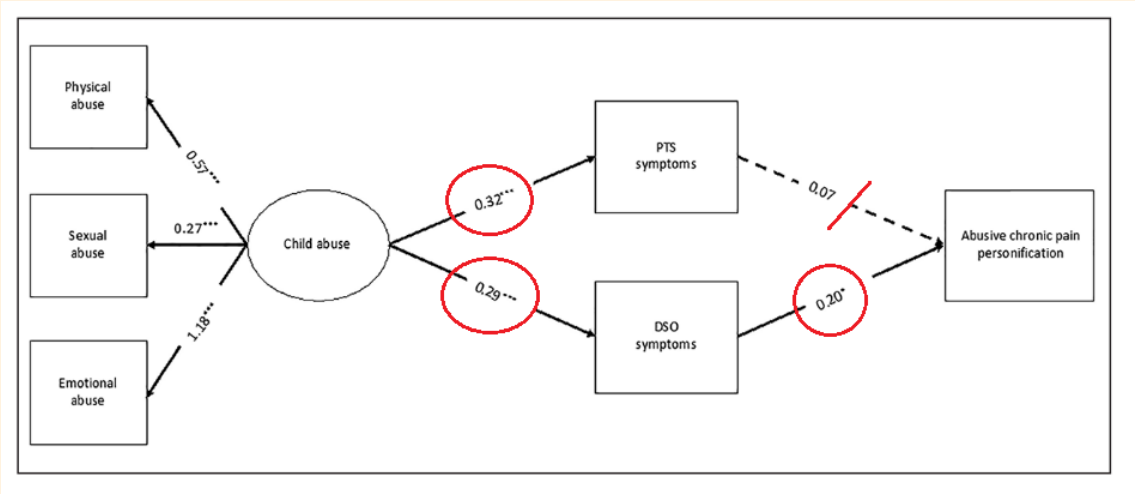
Fig. 1. The Classification and Regression Tree algorithm partitions the sample along significant predictors and cut-offs into subsets with homogeneous somatic symptom changes. Subset somatic symptom changes are depicted at the bottom using box plots with symptom change on the y-axis. Thick lines represent median somatic symptom changes, boxes depict interquartile ranges, and whiskers indicate 1.5 times interquartile ranges. Outliers are depicted as dots. Negative values of somatic symptom changes indicate somatic symptom worsening.

Extending our understanding of somatic symptoms in PTSD

- The result of the importance of changes in interpersonal problems is in line with growing evidence stressing the importance of the association of disturbances in self-organization (DSO) and somatic symptoms (Ho et al., 2021; Kuhar & Zager Kocjan, 2021; Tsur, 2020; but see diverging results by Wright et al., 2021)
  - Affective dysregulation
  - Negative self-concept
  - **Disturbances in relationships**
- Further research is needed regarding somatic symptoms, mentalization and attachment (e.g., Jansman et al., 2019)

The Importance of Disturbed Relationships: The Body

- Trauma patients often personify their bodily signals and ascribe human-like characteristics, resulting in complex relationships (Tsur, 2020)
  - „My body is responsible for the abuse.“
  - „My body is weak.“
  - „I hate my body.“
  - „This is not me. This is not my body.“
- The link of childhood abuse and pain personification is explained by DSO symptoms (Tsur, 2020)



The Importance of Disturbed Relationships: Therapy Alliance

All too often, the interpersonal problems of patients with somatic symptoms lead to conflicts in psychotherapy (Egle, Seeher, & Cattapan, 2020)

Classic traps with patients with PTSD and somatic symptoms

- A typical vicious circle of patients with PTSD following childhood abuse – The example of M.
  - The patient wants to „function“, „be normal“, and „get rid of“ pain
  - Trigger => Reexperiencing with pain
  - Self-invalidation, avoidance, voice hearing, self-mutiliation, opioids
  - Shame! The patient wants to „function“, „be normal“, …

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- Treatment failure as a re-enactment of trauma
  - Acceptance of the patient‘s (implicit) assumption that there are tools to get rid of pain
  - Helplessness of the patient: „This does not work. You don‘t understand…“
  - Frustration of the therapist turns to anger: „This patient just does not want to change. Classic alexithymia…“
  - Stigmatizing jokes about somatization patients in conference lunch breaks: „Gosh, they‘re annoying…“

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  - Stigmatizing jokes about somatization patients in conference lunch breaks: „Gosh, they‘re annoying…“
- There is a way out and it is called trauma-focused treatment
  - We have to understand what our patient has experienced yet cannot tell with words
  - Patients need to accept responsibility for their feelings, memories, pain, body, …
  - To do so, they have to realize all aspects of the experience of the abuse like the pain, the shame, the helplessness, the will to survive and the price for

Somatic Symptoms in PTSD

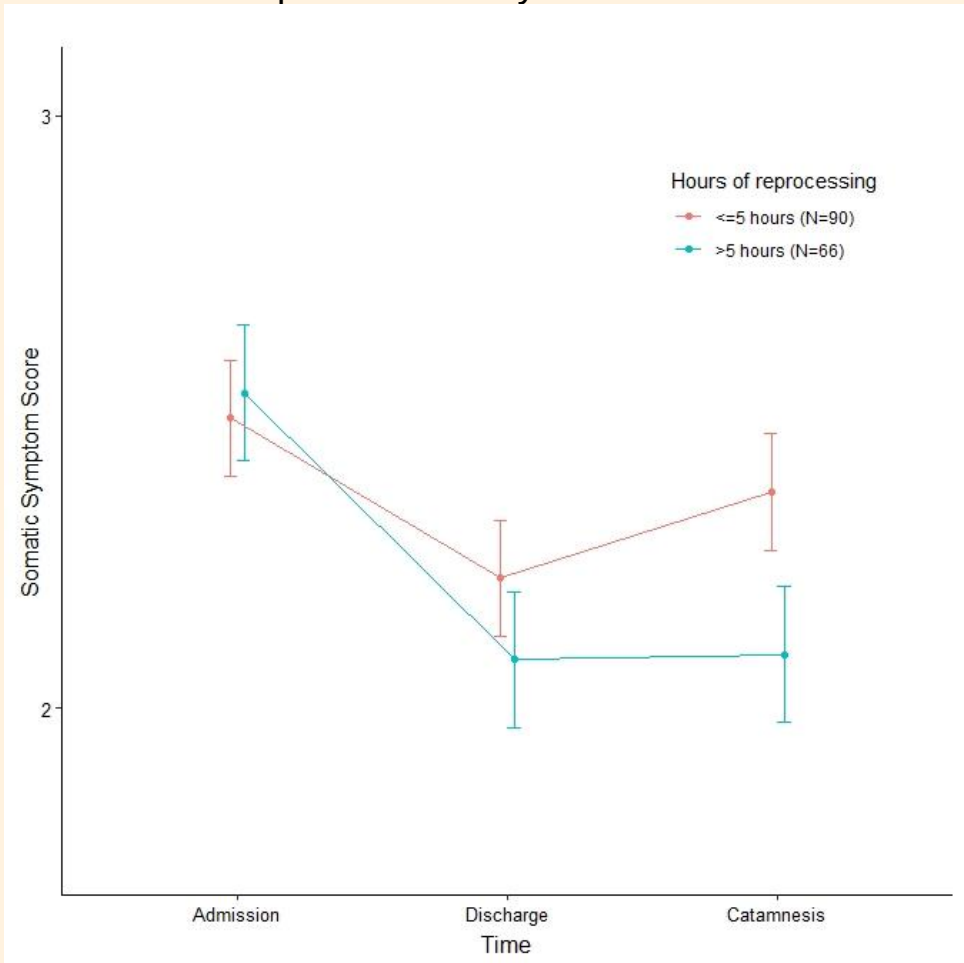
4

Implications for treatment

Implications for a better treatment?

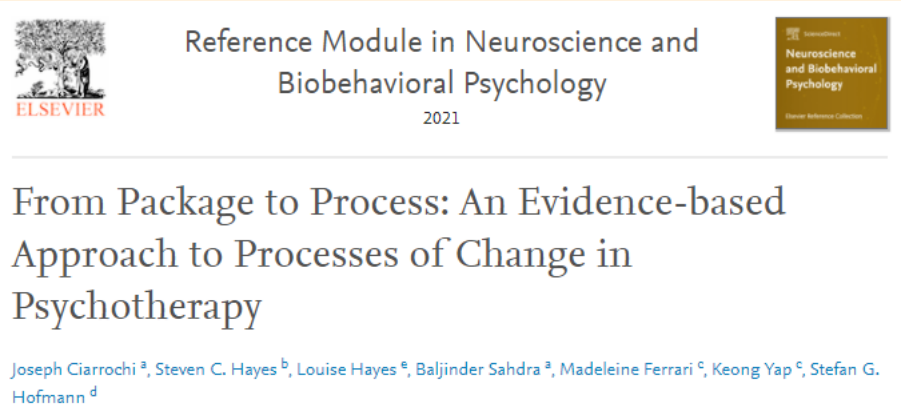
- Our intensive, trauma-focused approach is effective on average, also regarding somatic symptoms
  - No need to try to integrate evidence-based interventions for somatic symptoms
  - Might even make things worse as we'd lose precious time to process traumatic memories which predicts the long-term outcome of somatic symptoms
- Still, a subgroup of patients is in dire need of changes to our trauma-focused approach …
- What is needed is a **personalization of treatment**

Unpublished analysis of N=156 for this talk



Psychotraumatology of the future?

- “Imagine there are no therapy brands, it isn’t hard to do” (Hofmann, 2020)
  - Better focus on competences than traditions (Rief, 2021)
  - Better focus on evidence-based core ingredients like reprocessing of memories than brands like EMDR or PE (Ehring et al., 2014; Schnyder et al., 2015)
- Modular Treatment: Particularly in complex PTSD, symptoms should be targeted using a formulation based approach guided by symptom severity, preference to target these symptoms and readiness to change this symptom (Karatzias and Cloitre, 2019; Kratzer et al., in review)



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- Modular Treatment: Particularly in complex PTSD, symptoms should be targeted using a formulation based approach guided by symptom severity, preference to target these symptoms and readiness to change this symptom (Karatzias and Cloitre, 2019; Kratzer et al., in review)
- Focus on core mediators and moderators to develop process-based therapies (Hofmann & Hayes, 2019)
- “Building a Science of personalized Interventions for PTSD” (Cloitre, Cohen, & Schnyder, 2020)
  - One size fits all has failed (Cloitre, 2015)
  - Every single patient counts – for an idiographic perspective (Beltz, Wright, Sprague, & Molenaar, 2016; Molenaar, 2004)
- Real-Time Monitoring and Feedback to reduce dropout and nonresponse in particularly complex patients (Lambert, 2017)
- Get to know your most important ingredients: common factors
  - Learn how to repair ruptures in alliance (Muran, Eubanks, & Samstag, 2021)
  - Accept instability of motivation and crises in the treatment of PTSD as chances to learn
  - Learn from your patients and your errors (Chow et al., 2015)

Getting back to M.

- Apart from suicidality and self-mutiliation, chronic pain and iatrogenic substance abuse are core aspects of her complex sympatomatology
- In more than 20 psychiatric hospitalizations and multiple outpatient treatments, M. has again and again been treated with CBT with little to no effect
- **There is no “treatment of somatic symptoms in PTSD“ other than a treatment focused on the core of the traumatic experience and all its implications on emotion regulation, interpersonal difficulties, mindfulness deficits, negative self-concept, pain, …**

This is not to say that *later in treatment*, CBT techniques for somatic symptoms might become really helpful!

Getting back to M.

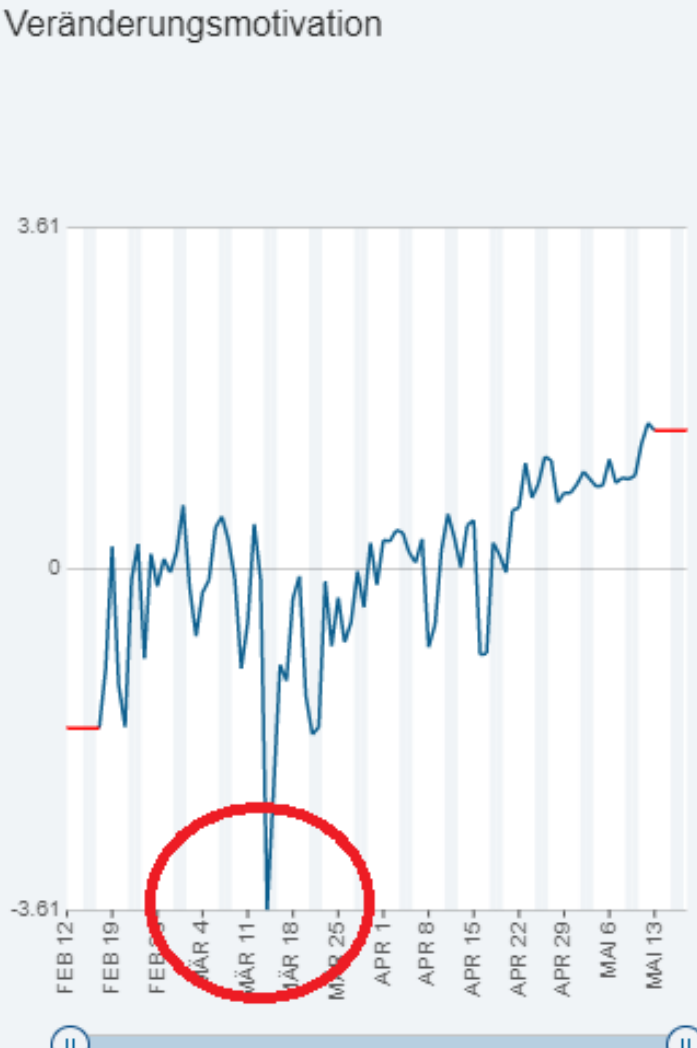
- M. needs respect and dignity and neither the psychological equivalent of a pill nor being rescued
- M. needs to survive, and she has to learn how to stop making things worse
- More than anything, M. needs a perspective how she can live a life worth living according to her values
- M. needs a realistic treatment plan and years of support
- Obviously, M. also needs a wash-out of medication

„The drugs don‘t work, they just make it worse.“ (The Verve, 1997)

Our exploratory results should be interpreted cautiously regarding causality and require replication. Other explanations and mechanisms of change are possible and should be investigated. E.g., even though long-term analgesic medication was increased or changed in only twelve cases (3.5%) during the course of treatment, whereas it was not prescribed at all in 139 cases (41.0%), kept constant in 115 cases (33.9%), reduced in 9 cases (2.7%), and discontinued in 64 cases (18.9%), it could still have played an important role in the reduction of somatic symptoms. Further interventional research with more rigorous randomized-controlled and/or dismantling designs is needed, as is the investigation of other possibly worthwhile treatment targets like shame or affective dysregulation (Ho et al., 2021; Kealy et al., 2018).

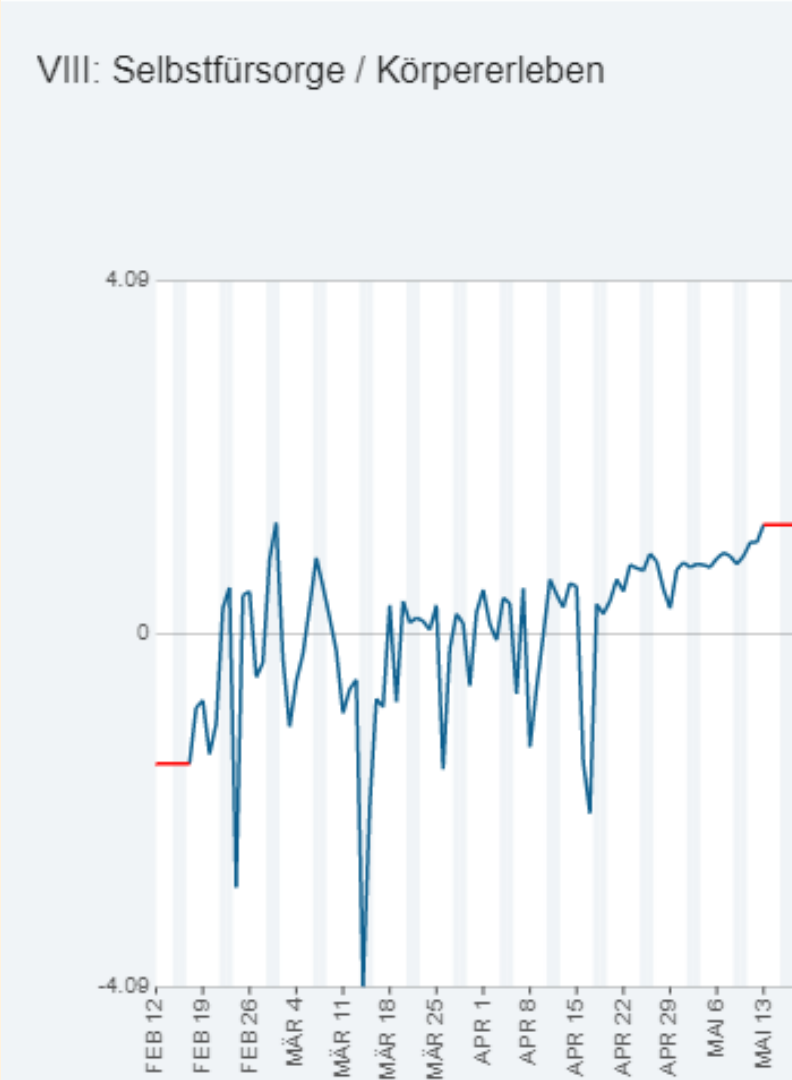
Getting back to M.

- More than anything, M. needs a perspective how she can live a life worth living according to her values
- **To get there, she will have to face many crises and sometimes, she will lose hope and motivation**



Getting back to M.

- More than anything, M. needs a perspective how she can live a life worth living according to her values
- To get there, she will have to face many crises and sometimes, she will lose hope and motivation
- **Stable changes in her ability to act with self-compassion won‘t come easy**

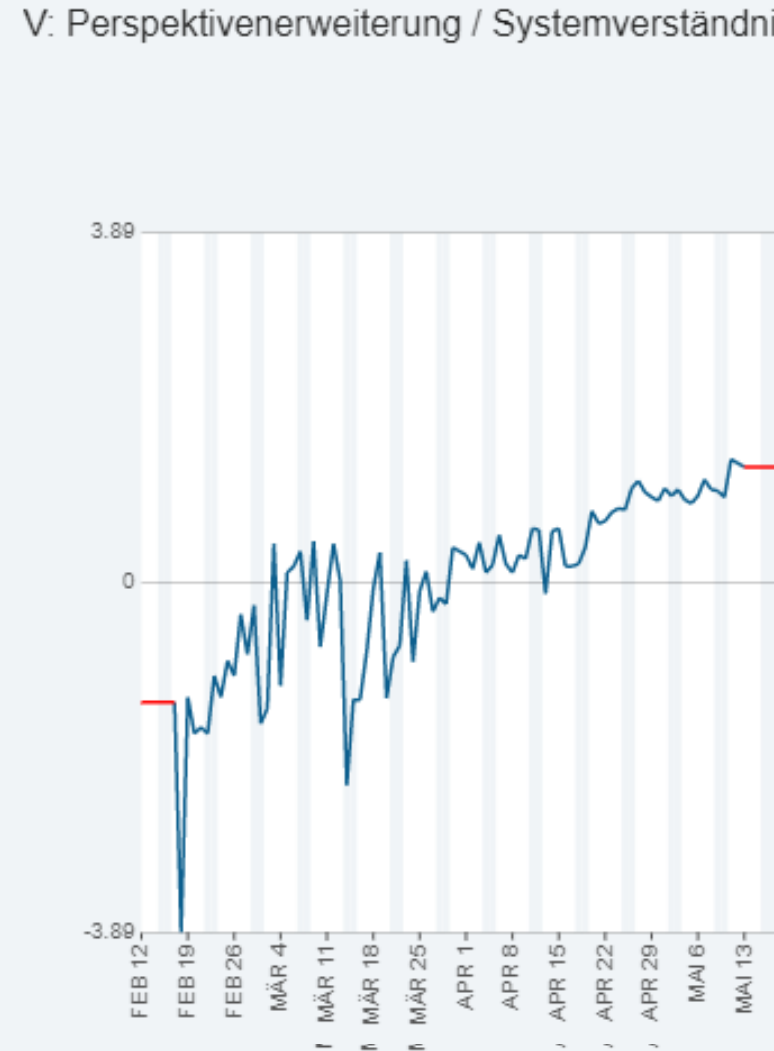


Getting back to M.

- More than anything, M. needs a perspective how she can live a life worth living according to her values
- To get there, she will have to face many crises and lose hope and motivation
- Stable changes in her ability to act with self-compassion and responsibility won‘t come easy
- **Never shall we accept that there is no hope for patients like M. to gain deep insights and to change their lives:**

„My body used to be my enemy. It‘s not my friend yet,
but I take care of it. It‘s like someone I have to get to know better. The pain is still often inbearable, but it helps me to realize what happend. Thank you for never losing faith in me.“

* After more than 30 hours of imaginal reprocessing with dissociative seizures, vomiting, paranoid states, hallucinations, submissive and sexualizing states, aggressive states, … Now: ACES!



Take Home Message

- **While the focus in PTSD criteria is largely on behavioural symptoms, it is often somatic symptoms that drive patients to seek medical help** (McFarlane & Graham, 2021) **Consequences are tragic and this has to stop!**
- **Posttraumatic somatic symptoms should be viewed and treated as inherently linked with the experience of the abuse, rather than a physiological derivative** (Tsur, 2020)
- **Particularly in complex PTSD, symptoms should be targeted using a formulation based approach guided by symptom severity, preference to target these symptoms and readiness to change this symptom** (Karatzias and Cloitre, 2019; Kratzer et al., in review)
- **A dynamical and flexible approach with monitoring and feedback should not be used to avoid reprocessing but helps to do *more reprocessing***

Stay safe and well!

Thanks!

Do you have any questions?

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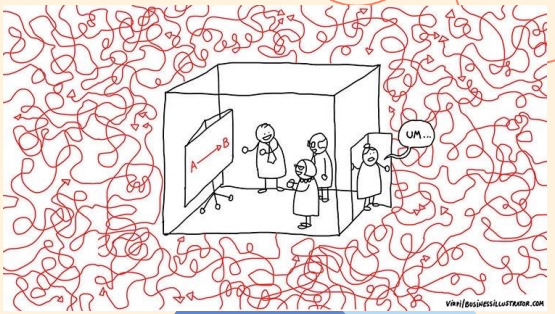

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