

Talking about trauma in treatment as usual:

*an exploratory study of relationship to outcome in therapy with
children and adolescents*

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Summary

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Title: Talking about trauma in treatment as usual: relationship to outcome in therapy with children and adolescents

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Background: Recommended and empirically supported treatments for children and adolescents with PTSD all have in common a tendency to focus on the youth's traumatic experiences, and engage the client in what we may label "trauma-talk", instances where the youth talks about what actually happened. While the number of studies on the effectiveness of specific trauma-focused treatment models are growing, little attention has been given to the effectiveness of trauma-talk in and of itself. In addition, few studies have examined the transportability of active ingredients in trauma-focused treatments to treatment as usual settings. In this study, the relationship of trauma-talk to outcome was examined with regards to the role of therapists in initiating talk about trauma; achievement of in-session emotional processing; and level of focus in therapy.

Methods: The study included 30 participants, aged 10-18 years old, in treatment as usual for PTSD. A variable was developed for emotional processing based on the presence of a drop in emotional activation across sequences with trauma-talk. An exploratory variable for level of focus in therapy was also developed conceptualised as the degree therapist interventions relate to the goals of therapy. PTSD symptoms was measured with CAPS-CA. 381 therapy sessions were coded for trauma-talk, emotional processing and focus in therapy. Relationships between variables were measured with t-tests, Pearsons' r , and Kendall tau. Mediation of trauma-talk by emotional processing was tested using bootstrapping of the indirect effect. Interaction effect of trauma-talk and focus was tested through calculating an interaction variable and multiple regression. Finally, path analysis was used to test the magnitude and significance of the hypothesized relationships of the different variables.

Results: Therapies that included more than 25 minutes of trauma-talk achieved on average a larger reduction in PTSD symptoms, but the difference was not significant. In general, the amount of trauma-talk was found to be low: average amount of trauma-talk per therapy was around 12 minutes, and maximum amount was about 38 minutes. Emotional processing was found to be strongly associated with symptom reduction, and also to mediate the relationship between trauma-talk and treatment outcome. The effect of therapist initiations on the extent youth talk about their traumatic experiences was found to be large. Further, focus in therapy was moderately associated with outcome, and no interaction effect between trauma-talk and level of focus was found. Finally, the results of the path analysis indicate that the model provides a good fit with data.

Conclusion: Overall, trauma-talk seems to play an important role in the treatment of traumatized youth. Specifically, it seems that the *how* of trauma-talk, rather than the *how much*, is of greater importance in terms of treatment outcome. Just talking about trauma may not be sufficient: rather, achieving in-session emotional processing, in the form of exposure to corrective information, may be necessary. It is also possible that there are threshold effects, and that more trauma-talk is needed to obtain a significant relationship with outcome. In addition, findings seem to suggest that avoidant strategies, a key symptom of PTSD, may make it unlikely that youth will talk about the traumatic events unless the therapist explicitly asks. Furthermore, findings suggest that focus in therapy may provide an alternative path to outcome which does not necessarily involve talking about the traumatic events. While further testing is necessary, the measure may seem to capture aspects of therapies that are relevant. Finally, further investigations should be conducted to strengthen our understanding of the relationship of trauma-talk to outcome, and improve the treatments delivered to traumatized children and adolescents in usual care.

Preface

When we began this project, the plan was to assess the relationship between the quantity of trauma-talk and treatment outcome. However, as we embarked upon listening and coding, it became apparent that measuring only the amount of trauma-talk was not enough to capture the richness of the material presented to us. In the encounter with the material new questions emerged, and at times we felt almost overwhelmed with inspiration and ideas. We returned to the literature to explore and expand upon our thinking, and after long discussions with our supervisors, and some twists and turns, a new direction was implemented. This led to the development of two new exploratory scales in addition to our original measurements. The project's workload consequently expanded substantially, yet both the process and the results were much more exciting.

At times, the project also proved to be challenging, time consuming and emotionally demanding. We listened to more than 500 therapy sessions, about 260 therapy sessions each, including double coding, training and cases that were later excluded. Listening to children's suffering, and to the details of their experience of horrific events, including severe accidents, domestic violence and sexual abuse, took its toll on us. Yet, we were also struck by the youths' courage and strength in their bid to overcome obstacles. This process has been a humbling experience for both of us. We would like to thank these brave children and adolescents, as well as their families, for their valuable contribution to research, and for sharing their thoughts, feelings and experiences. The therapists in this study are also deserving of acknowledgement. It has been highly educational to listen to different experienced therapists in their clinical work. Without these children and therapists, this unique opportunity to listen to real therapy processes and compile research would not have been possible.

We would also like to thank our supervisors, Silje Ormhaug and Tine Jensen. They have both shared generously with their time and knowledge, and we have greatly benefited from their expertise. Silje, thank you for your countless advice regarding methodology, theory, and for clear feedback on how to present our work in an orderly and comprehensible manner. You have continuously been available to us, answering e-mails during holidays and weekends. Tine, thank you for your enthusiasm and honest feedback. Your theoretical insights, passion for the field of

research on trauma and treatment for children is inspirational. We know that you both have had your concerns regarding the project's scale of work. Even though your concerns have been reasonable and frequently also shared by us, we appreciate that you have been open and supportive during the process.

This project would not have been possible to complete alone. Therefore, we would like to thank each other. Working as a team provided invaluable support, particularly during listening. We would also like to thank our friends and families for their support and patience with dinner cancellations and late work nights.

Our hope is that this study can be a small contribution in the field of research on treatment for children and adolescents suffering from PTSD.

Ingvild and Eirin

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1. Introduction

1.1. The relevancy of this study within the “bigger picture”

Every year, a substantial number of Norwegian children and youths are exposed to potentially traumatic events. While there is no national data that covers all kinds of potentially traumatic experiences, surveys of violence and sexual abuse show disquieting prevalence rates. In a survey of 4530 high school seniors, 21% of the students reported exposure to at least one episode of physical abuse from their caregivers, and 29% of the girls and 7% of the boys reported they had been sexually assaulted at some point in their life (Mossige & Stefansen, 2016). Looking at trends over time there has been a small reduction in physical abuse from caregivers, with a drop from 25% students reporting such incidents in 2007 to 21% in 2015. Closer scrutiny reveals that the reduction seems to be caused by fewer incidents of mild physical abuse, and that trends in aggravated physical abuse remain stable at about 6%. At the same time, trends in lifetime exposure to sexual assault has remained stable from 2007 to 2015 (Mossige & Stefansen, 2016). All of these events put children and adolescents at risk of developing severe mental health problems such as posttraumatic stress disorder (PTSD), anxiety, depression, conduct disorders, social problems, substance abuse and school-related problems (Dong, Anda, Dube, Giles, & Felitti, 2003; Gerson & Rappaport, 2013; Kilpatrick et al., 2003). A recent meta-analysis found that among children and youth exposed to trauma, about 16% develop posttraumatic stress disorder (PTSD) (Alisic et al., 2014). In clinical settings the rates are likely to be higher: research involving client populations of Norwegian child and adolescent mental health clinics found that 47% of the youth reported exposure to at least one traumatizing event and that 60% of these clients were found to report significant levels of posttraumatic stress symptoms (Ormhaug, Jensen, Hukkelberg, Holt, & Egeland, 2012). If trauma reactions remain unresolved, they are likely to have a lifelong, negative impact on psychological and social well-being (Anda et al., 2006; Judith A. Cohen, Mannarino, Murray, & Igelman, 2006; Dong et al., 2003; Kessler et al., 2010; Kilpatrick et al., 2003; McGloin & Widom, 2001).

Considerable progress has been made over the past two decades developing effective psychotherapeutic treatments for children and youth suffering from posttraumatic stress symptoms

(PTSS) and PTSD (Markus A. Landolt, Marylene Cloitre, & Ulrich Schnyder, 2017b). Among these treatment models, different specific ingredients such as developing a trauma-narrative (Deblinger, Mannarino, Cohen, Runyon, & Steer, 2011), and different common ingredients, such as forming a strong therapeutic alliance (Cloitre, Stovall-McClough, Miranda, & Chemtob, 2004; Eltz, Shirk, & Sarlin, 1995; Ormhaug, Shirk, & Wentzel-Larsen, 2015), have been identified as “active ingredients” that contribute to positive treatment outcome. Recommended and empirically supported treatments have in common a tendency to focus on the youth’s traumatic experiences (see e.g. ACAAP practice parameters 2010; NICE guidelines 2005; and Markus A. Landolt, M. Cloitre, & Ulrich Schnyder, 2017a). This is similar to what is found in recommended treatments for adults (Schnyder et al., 2015). Treatment models make use of techniques such as the creation of a trauma-narrative, prolonged exposure, narrative exposure and/or cognitive restructuring (Cloitre & Schmidt, 2015; J. A. Cohen, Mannarino, & Deblinger, 2006; Foa, Chrestman, & Gilboa-Schechtman, 2008; Schauer, Neuner, & Elbert, 2011). These techniques engage the client in what we may label “trauma-talk”, instances where the client talks about what actually happened. Using these techniques, the youth’s trauma is talked about in different ways: with different degrees of detail, length of time, and therapeutic purpose.

While research on the effectiveness of different ingredients that include trauma-talk has increased significantly over the past two decades, little attention has been paid to the effectiveness of trauma-talk in and of itself. As a result, not much is known about the usefulness of simply talking about one’s traumatic experiences in the presence of an empathic therapist, regardless of which other therapeutic techniques used or treatment protocol followed. In addition, little is known about what takes place in treatment as usual, or if the effectiveness of active ingredients within trauma-focused treatment protocols transport into treatment as usual settings. Studies have shown that the implementation of evidence-based practices in usual care tends to be a lengthy process, and that treatment as usual is altogether a very different operational environment from that of experiment group conditions in trials (Chorpita et al., 2002). Many therapists in treatment as usual settings may make use of trauma-focused treatment techniques. At the same time, therapists in real-life conditions are not obliged to follow treatment protocols, may make other clinical judgements than therapists trained in trauma-focused therapies and may face many competing demands. Little is known about the extent children and youth actually talk about their traumatic experiences in

treatment as usual and if talking about trauma leads to better outcomes relative to other therapies in these settings. These issues are of particular importance in terms of bridging the gap between what takes place in trials and what takes place in “real life”, and in terms of transforming knowledge about active ingredients within treatment protocols, into raised effectiveness of treatment offered as part of usual care.

1.2. The current understanding of posttraumatic stress disorder (PTSD)

Posttraumatic stress disorder (PTSD) may develop following exposure to a trauma, an extremely threatening or horrific event that is likely to cause pervasive distress in almost anyone, e.g. death, threatened death, actual or threatened violence, serious injury, or actual or threatened sexual violence. In DSM-5 (2013), the first diagnostic criterion for PTSD requires exposure to at least one such event in at least one of the following ways; direct exposure, witnessing the trauma, learning that a relative or close friend was exposed, or indirect exposure to aversive details. The second criterion requires that the traumatic event is persistently re-experienced, in at least one of the following ways: intrusive thoughts, nightmares, flashbacks or emotional distress or physical reactivity after exposure to traumatic reminders. In children, studies have shown that re-experiencing symptoms may take the form of re-enacting, repetitive play or frightening dreams without recognizable content (Scheeringa, Zeanah, Myers, & Putnam, 2003). The third criterion in DSM-5 is avoidance of trauma-related stimuli, such as trauma-related thoughts and feelings or trauma-reminders. The fourth criterion includes negative thoughts or feelings that began or worsened after the trauma, in at least two of the following ways: inability to recall key features of the trauma, overly negative thoughts and assumptions about oneself or the world, exaggerated blame of self or others for causing the trauma, negative affect, decreased interest in activities, feeling isolated or difficulty experiencing positive affect. The remaining criteria includes hyperarousal and reactivity that began or worsened after the trauma, in at least two of the following ways: irritability or aggression, risky or destructive behavior, hyper-vigilance, heightened startle reaction and difficulties concentrating or sleeping. These symptoms must have lasted for at least one month, and create distress or functional impairments. WHO’s diagnostic manual, ICD-10, also includes the main PTSD-criteria of exposure to a potential traumatic event, as well as symptoms of re-experience and avoidance (1992). The criterion of persistent negative moods and cognition

is, however not included. The hyper-arousal criterion is worded differently, including either the inability to recall partially or completely the traumatic events, and/or physiological sensitivity and hyperarousal.

A central theory for understanding PTSD is the cognitive model proposed by Ehlers and Clark (2000). The model informs the theoretical underpinnings of several treatments models that emphasize the necessity and benefits of talking about trauma. In this model, it is suggested that posttraumatic stress symptoms become persistent if the traumatic event is processed and stored in memory in a way that makes the person feel that the situation is a current ongoing threat rather than a time-limited event. The sense of threat arises from 1) “excessively negative appraisals of the trauma and/or its sequelae” and 2) “a disturbance in the autobiographical memory characterized by poor elaboration and contextualization, and strong associative memory and strong perceptual priming” (Ehlers & Clark, 2000, p. 319). Taken together, these cognitive processes will make affected individuals feel that they are still in danger and that the traumatic event has global and negative consequences for their future.

In attempts to understand how the sense of current threat arise in children, as well as the re-experiencing phenomenon, particular attention has been given to children’s memories of traumatic events. Theorists that posit a cognitive approach to PTSD in adults (Brewin & Holmes, 2003; Ehlers & Clark, 2000) contend symptoms indicate an underlying abnormality in the nature of trauma memories. The experience of trauma is, by definition, overwhelming, and may therefore interfere with attention and encoding of memory during the traumatic experience, resulting in memories with biased and reduced information (Brewin, 2014; Brewin & Holmes, 2003; Foa, Molnar, & Cashman, 1995; Foa & Riggs, 1993; van der Kolk & Fisler, 1995). Brewin has presented evidence from a cognitive neuroscience perspective that suggests “traumatic memories” are stored in a way that bypasses the hippocampus, the neural structure considered to be responsible for the encoding of memories within a temporal and spatial context (Brewin, 2014). The delinking of memories from time and space may account for the sensation of a threat taking place in the “here and now”. Brewin argues that these memories are “situationally accessible”. Poor elaboration within autobiographical memory (i.e., few associations with other stored information) render

trauma memories vulnerable to triggering by matching sensory cues, resulting in intrusive symptoms.

In a review of studies on the nature of children and adolescents' memories of trauma, Meiser-Steadman argues that Brewin's model is of explanatory relevance, and that like adults, children are likely to possess emotion-laden memories composed of sensory fragments, that are easily elicited by the reminders of the event (Meiser-Stedman, 2002). At the same time there are some important differences. From a developmental perspective, Salmon & Bryant (2002) argue that children's non-verbal and verbal memories may be affected by their linguistic development. In a study of children that had experienced an earthquake, Azarian, Lipsitt & Miller (1999) found that the very young children (age 2-3 years at time of trauma) had no verbal memories, but possessed nonverbal memories at the same rate as older children. The failure to create verbal representations of trauma does not seem to be eliminated with age: Brewin (2001) argues that "verbally accessible memories" of adults with PTSD are likely to be fragmentary and more biased to describing sensory rather than semantic aspects of what occurred (Brewin, 2001). The lack of verbal representation may result in considerable amount of trauma information remaining in the situationally accessible memory system outside the realm of language (Brewin, 2001). Both linguistic development, as well as the nature of how trauma memories are laid down in what Brewin describes as a dual representational systems, may cause children and youths to experience dysphoric emotions and problematic inner states that are unrepresented and verbally incommunicable. The verbalization of the traumatic event may therefore in some cases be a necessary first step in processing the experience.

In addition to trauma memory, Ehlers and Clark argue that maladaptive appraisals are responsible for the maintenance of PTSD (2001). This proposition has been corroborated by several studies (Dunmore, Clark, & Ehlers, 1999, 2001; Ehlers, Mayou, & Bryant, 2001; Halligan, Michael, Clark, & Ehlers, 2003; Salmon, Sinclair, & Bryant, 2007). Maladaptive appraisals may include thoughts about what took place, why it happened and the youth's own reactions, but also thoughts about the meaning of posttraumatic stress-symptoms (i.e. I will never be the same again); one self as a person (I am weak/I am guilty/I am not worthy); attachment to others (I have been betrayed, I am alone); and about one's general sense of safety (the world is an unsafe place)(Meiser-

Stedman, Dalgleish, Glucksman, Yule, & Smith, 2009). In understanding of how maladaptive appraisals contribute to the maintenance of the PTSD, theorists have found it necessary to expand upon learning theory. While theory of associative learning may explain the elicitation of intrusions, it provides a poor account of the attributions of meaning and how thoughts that are verbally represented inform cognitive processes. Building on Lang's theory that fear is a "program to escape danger" (1977), Foa and Kozak developed the concept of "fear structure" (1986; see also Foa, Steketee, & Rothbaum, 1989). They suggest that fear is represented as a propositional network in memory with information about what is feared, information about possible responses, as well as the meanings that the person attributes. Pathology arise from impairments in the network that processes fear-relevant information. Several studies have found that maladaptive appraisals mediate the relationship between initial reactions to a traumatic event and later posttraumatic stress; (Meiser-Stedman et al., 2009; P. Stallard, 2003; Paul Stallard & Smith, 2007). The role played by maladaptive appraisals seems to be particularly important in the maintenance of PTSD in young people. In a follow-up study of 59 children and youth, Meiser-Stedman et al. found that maladaptive appraisals are involved in the development and maintenance of posttraumatic stress symptoms over time, whereas other cognitive processes (e.g., subjective threat, memory processes) may have an effect only in the acute phase (Meiser-Stedman et al., 2009).

Several studies have found that maladaptive appraisals are maintained by avoidance, including problematic behavioural and cognitive strategies such as safety behaviours and thought suppression (Asarnow et al., 1999; Lengua, Long, & Meltzoff, 2006). Avoidance is both a diagnostic criterion of PTSD, as well as the mechanism that is thought to impede natural recovery rates. By avoiding stimuli that induces re-living, such as avoiding cars after a car-crash, youth also avoid learning that cars, most of the time, are safe. The attempts of children and youths to control the threat and symptoms prevents emotional processing and exposure to corrective information. In a systematic review of 27 studies of natural recovery rates from PTSD over the first 12 months post-trauma, Hiller et al. found little evidence of change in prevalence or symptom severity after 6 months, suggesting that PTSD is maintained, and that it is unlikely a child would lose a PTSD diagnosis without intervention beyond this point (2016). While the same review found that considerable natural recovery can occur up to 6-months post-trauma, Meiser-Steadman et al. found, in a randomized controlled trial (RCT) with 29 young people with PTSD, that early trauma-focused

treatment is significantly more efficient than waitlist control (2017). The evidence seems to indicate that at no point in time post-trauma, is it in the youth's interest to not receive empirically supported treatment, and that 6 months post-trauma the youth's condition is at high risk of becoming chronic bar intervention. Overall, simply overcoming avoidance, and talking about the traumatic events, seems to be critical first steps in the recovery of PTSD.

1.3. How talking about trauma may lead to improvement in therapy

Several therapies for young people with PTSD include a version of exposure with cognitive restructuring as key treatment components, including Trauma-Focused Cognitive Behavioural Therapy (TF-CBT), Cognitive Therapy for PTSD (CBT), Prolonged Exposure therapy for adolescents (PE), Narrative exposure therapy for children (KIDNET) and STAIR narrative therapy for adolescents (Cloitre & Schmidt, 2015; J. A. Cohen et al., 2006; Foa et al., 2008; Perrin et al., 2017; Schauer et al., 2011). E.g. TF-CBT includes the reconstruction of a trauma narrative to enable youth to recall traumatic experiences with reduced anxiety (e.g., intrusive trauma-related imagery, avoidance, and maladaptive cognitions) and to explore processes (e.g., cognitions, and emotions) related to the trauma and its impact (J. A. Cohen et al., 2006). There is strong evidence for the effectiveness of trauma-focused therapies in treating young children and youth with PTSD as demonstrated by systematic reviews and meta-analyses (de Arellano et al., 2014; Gillies, Taylor, Gray, O'Brien, & D'Abrew, 2012; Guterman et al., 2016; Leenarts, Diehle, Doreleijers, Jansma, & Lindauer, 2013; Miller-Graff & Champion, 2015; Morina, Malek, Nickerson, & Bryant, 2017).

Elaborating on the concept of exposure, Foa and Kozak (1986) propose that successful trauma-focused therapy involves correcting the pathological aspects of fear structures and that exposure to corrective information is the essence of emotional processing. They argue that emotional processing is the mechanism of change that makes exposure effective in treatment. Foa and Kozak propose that, regardless of the type of therapeutic intervention, two conditions are required for emotional processing to occur: firstly, following Lang (1977), they argue that the fear structure needs to be activated by means of fear-relevant information in order to be available to modification; secondly, they propose that corrective information incompatible with the pathological elements of the fear structure must also be available. The new information needs to be similar to what is represented in the fear network and at the same time inconsistent with the

pathological elements of the network (Asnaani & Foa, 2014). Emotional processing may serve to connect the fragmented memory to new information, such as “the threat is no longer on-going”, providing it with a temporal context, or with “it took place in a specific dark place” not any dark place, and as such providing it with a location (Halligan et al., 2003). During talk about the traumatic events, maladaptive appraisals about the trauma may also be uncovered. These appraisals may be updated and corrected. Foa and McNally (1996) suggests that updating may not necessarily alter the existing pathological structure, but rather form a competing structure that provides a more normal and realistic view, which may, if therapy is successful be more easily retrieved than the old pathological structure. For instance, “I believed it was my fault and I felt guilty, but now I understand it was not my responsibility”. When the memory of the traumatic event is activated, the simultaneous activation of corrected appraisals may serve to both reduce anxiety for feeling guilt as well as the intensity of the guilty feeling (in this example) and thereby reduce overall emotional activation. Finally, there are also studies that indicate that more concentrated trauma-talk could lead to sessions with deeper processing, resulting in improved results (see for instance Foa, Jameson, Turner, & Payne, 1980).

Emotional processing is a crosscutting therapeutic technique thought to be a core mechanism of change across a wide range of psychotherapeutic approaches (Whelton, 2004). This includes “Third Wave” CBT approaches such as Acceptance and Commitment Therapy (S. C. Hayes, Strosahl, & Wilson, 1999); psychodynamic approaches such as Intensive Short-Term Dynamic Psychotherapy (Davanloo, 1995); and experiential therapies such as Emotion-Focused Therapy (Greenberg, 2011). For example, within the psychoanalytical tradition, Varvin argues that the processing of anxiety associated with trauma may take place through increased symbolization (2003, p. 119). In a state where anxiety is activated, the therapist helps the client to increasingly represent inner states through thoughts and words, allowing the client to handle inner states differently. In the terminology of cognitive behaviourists it may be possible to argue that increased symbolization is similar to increased verbal representation of situationally accessible memory. The entering of new, verbally represented memory, may modify existing propositional networks. Once verbalised, memories may also be made available to cognitive restructuring and corrective information. While terminology and nuances may differ between different psychotherapy traditions, the crosscutting perspective on the validity of the technique of emotional processing is

relevant for understanding what may take place in treatment as usual. It is possible that therapists in treatment as usual may eclectically, or as an integral part of non-trauma focused approaches, make use of emotional processing of trauma-memories as a key therapeutic technique.

Understanding and detecting when emotional processing takes place in therapy is an important question for researchers on in-session processes. Foa and Kozak (1986) suggest three indicators. Firstly, clients show fear, indicating that the fear structure is activated, secondly, their reactions decrease gradually upon confrontation with feared images, objects, or situations and thirdly, their initial fear reaction at each exposure session decreases across successive sessions. Foa and colleagues have used several methods to examine the role of emotional activation in treatment of PTSD. One study operationalized emotional activation as facial fear expression during imaginal exposure. The study found that higher fear expression was associated with superior treatment outcome after Prolonged Exposure (Foa, Riggs, Massie, & Yarczower, 1995). In an examination of physiological indicators of emotional engagement, Pitman et al. (1996) found that peak heart rate during first session of imaginal exposure predicted a decrease in intrusions. At the same time, subjective reports of peak anxiety during imaginal exposure has not always been associated with better treatment outcomes (Rauch, Foa, Furr, & Filip, 2004; van Minnen A & M., 2002). Reviewing studies on emotional activation and treatment outcomes, Foa and McLean (2015) argue that overall findings support the hypothesis that emotional activation is associated with therapeutic recovery.

The above studies of emotional activation have used different instruments to assess levels of emotional activation, including instruments for assessing changes in physical expression, heart rates, or in scales based on self-reports. Observing changes in emotional activation in data where such measures are not originally built into the study design requires other methods. While therapists in trauma-focused therapies may ask clients' to report their levels of fear, typically with the help of a stress scale from one to ten (see for instance Sandy, Zandberg, & Foa, 2017), therapists in treatment as usual may be less inclined to directly ask clients. Clients self-reports are therefore not readily and consistently available. Some scales for observing patients' level of emotional activation have been developed in the literature: Mergenthaler (1999) has developed a scale of "emotional tone" through the use of content analysis of transcripts of sessions and an "emotional tone dictionary". Greenberg and Warwar has developed a Client Emotional Arousal Scale that assesses

the quality and intensity of client emotions on the basis of the evaluation of the client's degree of arousal from voice and body and the degree of restriction of expression (2000). The Client Emotional Arousal Scale holds some advantages: it is a more direct measure that observes both verbal and non-verbal expressions and it does not rely on the development of an emotional dictionary. Both measures have been used in studies confirming a relationship between a pattern of high and low activation and treatment outcome similar to the studies listed above. In a study of 20 patients in psychotherapy, Mergenthaler (1999) found that changes in emotional tone from high to low were associated with better treatment outcomes. In a study of 38 clients with depression, Carryer and Greenberg (2010) found that high arousal in some sessions, and low in others (compared with all high or all low), were also associated with better treatment outcomes.

1.4. Obstacles to talking about trauma in treatment as usual

No previous studies have looked at the extent clients talk about trauma in treatment as usual. There are however good reasons to suspect that there is less trauma-talk taking place in treatment as usual than in trauma-focused therapies that are implemented as part of RCTs. Children's avoidant strategies, a key symptom of PTSD, include attempts to avoid intense negative feelings such as fear, anxiety, shame or guilt associated with trauma. In therapy, these same strategies may manifest themselves as resistance towards talking about the traumatic events. In a study of 184 youth in treatment for PTSD, 42.9% showed resistance to treatment during the first three sessions (Berg, 2015). Comparing PTSD versus depression Berg found that the levels of active resistance are higher among youth with PTSD. In addition, there is evidence that clients' with traumatic experiences, particularly if they were subjected to abuse in their caring environment, may exhibit higher degrees of vigilance and less trust (Eltz et al., 1995). In the face of considerable resistance from clients, therapists also face constraints: in a study of 114 practitioners investigating barriers to screening for abuse, the highest rated reasons included other more pressing needs, concern that clients would find screening disturbing, or concern that questions about abuse may cause a deteriorating state in the client (Young, Read, Barker-Collo, & Harrison, 2001). In a qualitative study of 14 clinicians, investigating experiences in using a standard questionnaire about interpersonal violence, concerns about using the form included fear of harming the alliance and uncertainty about the usefulness of the form (Hultmann, Moller, Ormhaug, & Broberg, 2014).

Consequently, it is likely that clients' resistance as well as therapists' constraints may lead to more cautious therapists, and that therapists in treatment as usual are less proactive in initiating trauma-talk than therapists that follow trauma-focused protocols.

There may also be exceptions to this rule: in some therapies the youth, and not the therapist, may tend to initiate talk about the traumatic events. Research on *distress disclosure*, a term originally coined by Coates and Winston (1987), refers to a client's tendency to disclose personally distressing information across time and situations. Stiles (1987) suggests that an overload of psychological distress may lead some patients to overflow and disclose personal information, often in a rapid and slightly disorganized manner. Stiles proposes that disclosure's relation to psychological distress is comparable to fever's relation to a physical infection: the greater the distress, the greater the disclosure. Consistent with the fever model, Stiles, Shuster and Harrigan (1992) found that students with high anxiety traits, disclosed more when talking about an anxiety-arousing topic than students with low anxiety traits ($n=72$). Similarly, in a study with 29 youth in treatment with depression and a history of interpersonal trauma, Simpson (2013) found that the higher level of symptomatology and distress present at pre-treatment, the more frequently adolescents initiated talk about the trauma they had experienced. Further, Stiles (1987) argues that distress disclosure is part of a curative process. At least one study seems to confirm this hypothesis: in a study with 45 students in counselling, Kahn, Achter and Shambaugh (2001) found that students who have a tendency to disclose personally distressing information reported experiencing increased social support, a more stable sense of well-being and less susceptibility to negative emotions than students who have a tendency to conceal distress. They also found that higher levels of distress disclosure at intake was associated with a decrease in stress and symptomatology over the course of counselling. The finding may support the suggestion that client-initiated trauma-talk caused by high levels of psychological stress may be associated with improvement in therapy.

Further obstacles to talking about trauma in treatment as usual may include characteristics of the kind of treatments delivered. Several studies indicate that therapists in treatment as usual may prefer other approaches than that of manual based treatments or trauma-focused therapy. In a survey of 867 practitioners, 69% reported that they rarely or never use treatment manuals (Addis & Krasnow, 2000). In a qualitative study of 19 practitioner, hesitancy towards treatment manuals

was explained by a desire for a greater emphasis on the therapeutic relationship and the need for flexibility within treatment protocols (Nelson, Steele, & Mize, 2006). Efforts to characterize treatments found in usual care settings have indicated that treatment providers tend to favour client-centered, psychodynamic and family therapeutic interventions (Kazdin, Bass, Ayers, & Rodgers, 1990; Weersing & Weisz, 2002; Weisz et al., 2009). There is also a tendency to use a more eclectic approach, engage in a variety of therapeutic approaches and adhere less strictly to empirically supported treatment protocols (Santa Ana et al., 2008). Systematic and independent evaluation of the types of techniques used by clinicians in treatment as usual of clients with PTSD has not been reported in the literature. However, in a study of 25 clinicians delivering treatment as part of treatment as usual in RCTs on substance abuse, Santa Ana et al. found large discrepancies between what clinicians claimed they were doing and what independent raters observed they were doing (2008). Most surprising was the relative absence of interventions the clinicians had indicated they used frequently, including cognitive restructuring (Santa Ana et al., 2008). In a study following up 23 therapists three years after they had received training in CBT, Chu et al. found that therapists used parts of each protocol much more frequently than the protocol as a whole and used exposure exercises the least (Chu et al., 2015). Not all studies found that there are large differences between what takes place in test groups in trials and usual care. In a study of 110 clients treated in usual care for obsessive compulsive disorder, Abramowitz et al. found similar treatment outcomes to those reported in the test groups in RCTs (2000). However, in this study, all therapists in usual care delivered manualized versions of exposure therapy as part of the study requirements. In summary, therapist preferences in psychotherapy approaches, lower adherence to treatment protocols and the tendency to skip modules that include exposure, may contribute to relatively lower levels of therapist-initiation, which in turn may lead to relatively lower levels of trauma-talk in treatment as usual compared with trauma-focused therapies.

1.5. Level of focus in therapy may provide an alternative path to improvement

Substantial evidence supports efficacy of several specific psychological treatments of PTSD, though some controversy still mars the field in terms of identifying which, if any, are superior to the others. In the debate Benish, Imel and Wampold (2008) argue that all psychotherapies are equally good, given that they are *bona fide* treatments. According to Wampold et al. (1997) a treatment is bona fide if it fulfils the following criteria: firstly, the treatment must be delivered by a trained therapist and include an interaction in which the patient develops a relationship with the therapist and where treatment is tailored to the patient; secondly, the treatment must include a cogent rationale for the disorder, a treatment based on psychological principles (e.g. active ingredients such as exposure), and therapeutic actions consistent with the rationale. Benish et al. (2008) argue that RCTs that compare a treatment model with therapy as usual, or with therapies that are not described in publications, demonstrate the efficacy of treatment, but not superiority vis a vis other bona fide treatments. Ehlers et al. (2010, p. 269) argue that therapies that focus on the clients' trauma memories or their meanings are superior and that therapies that are not trauma-focused are either less effective or not sufficiently studied. Similarly, Asnaani and Foa (2014) argue that the lack of difference between bona fide trauma-focused therapies is caused by shared active ingredients, such as emotional processing and the capitalization of the ceiling effect in comparisons. Asnaani and Foa contend that differences in efficacy are likely to emerge in comparisons of trauma-focused therapies versus non-trauma focused therapies. In response to Ehler's, Wampold et al. (2010) argue that the unblinded rating of some treatments as trauma-focused and others as not, is problematic; and also that there is no differences in efficacy between treatments classified as trauma-focused and those that are not, when comparisons are restricted to treatments that are bona fide.

The essence of the bona fide concept that is of particular relevancy to this study, may be described by the level of focus in therapy. Level of focus may relate to the use of active ingredients based on psychological principles, as well as focus in therapy between therapeutic actions and a rationale. Wampold et al. use bona fide therapy as a categorical construct for assessing types of treatment delivered: either a treatment is bona fide, or it is not bona fide. A scaled measure that can be used to rate individual therapies, not only types of treatments, would allow investigation of

relationship to treatment outcome in treatment as usual. One previous study was identified that has looked at level of focus in therapy: investigating ‘therapeutic focusing’ in group therapy, Barlow et al. (1997) defined focusing as the degree to which a group-therapist’s interventions directed at a client related to the therapeutic goals generated for that specific client. Study results indicated that ‘therapist focusing’ is predictive of improvements in groups with trained therapists, but not in groups lead by non-professionals. This may suggest that ‘focusing’ only matters if therapists have therapeutic skills and knowledge of techniques that they may apply as part of the process of focusing.

Investigating the level of focus in therapy is different from observing the types of techniques therapists use, e.g. if they use cognitive, client-centred or psychodynamic techniques. For example, in treatment as usual, therapists’ tendency to place a greater emphasis on the alliance may suggest a relatively higher use of common techniques. This may typically include client-centred techniques, such as warmth, empathic listening, congruence and genuineness. It may also typically include supportive techniques, such as demonstrating support, emphasis on working together, communication of hope, and focus on the client’s strength (Watts, Turnell, Kladnitski, Newby, & Andrews, 2015). All of these techniques are used by a variety of therapies. Whilst both client-centred and supportive therapy are empirically supported and as such are bona fide therapies, the presence of techniques that are typical for these therapies does not in itself indicate that the therapy is a bona fide therapy (Barber, Stratt, Halperin, & Connolly, 2001; Benish et al., 2008). In example, Novalis, Rojcewicz and Peele (1993) argue that supportive therapy employs several techniques, such as promoting supportive therapeutic relationships, encouraging clients to use their support systems and coping skills. These techniques are used *within the rationale* of fostering independence, and reducing distress and behavioral dysfunctions of clients. If some therapies in treatment as usual make use of some client-centred and supportive techniques, but without any further rationale or connection between techniques and the kind of therapeutic change that is hoped to be achieved, it would seem that the therapy would have a lower level of focus than the count of techniques used would indicate.

Looking at treatment as usual it is possible to speculate that individual therapies may vary in terms of their level of focus. For instance, the use of more eclectic approaches and lower

adherence to treatment protocols in treatment as usual (Santa Ana et al., 2008) may result in a less potent mix of active ingredients and a poorer targeting of interventions towards treatment goals. Lower levels of focus may indicate for instance that there is a disconnect between ingredients and rationale. On the other hand, more eclectic therapy may also result in better tailored therapies and an optimized selection of active ingredients for the client in question. Although a lack of literature on level of focus in therapy is noted, there is at least one study of relevance with regards to what may take place in treatment as usual: in a study of 191 children in usual care, Garland et al. (2010) investigated the kind of strategies used by therapists, as well as the degree of intensity in implementation. Intensity was measured by looking at both the time and the thoroughness with which a strategy was pursued. For instance, a low intensity rating of a strategy called ‘problem-solving skills’ could reflect the generation of an alternative solution, but only for one particular problem, and in a fleeting or cursory manner with limited follow-through. A high intensity rating could reflect a thorough approach addressing multiple steps in problem solving and generalization to other problems. The study found that almost half of sessions did not include high intensity delivery and concluded that overall usual care was characterized as reflecting great breadth in strategies, but little depth in therapeutic approaches.

In this study, level of focus in therapy is defined as the degree therapist interventions relate to the psychological change that the therapy aims to achieve, assuming that the goal of therapy is made in agreement with the client and relevant to the client’s symptoms. A distinction is made between evidence-based practice and empirically supported treatments. Evidence-based practice is the integration of the best available research with clinical expertise in the context of patient characteristics, culture, and preferences (APA, 2006). On the other hand, empirically supported treatments describe treatments that have attained a certain threshold of research evidence from RCTs (Chambless & Hollon, 1998). In this study, the concept of focus in therapy should be interpreted in the context of evidence-based practice. In addition to investigating relationship to treatment outcome, the development of a measure of focus in therapy may allow for the investigation of interaction effects with trauma-talk. An interaction effect would indicate that there is an added value of trauma-focused ingredients to therapies with high levels of focus, suggesting that in treatment as usual, therapies where the youth’s trauma is talked about, may be superior.

With regards to the bona fide criteria listed by Wampold that are not covered by the concept of focus in therapy, it is deemed as likely that most of these criteria are adequately met in this study sample: all therapists in this sample were ‘trained’ and all were instructed to provide the treatment they thought would be most beneficial to the client. In terms of the criteria of a ‘patient-therapist relationship’, a study by Ormhaug (2015) using the same original sample as this study, found that the alliance in treatment as usual was comparable to that of the test-group. Because of the instruction given to therapists it is assessed as likely that therapists ‘tailored treatments to the clients’. With regards to ‘a cogent rationale of the disorder’, it is expected that all psychologists in the therapist group are familiar with research on the causes and characteristics of PTSD as part of their basic training. Educational therapists and social workers in the therapist group all work in child and adolescent mental health clinics, and it is therefore also deemed as likely that they have as a minimum, a basic evidence-based understanding of PTSD.

1.6. Our research questions

The main aim of this study was to understand more of trauma-talk and how trauma-talk may be related to treatment outcome in treatment as usual with traumatized youth. In particular, we wanted to investigate the role of client's trauma talk, whether the amount and/or concentration of trauma talk is associated with symptom reduction. Further, we wanted to investigate the relationship between the role of therapist initiation and prevalence of trauma-talk. We also wanted to investigate the relationship between emotional processing and symptom reduction, and whether the level of focus in therapy was related to better outcome. Finally, in an attempt to see how these elements are related, we wanted to test a path model for treatment outcome.

The following research questions were investigated:

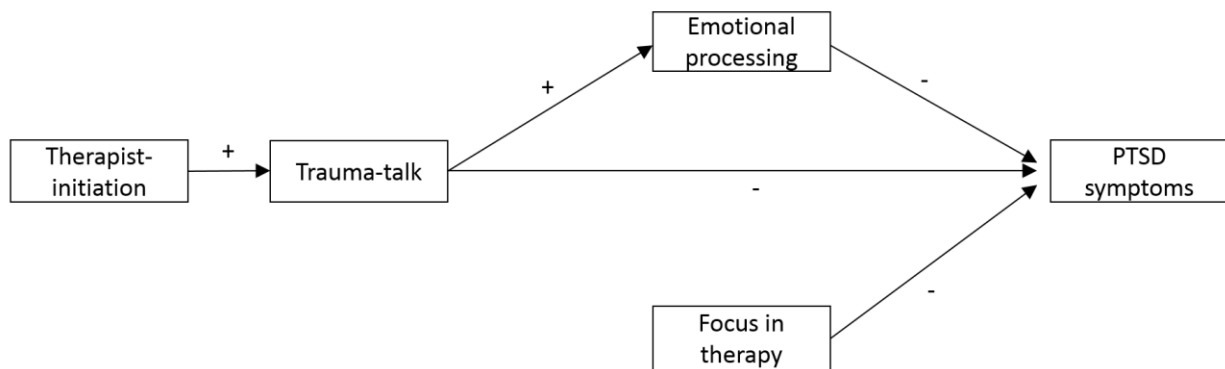
1. Is there a relationship between the total seconds clients talk about their traumatic experiences in therapy and symptom reduction in PTSD? Based on theories of PTSD we predict that more trauma-talk is associated with a reduction of posttraumatic stress symptoms. We also predict that more concentrated trauma-talk is associated with fewer posttraumatic stress symptoms, controlling for the total seconds of trauma-talk.
2. Is there a relationship between therapist initiation of trauma-talk and the amount of trauma-talk in therapy? Inferring from research on traumatized youth's avoidant strategies, we predict that more therapist initiations are associated with more trauma-talk.
3. Is there a relationship between emotional processing and symptom reduction in PTSD? Based on the empirical evidence in support of trauma-focused treatments that include emotional processing, we predict that emotional processing is associated with fewer posttraumatic stress symptoms. We also predict that emotional processing mediates the relationship between trauma-talk and symptom-reduction.
4. Does the level of focus in therapy provide an alternative path to improved treatment outcome? Drawing on the theory of bona fide treatments, we predict that there is an association between higher levels of focus and fewer posttraumatic stress symptoms. Based on the high level of focus in therapy between the causes of PTSD and the active ingredients in trauma-focused treatment, we also predict that there is an interaction effect between

trauma-talk and level of focus in therapy associated with fewer posttraumatic stress symptoms.

5. Is there a relationship between the variables as depicted in the below path diagram (see Graph 1)? The diagram hypothesizes that more therapist- initiations is associated with more trauma-talk; more trauma-talk is associated with fewer posttraumatic stress symptoms; emotional processing mediates the relationship between trauma-talk and symptom-reduction; and that higher levels of focus in therapy is associated with fewer posttraumatic stress symptoms.

FIGURE 1

Path diagram with hypothesized causal connections



2. Methods

2.1. Sample

2.1.1. Original study

The data in this study is derived from a randomized effectiveness study comparing trauma-focused cognitive behavioural therapy (TF-CBT) with treatment as usual (TAU) (Jensen et al., 2013).

The original study consisted of youths between the age of 10 and 18, who had been referred to one of eight community mental health outpatient clinics in Norway between April 2008 and February 2011. To be included in the original study the youths had to have experienced at least one traumatic event in addition to suffering from clinical levels of posttraumatic stress symptoms/PTSS. The exclusion criteria were acute psychosis, suicidal behaviour or the need for an interpreter.

Trauma experience was assessed by a checklist. This checklist included: (a) severe accidents, (b) natural disaster, (c) sudden death or severe illness of a person close to the child, (d) extremely painful or frightening medical procedures, (e) violence or threats of violence outside the family, (f) robbery or assault, (g) kidnapping, (h) witnessing violence outside the family, (i) witnessing violence within the family, (j) physical abuse within the family, (k) sexual abuse outside the family, (l) sexual abuse within the family, and (m) other frightening or overwhelming experiences (Jensen et al., 2013).

Youths reporting exposure to one or more of the checklist events were assessed for PTSD using the Child PTSD Symptom Scale (CPSS, Foa, Johnson & Treadwell, 2001). Out of the 200 youths that scored above the established cut-off of 15, having at least one symptom in each of the three PTSD symptom criteria (re-experiencing, avoidance and hyper-arousal), 156 agreed to participate in the study. After the initial assessments, participants were randomized to receive either TF-CBT or TAU. The PTSD symptoms were reassessed post-treatment (T3) in both TF-CBT-group and the TAU-group, approximately after 15 therapy sessions.

2.1.2. Study sample

The TAU-group in the original sample consisted of 77 participants and all therapy sessions were audio recorded. For this study, a strategic sample was selected to secure a wide range. This selection started with examining the 20 participants with the best outcome (responders) and the 20 participants with the poorest outcomes (non-responders), as measured by the reduction of posttraumatic stress symptoms from pre-treatment (T1) to post-treatment (T3). Every recorded session from each therapy up until they were measured at T3 were listened to and coded for trauma-talk and focus. Those cases who had only 5 sessions or less were excluded, and also cases with less than 50% recordings of the sessions. After the exclusion, the sample included 30 cases with a mean of 12.7 ($SD = 3.10$, range = 4–18) recorded sessions before T3. This means a total of 381 coded therapy sessions of 45-60 minutes each. In the final sample, 18 participants (60%) belong in the responders-group, 12 participants (40%) in the non-responder group. The statistical analyses are based upon these 30 therapy cases.

Among the participants, 23 were girls (76.7%) and 7 were boys (23.3%). They were on average 14.5 years old. Participants reported exposure to an average of 3.5 different types of trauma ($SD = 1.9$, range 1-8). The following events were reported as the “worst event”: 33.3% ($n = 10$) physical abuse within the family, 20% ($n = 6$) violence or threats of violence outside the family context, 20% ($n = 6$) sudden death or severe illness of a person close to them, 16.7% ($n = 5$) sexual abuse outside the family, 3.3% ($n = 1$) witnessing violence within the family, 3.3% ($n = 1$) extremely painful or frightening medical procedures and 3.3% ($n = 1$) sexual abuse within the family. In addition, participants reported exposure to witnessing violence outside the family, severe accident, robbery or assault, natural disaster, kidnapping as well as other frightening or overwhelming events.

2.1.3. Treatment

The TAU-therapists ($n = 21$) were not instructed in any particular way, but were asked to provide the treatment they thought would be most beneficial to the client and to carry out treatment as they normally would do. In the sample used in this study the therapists treated on average 1.4

participants. The therapist group consisted of 46.7% ($n = 14$) psychologists, 26.7% ($n = 8$) educational therapists 23.3% ($n = 7$) social workers, and 3.3% ($n = 1$) children's welfare worker. In the therapist group 53.3% ($n = 16$) describe their theoretical orientation as psychodynamic, 20.0% ($n = 6$) as cognitive behavioural, 16.7% ($n = 5$) as family-systemic, and 3.3% ($n = 1$) did not report theoretical orientation. On average, therapists had 16.4 years of experience ($SD=13.1$, range = 2–40).

From the original sample, two to three therapy sessions were randomly selected from each TAU-therapist ($n = 81$ sessions) and coded according to the Therapy Process Observational Coding System—Strategies Scale (TPOCS-SS) (McLeod & Weisz, 2010). The results from that study showed that the main strategies used in the TAU condition were client-centered (present in 92.6 % of the sessions, $\alpha = .71$) and psychodynamic strategies (present in 45.7% of the sessions, $\alpha = .64$). Other strategies observed were family therapeutic interventions in 35.8% of the sessions ($\alpha = .75$), cognitive strategies in 30.9% of the sessions ($\alpha = .72$), and behavioral strategies in 19.8% of the sessions ($\alpha = .79$). (Jensen & Ormhaug, 2016).

2.2. Measures

2.2.1. PTSD symptoms

The outcome measure in this study is the change in posttraumatic stress symptoms from pre-treatment to post-treatment. Posttraumatic stress symptoms were measured with the Clinician-Administered PTSD Scale for DSM-5 – Child/Adolescent (CAPS-CA). CAPS-scores were measured pre-treatment (T1) and post-treatment (T3). The CAPS-CA is a structural clinical interview suitable for children and adolescents younger than 18 that measures trauma exposure plus the frequency and intensity of the 17 DSM-IV-defined symptoms of PTSD (Nader et al., 1996; Nader et al., 2004). The symptoms' impact in terms of distress and impairment are also assessed, as well as associated features, for example survivors guilt, shame, and dissociation. The items are scored on a 5-points frequency scale ranging from 0 (*none of the time*) to 4 (*most of the time*) and 5-points intensity rating scales from 0 (*not a problem*) to 4 (*a big problem, I have to stop what I am doing*) assessing the past month. The scores are based on both the clients' answers, as well as

clinical judgment during the interview. In the original sample, the total scale has a satisfactory internal focus in therapy ($\alpha = .90$), as does the DSM-IV defined tripartite model (re-experience: $\alpha = .89$, avoidance: $\alpha = .77$ and hyper-arousal: $\alpha = .79$)(Jensen et al., 2013).

2.2.2. Trauma-talk

Trauma-talk is the time spent in therapy talking about the client's traumatic experiences. The measure is the total amount of seconds with trauma-talk taking place in all sessions between T1 and T3. For content to be coded as trauma-talk in this study, it must be linked directly to a traumatic event. To state simply that "something happened", e.g. "I used to be beaten", without portraying what actually happened, was not defined as trauma-talk. Similarly, stating that "My dad went to jail for beating up my mum", was neither coded as trauma-talk. The youths in these examples are stating that the traumatic events did happen and touch upon the content, but without sharing more details about what really happened and therefore lacking the exposing component believed to be an effective ingredient shared by most trauma therapies. A fundamental requisite of trauma-talk demands that the spoken content refers to what actually happened, e.g. "I must have been 11 when he first punched me and it was just after I came home late from practice". Trauma-talk is the distinction between basic informative speech and that of a more involved and descriptive content. In the above example, we that a client has been beaten by her father for the first time when she was 11, after she came home too late. The trauma-talk is coded from the time the therapist initiates a direct reference to the trauma content, e.g. "how did your father hit you, with a flat hand or a fist?" Or, when the client begins talking about the event, e.g. "I remember one time my parents were fighting, we were standing in the back yard, my dad suddenly called my mum a fat cow and just punched her in the face". The clients' emotions during the traumatic event reveal another level of exposure to the traumatic event, e.g. T: "How did you feel when he hit you? P: "I felt scared and sad." This is also coded as trauma-talk.

The interrater reliability for trauma-talk was high (ICC = .99). In addition, three related measures were coded: "seconds of trauma-talk per session" (ICC = .95), "session with most trauma-talk" and "number of sessions per therapy that included trauma-talk" (ICC = .97).

2.2.3. Therapist-initiation

For every sequence of trauma-talk, it was coded who initiated the trauma-talk: the therapist or the client. Therapist-initiation is the count of times the therapist initiates trauma-talk, or attempts to initiate trauma-talk. In order for the trauma-talk to be coded as therapist-initiated, the therapist has to make direct reference to the traumatic event, for example by a direct question, e.g. “what do you remember from the night of the assault?” Other direct references to the actual traumatic event made by the therapist is also coded as therapist-initiated, e.g.: “your mum told me that you were beaten up by some older boys last year. That must have been a very scary experience for you”. Sometimes the client does not want to talk about the traumatic events. The therapist may ask: “I understand that your father took an overdose, and that you were the one who found him, would you mind telling me a little about that?” The client may respond: “yes, I do mind, and I do not want to talk about it.” These instances were also coded as therapist-initiated, even though no trauma-talk took place following the initiation. Interrater reliability of therapist-initiated was acceptable (ICC=.86).

2.2.4. Emotional processing

Emotional processing is a scale based on raters’ assessments of the intensity of clients’ expressed emotions during trauma-talk (also see Table 1, p.32). The scale aims to capture the a drop in emotional activation during trauma-talk, from one session to the next, indicating the presence of emotional processing (Foa & Kozak, 1986). Emotional processing is divided into two parts: first, emotional activation was assessed per session that included trauma-talk using the Emotional Activation Scale (see Appendix A for a scoring form and list of criteria). The Emotional Activation Scale is a 5-point that was developed for the purpose of this study, and is an abbreviated version of the Client Emotional Arousal Scale (Greenberg & Warwar, 2000). The moment of peak intensity during trauma-talk was rated. The basis of assessment of emotional activation include the client’s degree of activation from voice and the degree of restriction of expression. In this rating, an “emotional voice” is characterized by an overflow of emotions into speech patterns (Carryer & Greenberg, 2010). Emotional voice is indicated by irregular patterns of accentuation, an uneven regularity of pace, heavy breathing and the presence of sighs, vocal tremors and unexpected endings of sentences and words suggesting accessibility to feelings. In cases where therapists’

asked clients to self-report their levels of activation during trauma-talk, this information was also used to inform scoring.

Emotional activation ratings are based on a 5-point scale, where upper levels indicate higher activation intensities, lower levels indicate restriction of emotional expression, and Level 2 is considered to be baseline expected emotional expression. For example, 1 = Client does not express emotions. Voice or gestures do not disclose any emotional activation; 3 = Activation is moderate in voice. Emotional voice is present; ordinary speech patterns are moderately disrupted by emotional overflow as represented by changes in accentuation patterns, unevenness of pace, and changes in pitch. Although there is some freedom from control and restraints, activation may still be somewhat restricted; 5 = Activation is extremely intense and full in voice and body. Usual speech patterns are completely disrupted by emotional overflow. Activation appears uncontrollable and lasting, and there is a «falling apart» quality. Interrater reliability was high (ICC=.84).

In addition, the emotional processing score was calculated: among sessions with trauma-talk, the highest emotional activation score was identified, as well as the lowest score succeeding the highest score. Emotional processing is the difference between the highest score and the lowest succeeding score. Cases without any trauma-talk, or no scores succeeding the highest score, were rated 0.

2.2.5. Focus in therapy

Focus in therapy is an exploratory 5-point scale based on raters' qualitative assessments (see also Appendix B for a scoring form and list of criteria). It aims to measure the degree therapist interventions relate to the psychological change that the therapy aims to achieve. The scale operationalises the concept of focus by looking at 1) the intensity in the delivery of interventions. Intensity was measured by looking at both the time and the thoroughness with which a strategy was pursued (Garland et al., 2010). The scales also considers 2) the range of interventions of therapist. The list of specific interventions is open-ended, and includes all therapeutically intended tasks engaged in during sessions, such as specific ways of exploring topics, thoughts or emotions, exercises such as stabilization exercises, drawing or the use of play, the use of homework, and so on. Interventions may also include systemic therapy interventions, such as working with the

network around the client; cognitive techniques, such as identifying and addressing maladaptive appraisals; psychodynamic techniques such as interpretation of transference; or client-centered techniques such as focusing on the patient's resources. Moreover, focus in therapy examines 4) the clarity of the goals in therapy, and finally, 5) if the interventions seem strategic for achieving the goals.

The scale is scored from 1 to 5, where 1 = very low intensity and narrow range of interventions very unclear goal(s), and choice of interventions do not seem strategic for achieving the goals; and 5 = very high intensity and broad range of interventions very unclear goal(s), and choice of interventions do not seem strategic for achieving the goals. In 20 therapy cases, all individual sessions were coded for level of focus. In 10 therapies 3 randomly selected sessions were coded for level of focus. The overall level of focus for the therapy case was computed by calculating the mean based on the scores from individual sessions. The interrater reliability of the 5-point Focus in therapy scale was high ($ICC = .96$).

2.3. Procedure

2.3.1. Training

All therapies were coded by the two authors. At the beginning of the project, both underwent thorough training in the coding methods for trauma-talk. As an initial test trial, the coders listened and coded individually to six therapy sessions to quantify the amount of trauma-talk. These sessions had been coded and transcribed by a former student in a pilot study on the behalf of NKVTS. The two individual trainee coders compared their results from the training sessions with each other and with the pilot coding. As a result, the foundations regarding how to define trauma-talk in future coding sessions was established. Moreover, this study developed a slightly broader definition of trauma-talk than that used in the original pilot coding, including the therapists' direct reference to the traumatic events. Subsequent training included training on rating focus in therapy and emotional activation. Training consisted of double-coding four sessions from two therapies. Discrepancies in coding were discussed, and scoring criteria were refined.

The therapy cases were randomly distributed between the coders, starting with 10 cases each. These cases included the ones already coded in the pilot. These cases were re-coded in line with the study's broader definition of trauma-talk as well as coded for other measures include in the study. Upon completion of the coding from the first therapy cases and satisfying interrater-agreement was achieved, the rest of the sample was distributed ($n = 30$). In addition, a single therapy case from the TF-CBT treatment group, randomly selected, was coded for trauma-talk, for purposes of obtaining an estimate of the amount of trauma-talk taking place in TF-CBT. This case was not included in the data-set.

2.3.2. Coding

Raters were blind to the outcomes. They did not know clients' pre- or post-treatment scores while listening to audio-recordings and conducting coding. To measure the interrater reliability the coders double-coded 3 of each of the coders' therapy cases, totaling six therapy cases, selected by drawing lots. All the sessions in these cases were included. The separate coding results from these six cases were used to run reliability tests, completed by the end of the coding process.

2.4. Statistical analyses

2.4.1. Initial analyses

Preliminary analyses included assessments of normal distribution of variables, including the use of histograms for visual assessments, interpretations of skewness (symmetry of distribution), kurtosis (clustering at tails of distributions) and the Shapiro-Wilk test of normality (comparing the scores in the sample to a normally distributed set of scores with the same mean and standard deviation) (Field, 2013). Outliers will be defined by $1.5 \times$ interquartile range. Descriptive analyses included reporting means, standard deviations and range of variables included in the study.

2.4.2. Testing of relationships between two variables

Comparisons between groups were computed using independent sample t-tests. Hedges' g was used for estimating size of effects. Compared with Cohen's d Hedges' g provides correction for small samples ($n < 50$). Correlations between variables were investigated with Pearson product-

moment correlation coefficient. Following Cohen (1992), sizes of effects were defined as a “small” effect when at least .10; a “medium” effect when at least .30; and a “large” effect when at least .50. In assessments of correlations when assumptions of normality were not met, Kendall tau rank correlation coefficient was used, as well as bias-corrected and accelerated (BCa) Bootstrap confidence intervals with 10,000 iterations.

2.4.3. Mediation and interaction

Mediation, the process through which an independent variable exerts its effect on a dependent variable via a third variable, was assessed through Bootstrapping of the indirect effect and the Sobel test. Calculating confidence intervals Bootstrap with 10,000 replications were used. Bootstrapping allows for testing of mediation even if the path from the independent variable and the dependent variable is not significant (A. F. Hayes, 2009). The null hypothesis of no indirect effect is tested by determining whether zero is inside of the confidence interval. The Sobel test is a specialized t-test that provides a method to determine whether the reduction in the effect of the independent variable, after including the mediator in the model, is a significant reduction and therefore whether the mediation effect is statistically significant. The completely standardized indirect effects were calculated to estimate effect size (Preacher & Kelley, 2011).

In calculating interaction effects, (where the effect of one of the variables differs depending on the level of the other variable) continuous variables were centered using grand mean centering. This allowed interpretation of the unstandardized coefficients in terms of change in the scale of the dependent variable, PTSD symptoms. Heteroscedasticity was controlled through generating standard errors using the HC3 estimator available in PROCESS. An interaction variable was computed through multiplying the coefficients of the dependent variables and a regression analysis was conducted with the independent variables, the interaction variable and the dependent variable (Field, 2013). The significance of the relationship was assessed through BCa Bootstrap, 10,000 iterations.

2.4.4. Path analysis

Path analysis was used to provide estimates of the magnitude and significance of the relationships illustrated in the path diagram (see Graph 1). Path analysis is an extension of multiple regression which holds two main requirements: all causal relationships are one-directional, and variables must have a clear time-ordering. Path analysis, in contrast to structural equation modelling (SEM), does not include any latent variables, only observed. Pearsons' r are used as basis for calculating direct and indirect effects. Critical ratio are used to estimate significance of paths. Critical ratio are obtained by dividing the covariance estimate by its standard error. Using a significance level of 0.05, any critical ratio that exceeds 1.96 in magnitude would be called significant (Arbuckle, 2012). Fit refers to the ability of a model to reproduce the data (i.e., usually the variance-covariance matrix). A good-fitting model is one that is reasonably consistent with the data and so does not necessarily require respecification. Model fit was tested using the root mean square error of approximation (RMSEA). It is suitable for small sample sizes. RMSEA analyzes the discrepancy between the hypothesized model, with optimally chosen parameter estimates and the population covariance matrix (independence model). The RMSEA ranges from 0 to 1, with smaller values indicating better model fit. A value of .06 or less is indicative of acceptable model fit (Hu & Bentler, 1999). One value for level of focus in therapy was missing, and was calculated using means and intercepts.

2.4.5. Statistical programmes

Path analysis was computed using the statistical software IBM SPSS Amos Graphic, which is a programme designed for conducting structural equation modelling. Mediation and moderation was conducted using PROCESS syntax, which is an observed variable path analysis modeling tool for SPSS and SAS for single-step analyses, produced by Andrew F. Hayes.¹ All other analyses were conducted using IBM SPSS 24.

¹ For a downloadable version free of charge, as well as more document information, see www.processmacro.org.

3. Results

3.1. Preliminary analyses

The graphical representations of the data (histograms and QQ-plots), examination of skewness, kurtosis and the Shapiro-Wilk test of normality ($p > .05$ indicates that the distribution of the variable was not significantly different from a normal distribution), indicated that PTSD symptoms was normally distributed, slightly negatively skewed (-.21) and had a slightly negative value for kurtosis (-.17) ($p = .992$). Therapist-initiation was positively skewed (.70), but kurtosis was closer to zero (.15) ($p = .028$). Trauma-talk was bimodal, positively skewed (.91), and had negative values of kurtosis (-.47) ($p < .001$). Emotional-processing was heavily skewed (1.14) and had close to zero values for kurtosis (.089) indicating binary properties ($p < .001$). Focus in therapy was not skewed (-.03), but pointy, with negative values of kurtosis (-.65) ($p = .018$). Because of the relatively small data sample ($n = 30$), the variables were not expected to be normally distributed.

An outlier was found with regards to Focus in therapy. Removing the outlier-case from the data-set changed the mean only slightly, from 3.8 ($SD = 2.9$) to 3.6 ($SD = 2.7$). It is likely that similar values would appear in a larger sample. The outlier case was therefore included in the full data set.

3.2. Descriptive statistics

PTSD symptoms had a mean of -22.7, indicating that on average, clients experienced less posttraumatic symptoms at the end of therapy with a drop in CAPS-scores ($SD = 25$, range = [-81, 27], $n = 30$). The standard deviation was relatively large, indicating that the different scores are distant from the mean, as expected in a sample where participants were strategically selected to secure a wide dispersion. Not all clients improved, and 7 had an increase in posttraumatic symptoms at the end of therapy.

Trauma-talk varied greatly between the therapy cases, with a mean of 700 seconds (11 minutes and 40 seconds) ($SD = 704$, range = [0, 2266]). Several cases included no trauma-talk ($n=6$). For therapy cases that included trauma-talk the average number of seconds 875 (14 minutes and 35 seconds)($SD=575$). The mean of single session with most trauma-talk was 394 seconds (6 minutes and 34 seconds) ($SD = 361.59$, range = [0, 1192]). Trauma-talk was found in totally 81 sessions out of 381, providing a mean of 2.63 (20.7 %) sessions ($SD = 1.88$, range = [0, 7], median = 3). The therapy case with the highest amount of trauma-talk had 2266 seconds (37 minutes and 46 seconds), spread over 4 sessions, with 970 seconds (16 minutes and 10 seconds) in the session with most trauma-talk. In comparison, it can be mentioned that the single TF-CBT case not included in the data-set, had 3687 seconds of trauma-talk (61 minutes and 27 seconds), spread over 7 sessions, with 1152 seconds (19 minutes and 11 seconds) in the session with most trauma-talk.

Therapist initiation had a mean of 3.83 ($SD = 2.94$, range = [0, 11]), meaning that therapists on average initiated trauma-talk close to four time across the course of therapy. There were 5 cases that did not include any therapist initiations. Among these, 4 cases included zero second of trauma-talk, suggesting that the therapist never asked about the traumatic experiences, and the patient never raised the issue.

Emotional processing had a mean of .43 ($SD=.679$, range= [0, 3]). There were 20 cases that included no emotional processing, 7 cases had a score of 1 and 3 cases had a score of 2 (see Table 1).

Focus in therapy had a mean of 3.14 ($SD = 1.22$, range = [0, 5], $n=19$) meaning that most therapies had a moderate focus, with moderate intensity and range of interventions, moderate clarity of therapeutic goal(s), and choice of interventions seemed moderately strategic for achieving the goal(s). One case was missing removed because of procedural mistakes in the scoring. About one third of therapies were scores as having moderate level of Focus ($n=11$). 8 therapy cases were scored below average (low or very low levels of focus), and 10 therapy cases were scored above average (high or very high levels of focus).

TABLE 1
Emotional activation scores

Therapy case number	Sessions with trauma-talk							Emotional processing ^c
	1 st	2 nd	3 rd	4 th	5 th	6 th	7 th	
1	3	5 ^a	3 ^b	.	.	.	.	2
2	4	4 ^a	2 ^b	.	.	.	.	2
3	3	2	3	2	5 ^a	3 ^b	.	2
4	.	.	.	.	.	.	.	0
5	3	4 ^a	.	.	.	.	.	0
6	3	3 ^a	2 ^b	.	.	.	.	1
7	2	2 ^a	.	.	.	.	.	0
8	2	3 ^a	2	2	2 ^b	.	.	1
9	.	.	.	.	.	.	.	0
10	3	3	4 ^a	3 ^b	.	.	.	1
11	2	2 ^a	.	.	.	.	.	0
12	3	2	2	4 ^a	3 ^b	.	.	1
13	4	4	4	4	4 ^a	.	.	0
14	3 ^a	.	.	.	.	.	.	0
15	.	.	.	.	.	.	.	0
16	2	5 ^a	3 ^b	.	.	.	.	2
17	3 ^a	.	.	.	.	.	.	0
18	.	.	.	.	.	.	.	0
19	3	3 ^a	2 ^b	.	.	.	.	1
20	3	3 ^a	.	.	.	.	.	0
21	.	.	.	.	.	.	.	0
22	.	.	.	.	.	.	.	0
23	4	3	4 ^a	.	.	.	.	0
24	3	3 ^a	.	.	.	.	.	0
25	2	2	2	3	3	3 ^a	.	0
26	3	2	3	4 ^a	3	3	3 ^b	1
27	2	3 ^a	2 ^b	.	.	.	.	1
28	2	2	2 ^a	.	.	.	.	0
29	3	3	3	3 ^a	.	.	.	0
30	3	3	3 ^a	.	.	.	.	0

^a = highest score

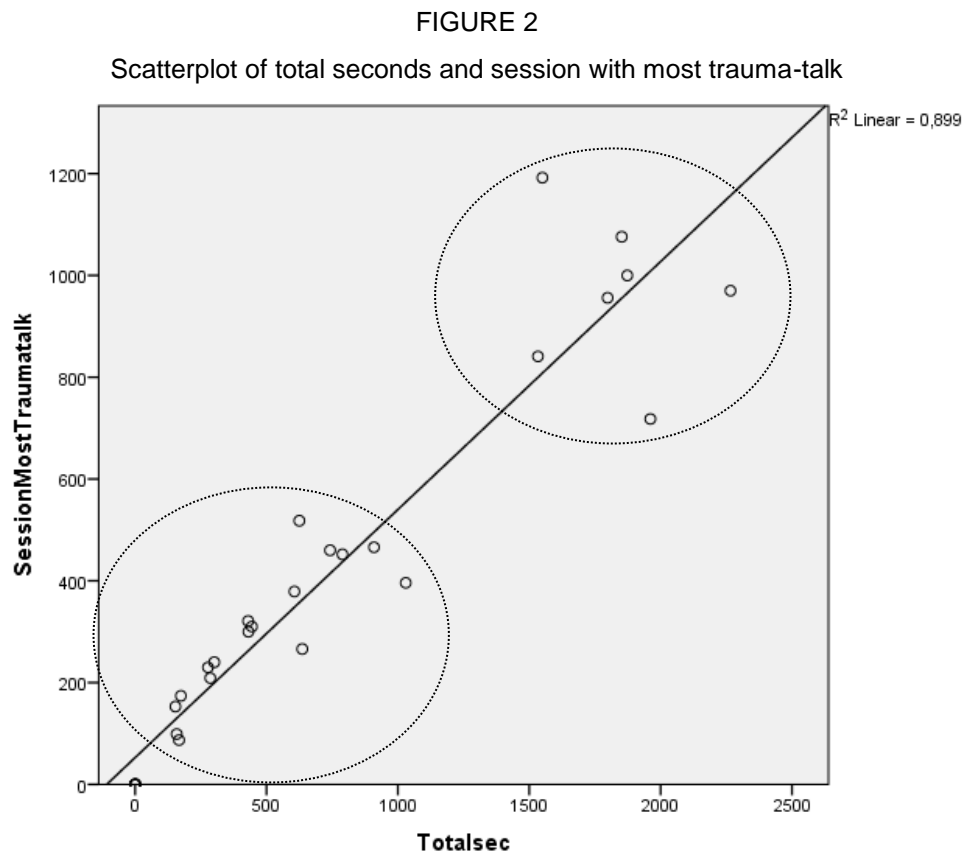
^b = lowest score succeeding the highest score

^c = [if b is present = a – b; if b is not present = 0]

Therapy cases are listed in descending order in terms of outcome, from highest responder to lowest non-responder.

3.3. Trauma-talk and PTSD symptoms

No significant relationship between trauma-talk and PTSD symptoms was found using non-parametric tests ($r_s = -.012$, $p = .929$). The bimodal characteristics of trauma-talk allow for the creation of a binary variable based on natural clustering labelled DTrauma-talk. Graph 2 shows scatter-plot with clustering of therapy cases based on trauma-talk (total seconds) and on session with most trauma-talk (measured in seconds). The cut-off for total seconds trauma-talk was set at 1500 seconds (25 minutes). The group above cut-off consisted of 7 cases with a mean of 1833 seconds (33 minutes and 33 seconds) of trauma-talk ($SD = 251$, range = (1533, 2266)). By comparison, the group below cut-off had a mean of 354.7 seconds (5 minutes and 55 seconds) of trauma-talk ($SD = 320.0$, range = 0–1030). The mean of PTSD symptoms for therapies above 25 minutes of trauma-talk was -30.0 CAPS-scores ($SD = 19.7$), and for therapies with less than 25 minutes of trauma-talk -20.5 CAPS-scores ($SD = 26.4$). The difference in means of 9.5 CAPS-scores was not significant ($t(28) = 0.88$, $p = .389$).



Controlling for total seconds of trauma-talk, no significant relationship was found between session with most trauma-talk and PTSD symptoms ($r=-.349$, $p=.566$, BCa CI $[-.092, .100]$). Among the 7 cases with more than 25 minutes trauma-talk, trauma-talk was distributed normally as indicated by the Shapiro Wilkes test ($p=.541$), meeting parametric assumptions for regression analysis. The mean session with most trauma-talk was 965 seconds (16 minutes and 5 seconds) ($SD=154$). Controlling for total seconds of trauma-talk, no significant relationship was found between session with most trauma-talk and PTSD symptoms ($r=-.237$, $p=.641$). Among the 17 cases with trauma-talk and with less than 25 minutes of trauma-talk (excluding cases with no trauma-talk), trauma-talk was also distributed normally ($p=.181$). The mean session with most trauma-talk was 298 seconds (4 minutes and 58 seconds) ($SD=133$). Controlling for total seconds of trauma-talk, no significant relationship was found between session with most trauma-talk and PTSD symptoms ($r=.071$, $p=.895$).

3.4. Therapist-initiation and Trauma-talk

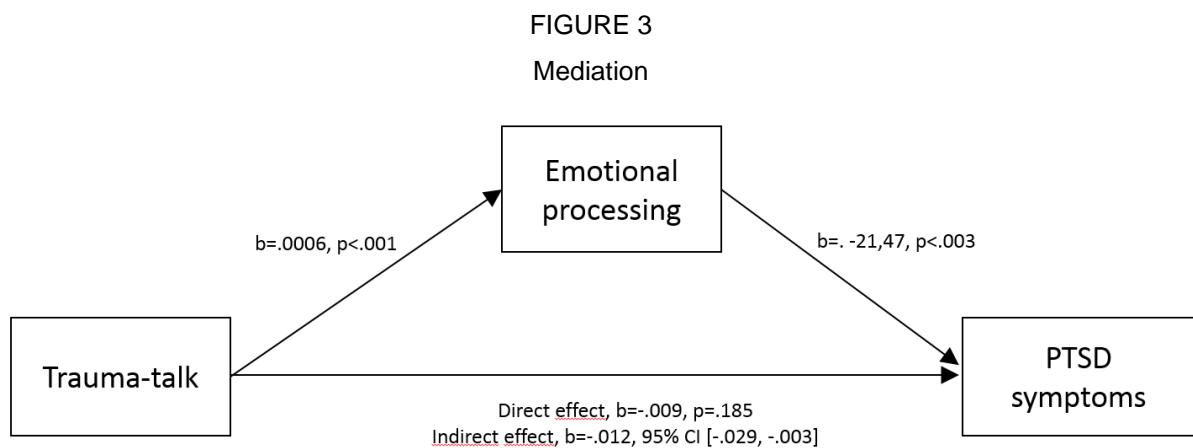
The mean number of therapist-initiation for therapies above 25 minutes of trauma-talk was 6.9 ($SD=2.97$) and for therapies with less than 25 minutes of trauma-talk 2.9 ($SD=2.28$). The difference in means was significant ($t(28)=-3.745$, $p=.001$). The effect of therapist initiation on trauma-talk was large ($g=1.511$). Increases in the number of times therapists initiated trauma-talk increased the amount of time spent on talking about the client's traumatic experiences in therapy.

3.5. Emotional-processing and PTSD symptoms

Because of the binary properties of emotional-processing a variable based on natural clustering was created with cut-off at <1 . A total of 19 cases were scored as zero, and 11 cases were scored as 1. The mean change in symptom-reduction for therapy cases with emotional-processing was -33.8 CAPS-scores ($SD=26.8$), and for therapies without emotional-processing -16.3 CAPS-scores ($SD=22.1$). The difference in means was significant at a 90% confidence level ($t(28)=1.993$, $p=.062$). The effect of emotional-processing on PTSD symptoms was found to be large ($g=.712$).

3.6. Mediation

There was a significant indirect effect of Trauma-talk on PTSD symptoms through Emotional-processing based on bootstrapping and calculation of confidence intervals ($b=.01$, 95% BCa CI $[-.029, -.003]$) (see Graph 2 below). Using the Sobel test of significance, the indirect effect was also found to be significant ($b=-.012$, $Z=-2.31$, $p=.021$). The completely standardized indirect effect of Trauma-talk on PTSD symptoms through Emotional-processing was found to be small ($b= -.342$, $\beta=.152$, BCa CI $[-.720,-.148]$). The direct effect was not significant ($b=-.009$, $p=.185$)



3.7. Focus in therapy and PTSD symptoms

Focus in therapy was significantly correlated with symptom reduction using non-parametric tests and bootstrapping ($r_{\pi}= -.314$, $p=.021$) ($r=-.368$, 95% BCa CI $[-.614, -.109]$ $p=.050$). Focus in therapy explains a significant proportion of variance in symptom change score ($R^2 = .14$, $F(28) = 4.23$, $p < .050$). Overall there was a moderate negative relationship. Increases in scores on Focus in therapy were correlated with larger reductions in PTSD symptoms.

3.8. Interaction

No significant interaction effect was found between Focus in therapy and trauma-talk in relationship with PTSD symptoms ($b=2.42$, $t=0.22$, $p=.824$) (see Table 2 below).

TABLE 2
Linear model of predictors of PTSD symptoms: interaction “focused-therapy x trauma-talk”

<i>Variable</i>	<i>b</i> (unstandardized coefficient)	<i>SE B</i> (standard error)	<i>t</i>	<i>p</i>
Constant	-22.93 [-33.59,-12.27]	5.17	-4.43	$p<.001$
Focus in therapy (centered)	-7.60 [-14.89, .31]	3.54	-2.15	$p=.042$
Trauma-talk (centered)	-7.15 [-34.27, 20.04]	13.18	-.54	$p=.594$
Focus in therapy x Trauma-talk	2.42 [-19.82, 24.66]	10.80	.22	$p=.824$

N=29, Confidence intervals are reported at 95%, $R^2 = .15$.

3.9. Path analysis

The results of the path analyses confirms the above results and indicates that there is a strong and significant correlation between therapist-initiation and trauma-talk ($\beta=.67$, C.R.= 4.89, $p <.001$)(see Graph 4 and Table 3 below). The correlation between trauma-talk and emotional-processing was also strong and significant ($\beta=.55$, C.R.= 3.52, $p <.001$), as well as the correlation between Emotional-processing and PTSD symptoms ($\beta=-.587$, C.R.= 3.24, $p =.001$). The correlation between Focus in therapy and PTSD symptoms was also moderate and significant ($\beta=-.30$, C.R.= -1.96, $p =.050$). The relationship between trauma-talk and PTSD symptoms was not significant. However, the direction of the relationship was positive, indicating that the direct path of trauma-talk, when controlling for the other variables in the model, leads to poorer treatment outcomes. The model provides a very good fit of data (RMSA<.001, CI 90% [.000,.158], indicating that the model seems to explain the relationships between the variables and does not require respecification.

FIGURE 4
Standardized regression weights of paths

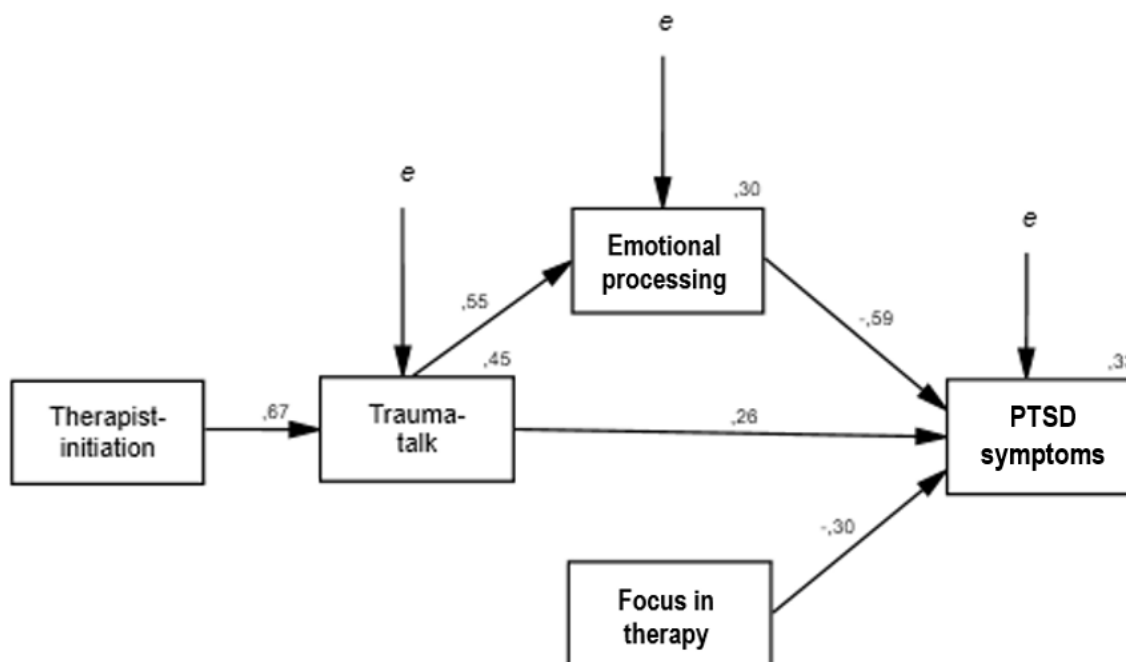


TABLE 3
Regression weights and significance of paths

Paths in model	b (unstandardized coefficient)	SE B (standard error)	β (standardized coefficient)	C.R. (critical ratio)	p
Trauma-talk \leftarrow therapist-initiation	160.99	32.96	.672	4.89	p<.001
Emotional-processing \leftarrow Trauma-talk	.001	.000	.547	3.52	p<.001
PTSD symptoms \leftarrow Trauma-talk	.009	.006	.256	1.41	p=.157
PTSD symptoms \leftarrow Emotional-processing	-19.63	6.05	-.587	-3.24	p=.001
PTSD symptoms \leftarrow Focus in therapy	-6.06	3.10	-.297	-1.96	p=.050

n=30

4. Discussion

4.1. Discussion of main findings

The number of studies demonstrating the effect of trauma-focused therapy for children and adolescents are growing, providing important knowledge about treatments that can help alleviate youths' posttraumatic symptoms and distress. There are, however, still many unanswered questions regarding how these interventions work and the processes contributing to change. Although emotional processing is often described as an important shared mechanism of change in youth trauma-focused treatment (Landolt et al., 2017a), no studies have so far looked at the effect of simply talking about trauma in the presence of an empathic therapist. Learning more about the role trauma-talk plays in the process and outcome of therapy is an important step along the way to further improve the treatment provided to trauma-affected youth and their families. In this study, trauma-talk was examined in the context of treatment as usual, which made it possible to explore several aspects of trauma-talk, such as the relationship between the role of therapists and the prevalence of trauma-talk. It also made it possible to explore the role of emotional processing in mediating the effect of trauma-talk on treatment outcome. In addition, the study developed an exploratory measure in an attempt to describe the level of focus in therapy, in terms of the degree interventions relate to the goals of therapy. This allowed for the exploration of focus in therapy as an alternative path to treatment outcome, as opposed to focusing on the youth's traumatic experiences. Finally, the significance and magnitude of the hypothesized causal relationships were tested in a path model.

4.1.1. Just talking about trauma may not be sufficient

In this study sample, talking about trauma was not significantly related treatment outcome. Therapies that included more than 25 minutes of trauma-talk in total achieved on average a bigger reduction in symptoms (a difference of 9.5 CAPSscores) compared with therapies that included 25 minutes or less of trauma-talk. The direction of the relationship was consistent with the hypothesis, and possibly with a larger sample the relationship would be statistically significant.

An explanation for the lack of a significant relationship could stem from the relatively narrow range of the amount of trauma-talk. In this study, the maximum amount of time spent on trauma-talk in a single therapy case was 38 minutes. The average amount of trauma-talk was 11 minutes 40 second. In comparison, the single TF-CBT case that was coded included slightly above an hour of trauma-talk (61 minutes). Whilst the coding of the single case represents only an anecdotal estimate of time spent on trauma-talk in TF-CBT, the case was randomly selected, followed the treatment manual and appears to provide a reasonable indication. It is possible that there are threshold effects, and that more trauma-talk is needed before effects of trauma-talk on treatment outcome emerge. This would be consistent with other findings that indicate that the amount of time spent on reliving in CBT matters (Wambach & Rief, 2012).

It did not seem to matter if trauma-talk was spread out thinly across multiple sessions, or more concentrated in larger bulks. The hypothesis was that more concentrated trauma-talk could lead to sessions with deeper processing, resulting in improved results (see for instance Foa et al., 1980). The direction of the relationship was consistent with the hypothesis, indicating that therapies that included larger concentration of trauma-talk, controlling for the total amount of seconds of trauma-talk, achieved better treatment outcomes. It is possible, that with a larger sample the relationship would be statistically significant. The therapy case with most trauma-talk in a single session had 16 minutes and 10 seconds. In comparison, the session with most trauma-talk in the TF-CBT-case that was coded had 19 minutes. It appears that for most therapies in treatment as usual, when they talk about trauma, they are likely to talk about trauma for shorter durations than what takes place in TF-CBT. The relationship between concentration and treatment outcome was also tested for the group of cases with less than 25 minutes of trauma-talk, as well as for the group of cases with 25 minutes or more of trauma-talk, but without finding a significant relationship in either group.

Considering the emphasis on overcoming avoidance as a critical first step in the recovery of PTSD, the lack of a significant relationship may warrant a more theoretically grounded explanation. The finding may suggest that the relationship between talking about trauma and overcoming avoidance is not linear. With short segments of trauma-talk, scattered over multiple sessions, it is possible that some clients processed very little of their trauma-memories. Youth may

talk about what happened, but may simultaneously engage in cognitive strategies that keep the overwhelming nature of the trauma at a distance. They may talk about the least scary aspects of the trauma or change topic frequently. Youth may also, unconsciously, aim to control their emotional engagement by developing ready-made narratives of the events. The qualitative observations during coding suggest that some youth made use of such strategies. For example, one girl talked about the abuse she experienced at home when she was younger in a manner in which affect appeared as structuralized: the emotions she described that she had during trauma were talked about, but seemed to be encapsulated in words and not felt. The affect that was actualized, in the “here and now” in relationship with the therapist, appeared to be of much lower intensity and to some extent revolve around gaining the therapist’s sympathy. It is possible, that longer continuous segments of trauma-talk may suffice for overcoming youths’ avoidant strategies that may operate simultaneously with trauma-talk. It is also possible that in some cases, persuasion of the usefulness of talking about the trauma is necessary before the youth is willing, or able, to let go of cognitive control strategies and engage in re-experience. Similarly, in some cases gradual exposure may possibly assist with building-up to engaging in re-experience and with dismantling avoidance. While some of these therapeutic strategies were observed during coding, it is uncertain to what extent they took place across therapies in this study.

4.1.2. The effect of talking about trauma is mediated by emotional processing

There was a strong and significant relationship between emotional processing and symptom reduction, indicating that therapies that achieve emotional processing are highly correlated with improvement in treatment outcome. The finding is consistent with other studies that have found emotional processing to be an active ingredient in trauma-focused therapy. Moreover, the finding indicates that emotional processing may be an active ingredient in a wide range of therapies, including those that do not follow trauma-focused treatment manuals and in therapies that take place in treatment as usual. The finding may be interpreted to support the cross-therapeutic validity of emotional processing as an active ingredient in evidence-based practice.

Talking about the traumatic experiences is a pre-condition for emotional processing to take place, and the correlation between trauma-talk and emotional processing was found to be significant and strong. Emotional processing was also found to mediate the effect of trauma-talk

on treatment-outcome. Whilst the indirect effect of trauma-talk on treatment outcome through emotional processing was significant, the completely standardized indirect effect was found to be small, indicating that a great amount of trauma-talk that took place in therapy did not translate into emotional processing and into an effect on treatment outcome.

The finding of a mediation effect, in combination with a non-significant relationship between trauma-talk and treatment outcome, seems to indicate that the manner in which one talks about the trauma, the “*how*” of trauma-talk, is more important than the “*how much*” of trauma-talk. If this is the case, it would seem to indicate that focusing and the use of techniques during trauma-talk matter. Possibly, generic techniques trauma-talk, such as warmth, empathic listening and congruence, may not in itself be sufficient for securing that emotional processing takes place. Rather, emotional processing may require a therapeutic focus on facilitating a sequence where the client’s fear networks are activated and the exposure to corrective information during activation is achieved.

4.1.3. The effect of therapist initiation on the extent youth talk about trauma is large

The effect of therapists’ interventions, in the form of initiating talk about the client’s traumatic experiences, was large: more initiations correlated with higher levels of trauma-talk. Therapists initiated trauma-talk on average 7 times for therapies with more than 25 minutes, vs. an average of 3 times for therapies with less than 25 minutes of trauma-talk. The large effect of therapist-initiation is consistent with the hypothesis. It suggests that the role of the therapist is significant and large in determining how much trauma-talk will take place in therapy. It also implies that without the therapist’s initiation of trauma-talk, the youth is unlikely to address the trauma. The youth’s avoidant strategies in therapy, may be interpreted as a symptom- and a maintenance factor of PTSD. Given this finding, in short-term therapy (15 sessions or less) it seems unlikely that the client will be able to dismantle avoidant strategies without the explicit focus of therapists. “Waiting strategies”, where therapists aim to wait until the youth is comfortable enough to raise the issue by him- or herself, seem likely to fail. In sum, it may be unlikely the youth will talk about the traumatic events unless the therapist explicitly asks.

The skewed distribution of therapist-initiation and the bimodal properties of trauma-talk was an interesting finding in itself. It may suggest that there was a difference between therapists. It is possible that some therapists focused on the traumatic experiences and proactively addressed the issue, leading to more therapist initiation and more trauma-talk vs other therapists that may have focused on other issues, which may have led to less initiation and less trauma-talk. Some of this difference may also be explained by differences among the youth. Possibly, some therapists made clinical judgements about treatment goals and therapeutic focus based on the response of clients. They may have focused on trauma in cases where they were able to persuade the youth about the benefits of talking about the traumatic events. However, in the face of considerable resistance, therapists may have opted for non-trauma-focused strategies. Qualitative observation during coding confirmed both explanations. Among the 7 cases with the most trauma-talk several therapists seemed to focus explicitly on trauma, using psychoeducation to persuade youth about the benefits of talking about the traumatic experiences. At least one case with no trauma-talk included a therapist that provided psychoeducation on the benefits of talking about trauma and asked about the traumatic experiences on several occasions, but was met with considerable resistance and ended up focusing on family systemic therapy.

Finally, there seemed to be a few cases that proved to be an exception to the rule, where the youth, and not the therapist, initiated most of the trauma-talk. An example from the data material included a teenage girl, who had experienced multiple traumatic events in her past (e.g. victim of and witness to several violent incidents, both within and outside her family), in addition to being exposed to new potential traumatic experiences during the period she received therapy. In several of the therapy sessions, this girl appeared to speak persistently about different traumatic experiences, going in and out of trauma-talk in a chaotic manner, often disturbed by her own associations, seemingly emotionally unaffected. Contrary to the avoidant behaviour expected in clients with PTSD, this girl seemed overloaded with distress, and the overload seemed to propel her disclosure of the traumatic events. This exception to the rule may possibly be explained by the theories of distress disclosure, such as the fever model (Stiles, 1987).

4.1.4. Focus in therapy provides an alternative path to improvement

The study found a moderate and significant correlation between level of focus in therapy and treatment outcome. Regarding the question of superiority of therapies that include a trauma-focus (higher levels of trauma-talk), this study did not find an interaction effect of trauma-talk and level of focus in therapy. These findings suggest that focus in therapy may provide an alternative path to improvement which does not necessarily involve talking about the traumatic events. Several RCTs have provided empirical support for non-trauma-focused treatments for children and adolescents, (see for instance Najavits, Gallop, & Weiss, 2006). What is different in this study is that specific treatment models have not been examined, rather level of focus has been construed as a common factor and as a characteristic of individual therapies, not of treatment models. The finding suggests that the level of focus may be important for evaluating the quality of therapy, and that focus matters in terms of treatment outcome.

The finding also seems to confirm that the exploratory ‘Focus in therapy scale’, which has been developed for the purpose of this study, captures aspects of therapies that are relevant for understanding different paths from treatment to outcome. The value of the scale includes its cross-therapeutic attempt at describing a quality of therapy and may be particularly useful in treatment as usual settings, where therapists may use a wide range of eclectic therapeutic methods, and where the level of focus is expected to diverge more widely. The scale needs further testing and development to obtain validity (see methodological considerations below). Because of the exploratory nature of the scale, a strong caution is warranted in drawing any generalizations from findings beyond what has been observed in this sample.

As an example of a therapy with a high level of focus from the data material was provided by a case with a teenage girl, who struggled with sleep problems, isolation, high levels of somatization, chronic pains and low school attendance. The therapist asked about trauma on several occasion, but the girl stated that she did not wish to talk about her traumatic experiences. Jointly, the girl and therapist decided to focus on pain management, sleep problems and reinsertion into social life. The therapist provided psychoeducation, relaxation and pain management techniques, as well as cognitive techniques of exploring and addressing negative automatic thoughts and rumination. The girl was encouraged to meet with friends weekly, do homework in-between

sessions and to monitor own progress. The therapist followed-through with high intensity and addressed set-back and hindrances. In the end, the client reported that her sleep improved, her pains lessened, she spent more time with friends and the post-treatment CAPSscores showed a reduction in posttraumatic stress symptoms above the mean.

4.1.5. Linking trauma-talk to outcome: evaluating results in light of pathways

Overall the path model provide a very good fit of data, indicating that the model provides a good description of relationships between the variables in the model. The good fit suggests that it is unlikely that other models of the relationships between the variables would provide a significantly better fit. The magnitude and significance of several relationships in the model were consisted with the hypotheses: more therapist-initiations were strongly and significantly associated with more trauma-talk; more trauma-talk was strongly and significantly associated with emotional processing; emotional processing was strongly and significantly associated with fewer posttraumatic stress symptoms; and higher levels of focus in therapy was moderately and significantly associated with fewer posttraumatic stress symptoms.

Contrary to hypothesis, the direction of the relationship between trauma-talk and symptom-reduction was positive: controlling for the other variables in the model, more trauma-talk was moderately associated with more posttraumatic stress symptoms. The association was not statistically significant, but could possibly achieve statistical significance with a larger sample. In comparison with results from testing the relationship without controlling for the other variables in the model, the direction of the relationship was reversed. The positive direction may suggest that not all kinds of trauma-talk are equally associated with symptom reduction. Talking about trauma but without such talk leading to emotional processing, or without being part of therapeutic focusing, may be less effective in terms of improvement in therapy. While it is possible that some kinds of trauma-talk is harmful, it is assessed as more likely that the association with poorer treatment outcome can be explained by other factors. Inferring from theories of distress disclosure it is possible that more trauma-talk is related to higher levels of psychological distress, which may be associated with higher, or even increasing levels of PTSD symptoms. Examining students in brief counselling, Kahn et al. (2001) suggested that distress disclosure leads to greater sharing of personal information with others, which may explain the greater experiencing of social support as

well as improvement in counselling. Kahn et al. did not report the type of issues for which student sought counselling. It is possible that PTSD is different and that the symptoms among participants in this study were more severe. The social support that distress disclosure may have engendered may not have been equally effective in this sample. Also, the type of overflow of speech typical of distress disclosure may produce a lot of trauma-talk in therapy, but in a form that may not necessarily be optimal for cognitive restructuring and emotional processing. Finally, some clients in the sample experienced on-going traumatic events whilst in therapy. Retraumatization may relate to more distress, more trauma-talk as well as to poorer outcomes.

4.2. Methodological considerations

4.2.1. Sample size

It is important to interpret the results with some caution. The study's sample is relatively small ($n = 30$) and mentioned earlier, this could affect the statistical results and which effects we do and do not find. With a small sample, the statistical results have potentially been under powered, e.g. the results may have been lacking statistical strengths to find significant correlations. This increases the risk of type II errors, also known as false negatives. With this type of error, the null hypothesis is accepted even if it in reality is incorrect.

4.2.2. Validity and reliability of the scales

The outcome measure in this study was the youths' PTSD-symptoms, as measured with the Clinician-Administered PTSD scale for children and adolescents (CAPS-CA). The CAPS-CA has demonstrated good psychometric properties across several studies (Ohan, Myers, & Collett, 2002). In this study, the youths' CAPS-scores were measured pre-treatment (T1) and after approximately 15 sessions (T3). The outcome variable is the change score between these measured times, in other words, the difference in the patients PTSS-scores pre-treatment to post-treatment. Using only the CAPS-scores at T3 would not be a good outcome measure. This is because the youths' PTSD-scores varied greatly (range = 80) at T1, meaning their CAPS-scores at T3 would not provide much information about their actual recovery. The change score is considered a better outcome measure because it provides information about the difference in PTSS. However, regression towards the mean is a potential problem concerning this decision. Nevertheless, PTSD symptoms, as measured by the difference in CAPS-score, was used as the outcome-measure in this study.

The validity and reliability of the two exploratory scales developed for the purpose of this study need to be considered. It is important to stress that this is an exploratory study, and that validity issues are expected. Criterion validity, which refers to whether the scale measures what it intends to measure, requires comparison with objective criteria (Field, 2013). Because easily measured objective criteria are not easily available, the criterion validity of the scales is difficult to establish. The Emotional Activation Scale (5-point scale) is an abbreviated version of the Client Expressed Emotional Arousal scale which is 7-point anchored scale (Carryer & Greenberg, 2010).

Anchoring of this scale has involved the collection of critical incident behaviour, and in converting these into performance dimensions, strengthening the validity of the scale. The Emotional Activation scale used in this study was reduced from 7 to 5 points for purposes of making the coding simpler for raters. The coding manual of the original scale was not available. As a result, some behaviour may not have been observed or may have been classified incorrectly. However, drawing on client's self-reported levels of activation during therapy, when available from the audio-files, provided an indication of strong validity.

In terms of construct validity, the degree to which a test measures what it claims to measure, emotional processing was constructed to observe change events: the presence of a drop in emotional activation during trauma-talk from one session to the next. Foa and Kozak (1986) suggested three indicators: firstly, clients show fear, indicating that the fear structure is activated; secondly, their reactions decrease gradually upon confrontation with feared images, objects, or situations; thirdly, their initial fear reaction at each exposure session decreases across successive sessions. This operationalisation of the concept has been confirmed through multiple studies (see section 1.3 for a discussion). Emotional processing only includes the first indicator (showing fear) and the last indicator (initial fear reactions decrease across successive sessions). It is possible that at least one case was wrongly assessed to include emotional processing: the client in therapy case 26 listed in Table 1 seemed to talk about trauma in an overflowing manner, similarly to that described by distress disclosure theory. Sessions were hectic with little "calming down" during trauma-talk. At the same time, the level of distress in one session was assessed to be slightly higher than in the next session, resulting in a drop in activation, but with the absence of in-session gradual decrease in fear reaction.

The focus in therapy scale is highly constructed scale, including four items: 1) intensity, 2) range of interventions; 3) clarity of goals, and 4) strategic choice. Internal validity of the scale has not been assessed, and factor analysis should be conducted. It is unknown if these items form a coherent concept, or if some of these items, such as Intensity, may provide a better estimate of the underlying construct this study attempts to measure. The scale draws on similar criteria for measuring intensity as the Intensity scale, that has been used in one study (Garland et al., 2010). The ratings included the authors' qualitative judgements. Potential bias towards therapies that

resembled trauma-focused or cognitive therapies was actively reflected upon, (the authors are majoring in children and family therapy and in psychodynamic therapy respectively).

Findings showing expected relationships between variables can be indications of validity of the scales. The positive relationships between the variables derived by the scales and the reduction in PTSD symptoms were consistent with hypotheses, thus potentially indicate that validity of the scales may be obtainable. Further studies are needed to test, develop and evaluate to establish validity

A second consideration of the statistical soundness of the exploratory scales, is reliability; the ability of the scales to produce similar scores under similar conditions when measured twice (Field, 2013). The interrater reliability was high on both scales (The Emotional Activation Scale ICC = .84 and The Focus in Therapy Scale ICC = .96). The interrater reliability of The Emotional Activation scale was comparable to interrater reliability scoring from other studies of The Expressed Emotional Arousal Scale, ranging from .75 to .81 (Carryer & Greenberg, 2010). These results are promising, but should be interpreted with caution owing to the potential sources of error and that these scales have not been tested and validated in other studies.

4.2.3. External validity of the findings

External validity refers to the degree to which findings from one study can be applied to other samples that were not included, i.e., whether the results are representative and can be generalised to a larger population. One thing to consider regarding the external validity, is the sample's predominance of girls (76.7%) in relation to boys (23.3%). According to national data, the general children and adolescent psychiatric client population consists of 47.6 % girls and 52.3 % boys (Krogh, 2016). One explanation of the sample's predominance of girls lays perhaps due to the fact that the average age in our sample was 14.5 years old and that girls comprise two thirds of the general client population above 12 years old. It is also found that girls report more post-traumatic stress symptoms than boys (Tolin & Foa, 2008), another potential explanation for the high proportion of girls in relation to boys in this sample.

Further, it is necessary to consider whether there are any systematic differences between youths and their families who agreed to participate in the study and those who did not. Clients that

agree to participate in research may not be representative of the general client population. It is possible that the children and parents agreeing to this are more resourceful, motivated and eager to get better and therefore have an overall slightly better starting point for therapy than those not wishing to participate. Conversely, it is imaginable that those agreeing to participate in the study are heavier burdened with psychological distress and are therefore willing to do “anything” to get better. We have no basis to say whether one or the other explanation is more applicable for this sample, however, the considerations are worth taking into account.

Out of the 40 therapy cases we intended to use in our sample, 10 cases were excluded. Some of the exclusions were due to a low number of sessions in total, meaning that the clients dropped out of therapy early. The dropout study, derived from the same original sample, showed that the drop-out rate was predicted by a lack of caregiver attendance, lower rates of youth-perceived parental treatment approval, and weaker therapist-rated youth alliance (Ormhaug & Jensen, 2015). This is an indication that there may be a difference between the youths dropping out of therapy, and the youths attending enough sessions to be included in the sample. Furthermore, this could suggest that there may be a slight difference between the participants in this sample and the general client population. Additionally, it is worth considering that there could be something special about the therapists volunteering to be scrutinized, e.g. that they are more professionally interested and wish to improve their therapeutic skills in relation to non-participating therapists.

Some of the above mentioned considerations may indicate that this sample is not only just small, but perhaps also not representative. However, the participants were recruited through standard referral procedures and were thus more likely to reflect regular cases in normal clinics. Secondly, the therapists were employed at clinics located in different places across the country, and were instructed to provide the therapy they normally would provide. These latter factors are indicative that the sample probably is fairly representative of the youths and therapists in general outpatient clinics, an indication that strengthens the external validity of the results. Nevertheless, there are possibly systematic differences between those who are included in the sample and those who are not, potentially making the findings less representable for some subgroups of youths in the general client population.

4.2.4. Methodological Strengths

Despite several limitations and sources of error, this study also has some important methodological strengths. As mentioned, the participants were recruited through standard referral procedures and were therefore likely to reflect normal therapy cases. And even though this was an exploratory study, the measures were conducted by coders (us) naïve to the treatment outcome, thus reducing the risk of researcher allegiance bias.

4.3. Ethical considerations

The randomized effectiveness study that this sample was drawn from, was approved by the Regional Committee for Medical and Health Research Ethics (Jensen et al., 2013). Due to the sensitive character of the audio recordings, it was crucial that confidentiality was maintained the whole time. Confidentiality was ensured and secured by using encrypted files and separate offline computers. The participants and therapists have only been referred to as case-numbers.

4.4. Implications of the study and further research

This study provides new and interesting results that open up possibilities for future research. First, to better understand the relationship of trauma-talk to outcome in treatment as usual, studies should include a larger sample to see if relationship with outcome obtains statistical significance. This may also assist with uncovering potential threshold effects of trauma-talk. It may also be of relevance for strengthening clinical evidence-based practice to explore the relationship of trauma-talk to avoidance, examining the amount and structure that may be typically needed for overcoming avoidance, as well as gradual exposure and persuasion techniques. Examining the cognitive strategies that clients may use during trauma-talk may also yield interesting findings. Equally, more research on the relationship between distress disclosure, trauma-talk and outcome, may serve to uncover the role of a certain type of trauma-talk, as well as how to optimally intervene in these situations.

Additionally, more cross-cutting research may be needed to establish emotional processing as shared active ingredient that is valid across therapeutic approaches and treatment protocols. Other shared ingredients and their relationship to trauma-talk and outcome may also be studied, in particular the role that cognitive restructuring may play during trauma-talk, as well as in increased verbal representation of situationally accessible memories of trauma.

Further research on establishing a scale for measuring the level of focus in therapy may be informative for the bona fide debate, as well as useful for defining and operationalising therapeutic focusing as a common factor, and a characteristic of individual therapies. Research using such a scale may potentially examine its relationship to outcome, including the role of the level and training of therapists, and the role

Finally, research on the effectiveness of adopting a common elements approach to strengthening evidence-based practice in treatment as usual may also prove important for raising the effectiveness of usual care. Looking at common elements, such as emotional processing and focus in therapy, may provide a better ecological fit with treatment as usual, in contrast to counting therapist strategies or looking at adherence to manualized treatment protocols, and may provide a promising approach towards strengthening evidence-based practice as part of usual care.

4.5. Conclusion

Overall, the results of this study show that trauma-talk plays an important role in the treatment of traumatized youth. Specifically, it seems that the *how* of trauma-talk, rather than the *how much*, is of particular importance in terms of treatment outcome. The study found that just talking about trauma may not be sufficient: therapies that included more than 25 minutes of trauma-talk achieved on average a larger reduction in symptoms, but the difference was not significant. However, emotional processing of trauma memories was found to be strongly associated with symptom reduction, and also to mediate the relationship between trauma-talk and treatment outcome. As conceptualised in this study, achieving in-session emotional processing may require a sequence of trauma-talk with exposure to corrective information during emotional activation (Foa & Kozak, 1986). In general, the amount of trauma-talk was found to be low: average amount of

trauma-talk per therapy was around 12 minutes, and maximum amount was about 38 minutes. It is possible that there are threshold effects, and that more trauma-talk is needed to obtain a significant relationship with outcome.

Additionally, the effect of therapist initiations on the extent youth talk about their traumatic experiences was found to be large. The skewed distribution of therapist initiations indicate that some therapists may make a clinically strategic decision to focus on the traumatic experiences, while others may not. In consequence, therapies clustered in two groups with a cut-off point at 25 minutes of trauma-talk. The finding implies that the role of therapists in assisting clients in overcoming avoidance is large, and that it may be unlikely youth will talk about the traumatic events unless the therapist explicitly asks.

Furthermore, findings suggest that focus in therapy may provide an alternative path to outcome which does not necessarily involve talking about the traumatic events. Drawing on theory of bona fide treatments, an exploratory scale of focus in therapy was constructed that aimed to capture the degree therapist interventions relate to the goals of therapy. Focus in therapy was moderately associated with outcome, and no interaction effect between trauma-talk and level of focus was found. While there is a need for further testing and development, the finding may indicate that the scale captures aspects of therapies that are relevant to outcome.

This study has contextualised trauma-talk in settings where therapies tend to be more eclectic and less manualized. This has required a focus on active ingredients that may be shared across multiple therapeutic approaches, such as emotional processing. It has also made it relevant to look at common factors, such as focus in therapy. Looking at common elements may provide a better ecological fit with treatment as usual, in contrast to counting therapist strategies or looking at adherence to manualized treatment protocols, and may provide a promising approach towards strengthening evidence-based practice as part of usual care. Finally, although the results in this study may help elucidate the pathways from trauma-talk to outcome, further investigations should be conducted to strengthen our understanding of this relationship and improve the treatments delivered to traumatized children and adolescents in usual care.

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Appendix A: The Emotional Activation Scale

This is a measure of the intensity or strength of the client's emotional activation whilst engaged in trauma-talk. At the left end of the scale, no cues of emotional activation is detected. At the right end, the cues of emotional activation are intense.

Directions: Assess the client's emotional activation based on the client's vocal – or verbal cues. If you are watching the client, bodily cues can also be utilized. Select the client's activation level and make necessary comments under the table. If the level of emotional activation varies during the sequence of trauma-talk, use the moment of peak intensity.

1 = No expressed emotional activation	2 = Low expressed emotional activation	3 = Moderate expressed emotional activation	4 = High expressed emotional activation	5 = Intense expressed emotional activation
Voice, gestures or verbal content do not disclose any emotional activation.	Low levels of emotional activation are present in voice, gestures and verbally expressed feelings.	Emotional activation is present in voice, gestures and verbal expressions. Speech patterns are moderately disrupted by emotional overflow, represented by changes in accentuation, unevenness of pace and changes in pitch.	High levels of emotional activation are present in voice, gestures and verbally expressed feelings. Speech patterns are disrupted. Emotional cues, e.g. trembling voice, sighs or crying are present.	The expressed emotional activation is extremely intense. Speech patterns are completely disrupted, the activation appears uncontrollable and lasting. There is a “falling apart” quality.

Client's emotional activation (1-5):__

Comments:

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Appendix B: The Focus in Therapy Scale

This is a measure of the level of focus in therapy. At the left end of the scale, the no focus is found in the therapy. At the right end, the therapy is highly focused.

Directions: Assess the level of focus based on the degree therapeutic interventions relate to treatment goal(s). Select the level of focus in therapy and make necessary comments under the table. If the level of focus varies during the therapy session, use the mean level. Do not use half numbers. In scoring the level of focus for the therapy, average the level of focus of individual sessions.

1 = Very low levels of focus in therapy	2 = Low levels of focus in therapy	3 = Moderate levels of focus in therapy	4 = High levels of focus in therapy	5 = Very high levels of focus in therapy
Very low intensity and narrow range of interventions	Low intensity and narrow range of intervention	Moderate intensity and range of interventions	High intensity and broad range of interventions	Very high intensity and broad range of interventions
Very unclear therapeutic goal(s)	Unclear therapeutic goal(s)	Moderate clarity of therapeutic goal(s)	Clear therapeutic goal(s)	Very clear therapeutic goal(s)
Choice of interventions do not seem strategic for achieving the goal(s)	Choice of interventions seem a little strategic for achieving the goal(s)	Choice of interventions seem moderately strategic for achieving the goal(s)	Choice of interventions seem strategic for achieving the goal(s)	Choice of interventions seem very strategic for achieving the goal(s)

Focus in therapy (1-5): ____

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