

European Journal of Psychotraumatology

ISSN: 2000-8066 (Online) Journal homepage: www.tandfonline.com/journals/zept20

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To cite this article: Eline M. Meuleman, Johan C. Karremans & Elisa van Ee (2024) Stronger together: the longitudinal relations between partner responsiveness, dyadic coping and PTSD recovery, European Journal of Psychotraumatology, 15:1, 2358682, DOI: 10.1080/20008066.2024.2358682

To link to this article: https://doi.org/10.1080/20008066.2024.2358682

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Published online: 05 Jun 2024.

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EUROPEAN JOURNAL OF PSYCHOTRAUMATOLOGY
2024, VOL. 15, NO. 1, 2358682
https://doi.org/10.1080/20008066.2024.2358682

EUROPEAN JOURNAL OF PSYCHO-TRAUMATOLOGY
THE OFFICIAL JOURNAL OF THE EUROPEAN SOCIETY FOR TRAUMATIC STRESS STUDIES

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BASIC RESEARCH ARTICLE

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Stronger together: the longitudinal relations between partner responsiveness, dyadic coping and PTSD recovery*

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ABSTRACT

Background: Past research has primarily focused on negative associations between PTSD and relationships. Therefore, this investigation delves into the potential positive role of these relational aspects in aiding PTSD recovery during treatment.
Objective: This study aimed to examine the impact of dyadic coping and perceived partner responsiveness on treatment trajectories of PTSD patients.
Method: The study included 90 participants, who were requested to complete online questionnaires twice, with a six-month gap between the measures.
Results: The results from linear regression analyses indicated that perceived partner responsiveness had a positive effect on PTSD recovery, whereas dyadic coping had the opposite effect: higher levels of dyadic coping were associated with an increase in posttraumatic stress symptoms over time. Additional examination of the subscales indicated that heightened communication between clients and partners regarding stress was related with increased posttraumatic stress symptoms.
Conclusions: These findings underscore the importance and complexity of effective and supportive communication between patients with PTSD and their partners. While existing literature supports both perceived partner responsiveness and dyadic coping as beneficial, this study indicates that only perceived partner responsiveness positively impacted PTSD recovery.

Juntos más fuertes: relaciones longitudinales entre la receptividad de la pareja, el afrontamiento diádico y la recuperación del TEPT

Antecedentes: Las investigaciones anteriores se han centrado principalmente en las asociaciones negativas entre el TEPT y las relaciones. Por lo tanto, esta investigación profundiza en el posible papel positivo de estos aspectos relacionales para ayudar a la recuperación del TEPT durante el tratamiento. Objetivo: Este estudio tuvo como objetivo examinar el impacto del afrontamiento diádico y la receptividad percibida de la pareja en las trayectorias de tratamiento de pacientes con TEPT.
Método: El estudio incluyó a 90 participantes, a los que se pidió que respondieran cuestionarios en línea dos veces, con un intervalo de seis meses entre las mediciones.
Resultados: Los resultados de los análisis de regresión lineal indicaron que la receptividad percibida de la pareja tenía un efecto positivo en la recuperación del TEPT, mientras que el afrontamiento diádico tenía el efecto contrario: los niveles más altos de afrontamiento diádico se asociaban con un aumento de los síntomas de estrés postraumático a lo largo del tiempo. Un examen adicional de las subescalas indicó que una mayor comunicación entre los clientes y las parejas en relación con el estrés se correlacionaba con un aumento de los síntomas de estrés postraumático.
Conclusiones: Estos hallazgos subrayan la importancia y la complejidad de una comunicación eficaz y de apoyo entre los pacientes con TEPT y sus parejas. Aunque la literatura existente apoya tanto la receptividad percibida de la pareja como el afrontamiento diádico como beneficioso, este estudio indica que sólo la receptividad percibida de la pareja tuvo un impacto positivo en la recuperación del TEPT.

ARTICLE HISTORY
Received 16 November 2023
Revised 1 May 2024
Accepted 12 May 2024

KEYWORDS
PTSD; romantic relations; perceived partner responsiveness; dyadic coping; treatment

PALABRAS CLAVE
TEPT; relaciones románticas; receptividad percibida de la pareja; afrontamiento diádico; tratamiento

HIGHLIGHTS

- Perceived Partner Responsiveness and PTSD Recovery: the study reveals a significant positive impact of perceived partner responsiveness on PTSD recovery. Patients perceiving higher levels of understanding from their romantic partners experience enhanced recovery, possibly through increased social support and the development of new self-narratives.
- Dyadic Coping and PTSD Recovery: contrary to expectations, aspects of dyadic coping, particularly stress communication, were found to hinder PTSD recovery. Unhelpful disclosure and problematic interpersonal dynamics in discussing trauma within the relationship seemed to limit recovery, indicating the nuanced nature of communication's role in PTSD recovery.

1. Introduction

Over the years, several models have been developed to understand better the complex nature of Posttraumatic Stress Disorder (PTSD) and what factors might explain treatment effects. The majority of these models have followed an individual-centred approach, focusing on

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*This study was preregistered (https://osf.io/vm43z).

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biological and cognitive factors that contribute to the development, maintenance and PTSD recovery. For instance, Ehlers and Clark's (2000) cognitive model posits that individuals with PTSD have maladaptive appraisals of the traumatic event, which perpetuate their symptoms. Similarly, Stam (2007) proposes a model of PTSD that emphasises the role of neurobiological factors in the disorder. While individual-centred models are valuable in understanding PTSD, other theories argue that a comprehensive understanding of the disorder necessitates considering both individual and social factors (Maercker & Horn, 2013). According to the socio-interpersonal theory of PTSD, social relationships and cultural contexts play a crucial role in an individual's appraisal of the traumatic event, their ability to cope with the aftermath, and their access to resources that may aid in their recovery (Maercker & Horn, 2013). In this view, the relational nature of the development and recovery of trauma-related symptomatology is central.

Empirical research adopting a socio-interpersonal perspective has primarily focused on negative associations between PTSD and social factors (e.g. Beck et al., 2009). For example, several relational factors are related to understanding and treating PTSD, such as emotional numbing, emotional dysregulation, social withdrawal, mistrust in others and hypervigilance (Bleiberg & Markowitz, 2005; Campbell & Renshaw, 2013; Markowitz et al., 2009). These factors contribute to impaired romantic relationship functioning in patients with PTSD. Indeed, research has shown that individuals with PTSD tend to have poorer family adjustment (Galovski & Lyons, 2004), higher rates of marital conflict (Byrne & Riggs, 1996; Gold et al., 2007), and increased risk of perpetrating intimate partner violence (IPV; Birkley et al., 2016; Taft et al., 2011). Relationship functioning in turn affects PTSD, with romantic relationship distress leading to more intrusion, avoidance and hyperarousal symptoms at the beginning of treatment (Evans et al., 2010) and a weaker response to treatment (Evans et al., 2009). In all, research has shown that romantic relationship distress and PTSD symptoms can have a detrimental impact on each other, with each exacerbating the other over time.

Although PTSD and romantic relationship functioning may negatively affect each other, it is possible that the partner relationship can function as a source of support, and promote PTSD recovery. Research on the potential positive association between relationship functioning and PTSD trajectories is scarce. It has been shown that the relations between PTSD and social support are bidirectionally evolving over time (Kaniasty & Norris, 2008). On the one hand, findings have consistently shown that social support is negatively associated with PTSD: individuals who perceive their significant others as supportive were found to report less posttraumatic stress symptoms (Brewin et al., 2000; Guay et al., 2006; Ozer et al., 2003; Wagner et al., 2016). On the other hand, literature has shown that a decline in posttraumatic stress symptoms leads to an increase in social support over time (Wang et al., 2021).

During the course of treatment, the beneficial impact of social support is also evident. Specifically, when individuals undergoing treatment experience increased social support, it was associated with greater reductions in PTSD symptoms (Price et al., 2018). One way to increase a patient's feelings of social support is through involving a significant other in treatment. A recent review showed that the more actively a significant other is involved, the better the treatment outcomes (Meuleman et al., 2022). Moreover, cognitive behavioural conjoint therapy for PTSD, a treatment designed for couples to reduce PTSD symptoms and enhance relationship functioning, was found to be effective for decreasing PTSD symptoms in patients (Monson et al., 2012). Findings on relationship functioning and partners' mental health were promising, but somewhat mixed (Liebman et al., 2020; Pukay-Martin et al., 2022). Nevertheless, there is still a gap in research investigating the potential beneficial connections between relational factors and the recovery from PTSD within conventional evidence-based trauma treatments.

In contrast to PTSD research, there is a wealth of literature examining the effects of relationship variables on health outcomes of people in the general population in times of stress (e.g. Eisenberger et al., 2011; Master et al., 2009). Especially the impact of romantic relationships on various wellbeing related outcomes have been well established since romantic partners typically fulfil the role of primary attachment figures in adulthood. A romantic partner often becomes the primary source of meeting one's attachment needs, offering emotional support, reassurance, and a sense of security (Eller & Simpson, 2020; Hazan & Shaver, 1987).

During times of stress, perceived partner responsiveness and dyadic coping have been identified as particularly important in romantic relationships. Perceived partner responsiveness refers to how an individual perceives their partner's emotional support and attentiveness to their needs, goals, and concerns (Reis et al., 2004). There is good evidence indicating that having a responsive partner is associated with both individual well-being as well as higher levels of relationship satisfaction and stability (e.g. Reis & Gable, 2015). For example, a longitudinal study by Selcuk et al. (2016) found that perceiving one's partner as responsive is associated with reduced emotional reactivity to daily stressors, which predicts higher well-being. Positive dyadic coping is a related but distinct concept, referring to the partners' perceptions

that they engage in and can jointly manage stressors and challenges (Bodenmann, 2005). Dyadic coping is associated with reduced stress, improved mental health of both partners, and higher levels of relationship satisfaction (Aldwin & Revenson, 1987; Randall & Messerschmitt-Coen, 2019). Recent longitudinal research has found that the positive effects of dyadic coping on relationship satisfaction are intensified when one partner experiences stress (Rusu et al., 2020). Thus, both partner responsiveness and dyadic coping have been identified as important relational factors during times of stress and in fostering healthy and resilient relationships.

While studies in the general population have shown the positive effects of partner responsiveness and dyadic coping on both well-being and relationship satisfaction, it remains unknown whether these positive relational factors can aid in PTSD recovery during treatment. Given that patients with PTSD often have elevated levels of stress (Stam, 2007), positive relational factors might enhance treatment results. This study therefore investigated whether initial levels of perceived partner responsiveness and dyadic coping impacted changes in PTSD symptoms over a timespan of six months. We hypothesized that patients who report higher levels of dyadic coping and perceived partner responsiveness at the initial measurement would have a stronger decline in posttraumatic stress symptoms over six months. Moreover, as an exploratory analysis, it was investigated whether posttraumatic stress symptoms impact changes in dyadic coping and perceived partner responsiveness. In sum, the current study aimed to examine the positive relations between perceived partner responsiveness and dyadic coping on PTSD recovery among patients undergoing standard PTSD treatment.

2. Methods

2.1. Participants and procedure

The sample for this study was drawn from the Psychotraumacenter South Netherlands of Reinier van Arkel, which is a specialised mental health care institute for the treatment of clients with PTSD. In the Psychotraumacenter South Netherlands, various patient groups are provided with treatment, such as refugees, veterans, military, police, and individuals who have experienced early childhood trauma. The treatment includes psychoeducational components, evidence-based trauma interventions like Prolonged Exposure, Eye Movement Desensitization and Reprocessing (EMDR), and Narrative Exposure Therapy, along with interventions focused on fostering reconnection with others. Seventy percent of individuals seeking treatment at PTC have previously undergone trauma-focused therapy at another institution, with limited success in alleviating PTSD symptoms. A quarter of these patients are veterans. Adhering to PTSD treatment recommendations, the initial preference is for evidence-based trauma-focused interventions like EMDR. If the desired effectiveness is not achieved, a transition to an alternative trauma-focused psychological treatment is considered in collaboration with the patient.

To be included in the study, patients had to start or be enrolled in treatment at the centre and all participants had to be involved in a romantic relationship. Exclusion criteria included acute suicide risk, florid psychotic symptoms, and an intellectual disability (IQ < 80). Eligible patients received an invitation to participate via their therapist or email. Two weeks later, a researcher called all patients who had received an invitation to request their participation. There was no dedicated control group, as data was collected in a clinic for patients with PTSD symptoms. Furthermore, due to recent privacy regulations at the clinic, details regarding treatment methods and duration were unavailable. After providing informed consent, participants completed an online questionnaire that included demographic questions (age, children, problems), as well as assessments of posttraumatic stress symptoms, partner responsiveness and dyadic coping. Six months later, participants were sent the same set of questionnaires via email and were reminded to complete them weekly. After two months, the link to the questionnaire expired, and participants were no longer able to participate in the second wave of data collection. This study was preregistered (https://osf.io/vm43z). Due to the nature of the research, due to ethical restrictions, supporting data is not available. Ethical approvement was attained from Ethics Committee Faculty of Social Sciences of Radboud University (ECSW-2021-016).

2.2. Measurements

Dutch translations of self-reported questionnaires were used to assess PTSD symptoms, perceived partner responsiveness and dyadic coping twice. For the main analysis, data from T1 were used to assess PTSD symptoms, perceived partner responsiveness, and dyadic coping. Herein, T2 data were employed solely for assessing PTSD symptoms. Furthermore, for the exploratory analyses, T2 scores for perceived partner responsiveness and dyadic coping were utilised.

2.2.1. Posttraumatic stress symptoms

The PTSD CheckList-5 (PCL-5; Blevins et al., 2015) was utilised to assess posttraumatic stress symptoms. The PCL-5 is a self-report questionnaire that consists of twenty items and measures four domains: Re-experiencing (criterion B), Avoidance (criterion C), Negative alterations in cognition and mood (criterion

D) and Hyper-arousal (criterion E). Participants rated the frequency of their symptoms over the past month on a 5-point scale ranging from 0 (not at all) to 4 (extremely). An example item is: 'In the past month, how much were you bothered by: Repeated, disturbing dreams of the stressful experience?' A sum score was determined by adding up all responses. A sum score between 31 and 33 is considered indicative of a PTSD diagnosis (Bovin et al., 2016). For the analyses, items were mean aggregated, with higher scores indicating more posttraumatic stress symptoms at T1 (Cronbach's α = .95) and T2 (Cronbach's α = .96).

2.2.2. Perceived partner responsiveness

To evaluate individuals' perception of their partner's responsiveness, the Perceived Partner Responsiveness (PPR) questionnaire developed by Reis et al. (2018) was employed. This questionnaire included 18 items, and participants rated each item on a 9-point scale ranging from 1 (never) to 9 (always). An example item is: 'My partner usually: is aware of what I am thinking and feeling'. Items were mean aggregated, with higher scores indicating greater perceived partner responsiveness at T1 (Cronbach's α = .95) and T2 (Cronbach's α = .95).

2.2.3. Dyadic coping

The Dyadic Coping Inventory (DCI; Bodenmann, 2008) was used to evaluate the extent to which couples offer support and actively help each other during stressful situations. Participants were asked to rate their communication in times of stress and coping strategies, their perception of their partner's coping strategies, and how they both cope as a couple using a five-point Likert scale, ranging from 1 (very rarely) to 5 (very often). An example item is: 'My partner listens to me and gives me the opportunity to communicate what really bothers me'. Eight items were reverse-scored. The questionnaire consists of five subscales: (1) stress communication; (2) supportive dyadic coping; (3) delegated dyadic coping; (4) negative dyadic coping and; (5) common dyadic coping (Bodenmann et al., 2018). Stress communication refers to the way individuals communicate with their partners about stress within a dyadic or relational context. Supportive dyadic coping involves behaviours such as showing empathy, providing understanding, expressing solidarity and helping partners calm down. Delegated dyadic coping entails taking on tasks typically handled by the partner to alleviate their burden. Negative dyadic coping is categorised as hostile (e.g. criticism, distancing), ambivalent (e.g. unmotivated support, making the partner feel unappreciated), and superficial (e.g. support lacking motivation or genuine understanding). Common dyadic coping includes for example mutual problem-solving engagement and expressing tenderness. A mean dyadic coping score was obtained by mean aggregating the answers on the first 35 items, with higher scores indicating greater dyadic coping at T1 (Cronbach's α = .90) and at T2 (Cronbach's α = .93).

2.3. Statistical analyses

Means, standard deviations and inter-scale correlations between variables were computed. We used a linear regression model to assess the main model and the exploratory model, using the *lmer* function of the lme4 package (version 1.1.33; Bates et al., 2015) in R (R Core Team, 2023). The main model had perceived partner responsiveness (T1), dyadic coping (T1), age and relationship duration as independent variables, and PTSD recovery as a dependent variable (computed using the PCL scores at T2 minus the PCL scores at T1). Additional analyses were conducted to investigate the separate effects of the dyadic coping subscales on PTSD recovery, by running the same model but dividing dyadic coping into its five subscales. We also explored a second model. This exploratory model involved posttraumatic stress symptoms (T1), age and relationship duration, as the independent variable, and the change in perceived partner responsiveness (T2 minus T1) and dyadic coping (T2 minus T1) as dependent variables.

Before conducting the analyses, assumptions were checked. Computations showed that there were no large proportions of standardised residuals (> ± 3) and there was slight multicollinearity. Visual checks indicated no severe violations of the normality of residuals and linearity/homoskedasticity. Values of Cook's distance indicated that there was one influential value, which was deleted before any data analyses, resulting in $N = 90$. The model was saturated ($df = 0$; therefore, $p = 1.00$), so the model fit was not reported. We used a robust estimator method ('MLR') to correct for the deviations from normality. Full information maximum likelihood (FIML) estimation was used in all models to deal with missing data.

3. Results

3.1. Attrition

The total dataset consisted of 90 clients, of which 67 filled in the PCL-5 at both the first and second measurement moment. Data on the PPR and DCI at T1 were missing for respectively eight and two patients. Sensitivity analyses were conducted for all of the analyses described below, running the analysis again with only those participants with complete data. Results were similar using FIML and the complete dataset, showing that the attrition is likely to be random.

Table 1. Means, standard deviations, and Pearson-product correlations.

	M(*SD*)	1	2	3	4	5	6	7
1. Age	45.1 (9.0)							
2. Relationship duration	13.3 (9.9)	.35**						
3. PCL-5_{T1}	2.4 (0.8)	.01	.33**					
4. PCL-5_{T2}	1.8 (0.9)	−.11	.21	.63**				
5. DCI_{T1}	3.5 (0.4)	−.08	−.11	−.15	.02			
6. DCI_{T2}	3.5 (0.5)	.01	−.24	−.01	−.08	.72**		
7. PPR_{T1}	6.7 (1.5)	.22	.08	−.13	−.21	.65**	.62**	
8. PPR_{T2}	6.6 (1.5)	.23	−.05	−.05	−.24	.48**	.69**	.72**

Note. *$p < .05$. **$p < .01$.

3.2. Participants and descriptives

A total of 90 clients participated in the study, 49 of whom were veterans. The total sample consisted of 61 males (67.8%) and 29 females (32.2%). Among the 81 clients who responded to questions regarding their parental status and their involvement in legal and/or financial difficulties, it was found that 68 individuals (84.0%) reported having at least one child and 17 individuals (21.0%) reported legal and/or financial issues.

The average sum score on the PCL-5 at T1 was 46.8 ($SD = 16.5$), which exceeded the threshold of 33. This threshold is considered indicative of probable PTSD, as suggested by Bovin et al. (2016). At T2, the average score was 37.1 ($SD = 18.0$). In the sample of veterans, sum PCL-5 scores were similar, with an average of 47.0 ($SD = 17.3$) at T1 and 37.7 ($SD = 18.1$) at T2. Table 1 displays the means and standard deviations of relevant variables.

As shown in Table 1, most of the bivariate associations of patients' PTSD symptoms with reports of dyadic coping and perceived partner responsiveness were negative but non-significant, both at T1 and T2. Likewise, age and relationship duration did not significantly correlate with posttraumatic stress symptoms or any of the relational factors. Age and relationship duration were positively correlated. Moreover, the study found that reports of dyadic coping and perceived partner responsiveness at both T1 and T2 were significantly and positively associated with each other.

3.3. Main results: relational influences on PTSD recovery (Model 1)

A linear regression analysis was performed with PTSD recovery (PCL-5 at T2 minus T1; more negative scores represent stronger recoveries) as the outcome variable and posttraumatic stress symptoms at T1, dyadic coping, perceived partner responsiveness, age and relationship duration (yes/no) as predictors ($N = 90$). Posttraumatic stress symptoms at T1 were associated with PTSD recovery, $b = -0.29$, $SE = .08$, $p = .002$, indicating that those patients with higher levels of posttraumatic stress symptoms at T1 had greater declines in posttraumatic stress symptoms over time (and thus a greater recovery). Further results showed that dyadic coping was associated with PTSD recovery, $b = 0.81$, $SE = 0.23$, $p = .001$. However, the direction of this association was opposite to what was anticipated. The positive beta-weight indicated that those with higher levels of dyadic coping had less PTSD recovery over time. Perceived partner responsiveness was also associated with PTSD recovery, $b = -0.30$, $SE = 0.08$, $p < .001$. In line with predictions, higher levels of partner responsiveness at T1 predicted greater PTSD recovery over time. Age and relationship duration were not associated with PTSD recovery, with values of respectively $b = 0.01$, $SE = 0.01$, $p = .215$ and $b = 0.00$, $SE = 0.01$, $p = .703$.

To dive deeper into the unexpected association between more dyadic coping and less recovery over time, we performed an additional linear regression analysis with PTSD recovery as the outcome variable and posttraumatic stress symptoms at T1, the five dyadic coping subscales (stress communication, supportive dyadic coping, delegated dyadic coping, negative dyadic coping, common dyadic coping), perceived partner responsiveness, age and relationship duration as predictors ($N = 90$). The pattern of results for initial posttraumatic stress symptoms, perceived partner responsiveness, age and relationship duration remained unchanged from the first model. Results revealed that only stress communication was significantly associated with PTSD recovery indicating that those patients who scored higher at communicating about their stress to their partner, had lower levels of PTSD recovery (i.e. a smaller decline in posttraumatic stress symptoms between T2 and T1) (Table 2).

Table 2. Regression results including all coping subscales.

Predictor	Estimate	*SE*	*p*
PCL_{T1}	−0.32	0.10	.002
DCI-SC_{T1}	0.54	0.26	.041
DCI-SDC_{T1}	0.38	0.28	.171
DCI-DDC_{T1}	0.10	0.24	.966
DCI-NDC_{T1}	−0.07	0.18	.713
DCI-CDC_{T1}	−0.07	0.19	.698
PPR_{T1}	−0.24	0.09	.005
Age	0.01	0.01	.639
Duration	0.01	0.01	.593

Note. DCI-SCO is the stress communication subscale; DCI-SDC is the supportive dyadic coping subscale; DCI-DDC is the delegated dyadic coping subscale; DCI-NDC is the negative dyadic coping subscale; DCI-CDC is the common dyadic coping subscale.

3.4. Exploratory analyses: effect of PTSD on relational factors (Model 2)

We explored whether changes in dyadic coping or perceived partner responsiveness were predicted by initial levels of posttraumatic stress symptoms. A linear regression analysis was performed with DCI change (DCI at T2 minus T1; more negative scores represent declines in dyadic coping) and PPR change (PPR at T2 minus T1; more negative scores represent declines in responsiveness) as outcome variables and posttraumatic stress symptoms at T1, age and relationship duration as predictors ($N = 90$). The results demonstrated that changes in dyadic coping over time were not associated with posttraumatic stress symptoms at T1 ($b = 0.09$, $SE = 0.05$, $p = .073$), nor with age ($b = 0.01$, $SE = 0.01$, $p = .238$). Relationship duration was associated with changes in dyadic coping, $b = -0.01$, $SE = 0.01$, $p = .007$, meaning that the dyadic coping of patients with a longer relationship duration declined more over time (whilst in treatment). In addition, results showed that changes in perceived partner responsiveness were not associated with posttraumatic stress symptoms at T1 ($b = 0.05$, $SE = 0.18$, $p = .791$), nor with age ($b = -0.00$, $SE = 0.02$, $p = .913$) or relationship duration ($b = -0.01$, $SE = 0.02$, $p = .520$).

4. Discussion

Understanding PTSD requires considering both individual and social factors (Maercker & Horn, 2013). Existing literature has explored the positive impact of social support on posttraumatic stress symptoms (e.g. Wang et al., 2021), but further research on the positive relations between romantic relationship factors and PTSD recovery has been lacking. Studies in the general population have shown the importance of perceived partner responsiveness and positive dyadic coping in times of stress (Randall & Messerschmitt-Coen, 2019; Rusu et al., 2020). Therefore, this study investigated the impact of partner responsiveness and dyadic coping on PTSD recovery in a sample of patients undergoing treatment for PTSD.

Results showed that perceived partner responsiveness was related to PTSD recovery. According to the theory of posttraumatic growth (PTG; Tedeschi & Calhoun, 2004), perceived responsiveness of one's romantic partner has the potential to facilitate the development of new self-narratives and a redefined comprehension of one's character, significance, and purpose, which might in turn aid in PTSD recovery. The positive effects of perceived partner responsiveness on PTSD recovery also align with theories stating that actively involving significant others in treatment, and thus making partners more aware of and responsive to a patient's needs whilst in treatment, could enhance a patient's perceived social support (Meuleman et al., 2022; Monson et al., 2012; Shnaider et al., 2014), which in turn positively impacts PTSD recovery (Fredette et al., 2016). In all, patients who perceive their partner as being more responsive have a greater PTSD recovery, which can be explained by its positive effects on perceived social support and the development of new self-narratives.

In contrast to perceived partner responsiveness, we found that dyadic coping had a negative impact on PTSD recovery. More specifically, stress communication, which reflects how patients and partners communicate about (both of) their stress to one another (e.g. 'I show my partner through my behaviour when I am not doing well or when I have problems' or 'My partner tells me openly how she/he feels and that I would appreciate his/her support'), was found to hamper PTSD recovery. Stress communication consists of two parts: how clients communicate about their stress with their partner, and how clients perceive that their partners communicate about *their* stress. Literature suggests that discussing the consequences of trauma with a significant other can be beneficial, but how it is done is crucial (David et al., 2022). Accordingly, unhelpful disclosure might increase posttraumatic stress symptoms. Problematic interpersonal dynamics such as unhelpful disclosure can easily manifest in the context of communication regarding the traumatic exposure (Calhoun et al., 2022). One such example is partners who hold a belief that avoidance is beneficial for their partner with posttraumatic stress symptoms, whilst it reinforces fear and anxiety (Renshaw et al., 2020). Another example of precarious support might be that partners co-ruminate with one another. In the absence of an active stress management plan, the individual affected by trauma may perceive support from others but still experience significant stress (Calhoun et al., 2022). At the same time, it might be possible that discussing a partner's stress might exacerbate the client's learned helplessness, thereby negatively impacting PTSD symptoms (Flannery & Harvey, 1991). Thus, in contrast to perceived partner responsiveness, our study highlights that dyadic coping, particularly stress communication, can impede PTSD recovery. Future research into the romantic partner's perspective on dyadic coping is needed.

The exploratory analyses revealed that posttraumatic stress symptoms were not significantly associated with the deterioration of dyadic coping or perceived partner responsiveness over six months. This is in contrast to the stress deterioration model suggesting that PTSD symptoms influence social support and relationship behaviour (e.g. Campbell et al., 2017; Kaniasty & Norris, 2008). The lack of associations might suggest that coping and responsiveness are inherent components of a couple's dynamics.

That is, dyadic coping and responsiveness may embody a couple's resilience that might reflect ingrained attachment styles that have already been developed in previous relationship experiences (Van Ee et al., 2016). Thus, while dyadic coping and responsiveness are vital for maintaining a healthy relationship (Randall & Messerschmitt-Coen, 2019; Rusu et al., 2020), they may not be directly influenced by the severity of PTSD symptoms.

This study has several limitations that should be acknowledged. First of all, the conclusions in this study were collected in a clinical setting, under patients who were in treatment for PTSD. Details regarding the specifics of their treatment regimen, such as the type or the number of sessions, were unavailable due to privacy regulations. Therefore, interpreting these results requires caution and future research is needed to elucidate the effect of various treatments on PTSD recovery, including the moderating role of relational factors. Secondly, the sample size was relatively small, which limited further investigation of, for example, differences in relationship duration, trauma type and gender. A third limitation is the use of only one follow-up measurement. Future research would benefit from a longer time span and more follow-up measures, to further investigate the (positive) effects of relational factors on PTSD recovery. Fourthly, the study relied on self-report measures to assess posttraumatic stress symptoms, perceived partner responsiveness and dyadic coping. Self-report measures are subject to individual interpretation, recall bias, or social desirability bias, which could have affected the accuracy of the reported data. Lastly, it is worth noting that this study did not include a control group. Future research could be valuable in comparing the outcomes of patients receiving treatment with those who are on a waiting list, thereby adjusting for treatment effects. This comparison would help determine whether the observed effects are specific to patients in treatment or if they can be generalised to all patients with PTSD.

Despite these limitations, this study represents the first longitudinal study aimed at identifying romantic relationship factors that impact recovery from PTSD. From a clinical standpoint, we propose the involvement of partners in PTSD treatment, including providing them with psychoeducation on the significance of their responsiveness to the client's needs during treatment. Additionally, clinicians can actively engage romantic partners in the treatment process, emphasizing helpful disclosure and positive, reciprocal communication within the couple to promote positive dyadic coping. Further research should further delve into exploring positive relational factors as, in the appropriate circumstances, clients and partners can become stronger together.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Funding

This study was partly supported by a grant of Nederlands Veteraneninstituut (Dutch institute for veterans); Landelijk Zorgnetwerk Veteranen.

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