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The effectiveness of imagery work in schema therapy with couples: a clinical experiment comparing the effects of imagery rescripting and cognitive interventions in brief schema couples therapy

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ABSTRACT

Schema therapy has shown good effectiveness in individual and group settings. Experiential techniques, in particular, seem to contribute to those effects. In a randomized controlled trial with 12 couples, we compared the effects of couple imagery rescripting exercises and a cognitive intervention based on the schema therapy model in a crossover design. We measured the couples' sense of closeness, using daily VAS-scales, and on mood (BDI-II). Imagery rescripting showed significantly stronger effects on the felt closeness and mood of both partners than schema model-based cognitive therapy techniques.

Introduction

There is an increasing evidence of effectiveness of schema therapy for individuals with various disorders in some studies (e.g. Bamelis, Evers, Spinhoven, & Arntz, 2014; Giesen-Bloo et al., 2006; Gude & Hoffart, 2008; Heilemann, Pieters, Kehoe, & Yang, 2011; Malogiannis et al., 2014; Nadort et al., 2009; Renner, Arntz, Peeters, Lobbestael, & Huibers, 2016). There is also first-order evidence for the application of schema therapy in a group format (Dickhaut & Arntz, 2014; Farrell, Shaw, & Webber, 2009).

Schema therapy has been developed especially to address the needs of more difficult and challenging cases that do not respond to brief counselling interventions, possibly caused by so-called "gridlocked problems", when hidden agendas underlie the issue (Gottman, 1999). The schema concept is one approach to conceptualize these "hidden agendas". A schema is meant as a "footprint" of a complex cluster of cognitions, emotions,

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sensations and tendencies to react, entrenched into the neural networks of the brain based on intensive or repetitive prior experiences, for example, of need frustration. Once these patterns get activated later in life, they unconsciously induce a strong and hard to change tendency to percept, appraise and react in the preformed manner. People tend to feel stuck or caught in a "life trap" (Roediger, Stevens, & Brockman, 2018).

The schema therapy approach provides the means to identify such underlying maladaptive patterns of behaviour and interaction and to guide the patient to develop more functional ways to get their emotional needs met. Schema therapy draws on interventions from several historical traditions within psychotherapy and includes an emphasis on bringing about emotional change through experiential techniques, such as chair dialogues and imagery rescripting. It also has a strong developmental orientation, addressing early experiences that lie at the root of the client's current problems. Thus, schema therapy combines the depth and developmental theory of long-term therapies with the active, change-oriented approach of brief therapies (Young, Klosko, & Weishaar, 2003).

So far, no studies have examined the effectiveness of schema-therapeutic interventions for the treatment of couples. However, their application seems promising if we assume that couples demonstrating very hardened and difficult interaction patterns, in particular, could benefit from treatment approaches designed for people with interactional difficulties that have their roots in early development. High-conflict couples break up their relationships earlier and more frequently (Bouchard, Sabourin, Lussier, & Villeneuve, 2009; Whisman, Tolejko, & Chatav, 2007). Conversely, a good relationship is one of the most important resources and a core factor in life satisfaction (Wernhart & Neuwirth, 2007). Studies show that a successful couples therapy has a similar impact on depressive symptoms to a disorder-specific individual therapy (Barbato & D'Avanzo, 2008).

One of the central experiential techniques in schema therapy is imagery rescripting (ImRs), which is also applied as a stand-alone treatment for a range of disorders that have their roots in traumatic or other negative experiences (see Arntz, 2012, for a review, and Morina, Lancee, & Arntz, 2017, for a meta-analysis). In ImRs, the patient imagines the memory of a traumatic or negative event as if it is happening in the here and now, and then imagines a different course of events that meets their needs better. While the name suggests that the original memory is overwritten by the fantasized new script, research indicates that this is not the case. Rather, the meaning of the memory representation of the negative event changes into a more functional direction, while the memory of what happened remains intact (Arntz, 2012). Based on the theory that negative (traumatic) childhood experiences, for example with caregivers, play a role in the

dysfunctional patterns that disturbed couples repeatedly end up in, ImRs is a potentially powerful technique to change those patterns. Atkinson (2012) introduced imagery into couple therapy. Roediger (Simeone-DiFrancesco, Roediger, & Stevens, 2015) developed a specific application of ImRs that is hypothesized to not only change the meaning of early experiences that underlie dysfunctional interpersonal patterns, but also to increase mutual understanding and empathy between the partners. In short, instead of the therapist or the patient directing the rescripting, the patient's partner steps into the image and soothes the activated emotions, bringing the scene to a good end. Clinical observation suggests that this helps partners to see each other as caring instead of antagonistic, which helps to break dysfunctional patterns. However, these impressions have not been put to the test.

The primary goal of our study was to examine whether conjoint ImRs exercises are more effective than a schema model based cognitive therapy (CT) approach. We randomized 12 couples into two groups, which differed in the sequence of the application of the two techniques. We based both techniques on the schema-therapeutic "mode-cycle" model, which we used to analyse each couple's conflict patterns and their biographical underpinnings.

Since the number of participating couples was rather small and the study lacked a control group, the results allow only limited conclusions about the overall effectiveness of the approach in general, making it a secondary outcome measure. Nevertheless, comparing two active treatment conditions in a crossover approach seems to be a relatively strong experimental approach from which one can draw conclusions.

The schema therapy model

Before presenting the methods and results of the study, we describe the schema therapy model for couples in more detail here.

Schema therapy has been developed over the past 30 years in order to treat maladaptive interactional patterns as they are frequently displayed by personality disordered people. Young et al. (2003) regarded these patterns as based on schemas acquired in early childhood from dysfunctional experiences with significant others who did not meet the core needs of the child. The effectiveness of schema therapy is probably based on the combination of a specific therapy relationship described as "limited reparenting", the use of a comprehensive theoretical model and the application of experiential techniques such as ImRs and chair dialogues, in addition to CT techniques. Experiential techniques, in particular, lead to an intensive emotional experience that is "deeper" than pure cognitive insight. ImRs enables patients to connect their present emotional experience with the

underlying childhood situations in which their emotions are rooted and to find a solution to meet their needs today. This is meant to induce a corrective emotional experience, supporting the couple to distinguish current perceptions from schema-based internal activation patterns in order to regain reaction flexibility in the present situation.

Applying the schema therapy model to couples

People tend to choose partners based on what they are familiar with, similarly to molecules matching and interacting in a chemical reaction. Young (2012) calls this "chemistry", which results in an intensive emotional connection based on the feeling of "knowing" each other. Based on Cannon's animal model (1915), various resulting interactional patterns can appear, like fight–fight, flight–flight or fight–flight. One prevalent pattern in couples coming into therapy is the "fight–flight" cycle. Johnson (2004) calls this a "pursuer–withdrawer dance". In the schema therapy model, we call this a mode cycle, since the activated states involved are called "modes". This cycle is unstable and tends to escalate when the dominant partner tries to get the withdrawing partner under control again (see Figure 1). Due to the high level of emotional activation, this happens to a large extent on an implicit level and is hard to influence. The couple feels increasingly trapped.

We regard the schema therapy for couples (ST-C) approach as an extension to emotion focussed therapy for couples (EFT-C). The basic assumptions of EFT-C are:

> (a) couple conflict and relationship distress result from partners being unable to meet each other's needs; (b) unmet needs lead to specific negative emotions in partners; and (c) specific negative emotions, accompanying unmet needs, give rise to specific behaviours in partners, resulting in negative interaction cycles between partners over time. (Vanhee, Lemmens, Moors, Hinnekens, & Verhofstadt, 2018, p. 24)
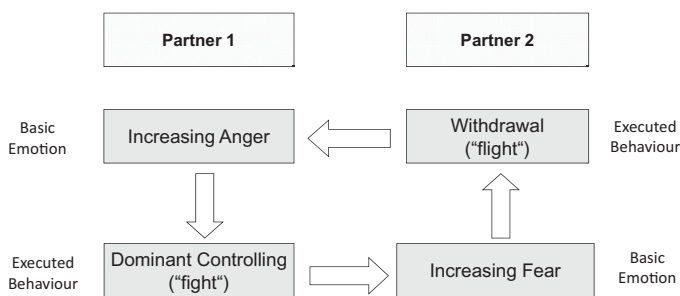

Figure 1. An example of a maladaptive interactional cycle.

ST-C shares these assumptions. Both approaches focus primarily on an emotional reconnection rather than on content-related problem solving. We assume that ImRs significantly deepens the emotional reconnection of couples, as described in the so-called "second stage" of EFT-C (Wiebe & Johnson, 2016). While EFT-C is already evidence based (see, e.g. Greenman & Johnson, 2013), the recently published ST-C model (Simeone-DiFrancesco et al., 2015) is not yet tested. However, we did not intend this study to provide evidence for the ST-C-model as a whole, but rather to show evidence of the ImRs technique as an active ingredient in therapy.

Method

We examined the effect of a conjoint ImRs exercise for couples compared to a schema-model based cognitive intervention (CT). Both techniques were based on the ST-C model. We limited our sample to couples reporting to find themselves in recurrent and hardened fighting patterns that they cannot overcome. A crossover design was used in order to investigate whether ImRs within the framework of a brief couples therapy of seven sessions is more effective than a schema-based cognitive intervention. In detail, we tested the following two hypotheses:

- ImRs leads to more intensive feelings of belonging and closeness to the partner compared to CT.
- Negative affect, measured by depression scores, diminishes after conjoint ImRs sessions to a higher extent than after sessions with solely cognitive interventions.

Participants

In our study, we treated couples with maladaptive interactional patterns that led to frequent arguments or withdrawal in the relationship. The couples became aware of our study through our websites or through recommendations from other sources, such as their individual therapists. The study design was approved by the ethical committee of the Psychotherapy Chamber in Hamburg.

We conducted screening telephone calls to check whether the following criteria were met: Prolonged interactional conflict, such as regularly repeated arguments with rigid patterns (based on the couple's self-reporting) and both partners aged over 18 years.

Exclusion criteria were the presence of a psychotic or major depressive disorder, dementia, severe OCD, eating or anxiety disorders or substance

abuse, screened by the SKID-I (Wittchen, Wunderlich, Gruschwitz, & Zaudig 1997) or an acute crisis (such as a recently revealed affair).

In the initial session, all participants were screened with the SKID-I to exclude participants meeting criteria for disorders that were exclusion criteria. No participant was excluded for this reason.

The participants were 12 heterosexual couples. The mean age was 44.9 years (SD = 9.5). The mean duration of the relationship was 11.5 years (SD = 6.9 with a range from 4 to 25 years). Eight of the 12 couples still had children living in the household; among 5 couples (41.7%) the youngest child was 5 years old or younger. In the beginning of the treatment, the couples payed a deposit of €250, which they were reimbursed after they returned all questionnaires. All couples completed all sessions and returned all measures completely, so there were no drop-outs. Thus, this is an intention-to-treat analysis.

Therapists

All three therapists (two females, one male) were fully licensed cognitive behaviour therapists working in private practice and also schema therapy trainers and supervisors certified by the International Society of Schema Therapy (ISST). All study therapists passed full ISST-certified ST-C training. Their mean age was 44.3 years. All intervention sessions were video-taped and checked for adherence by an independent schema therapist using the Schema Therapy for Couples Competence Rating Scale (STC-CRS). All sessions scored beyond 4.0 on a 0 (very poor) to 6 scale (excellent), meaning that they fulfilled the criteria for certification. The treatment of the participants was provided during regular office hours. The interval between the sessions was 2 weeks. The therapist received reimbursement through a donation by the Hamburg Cognitive Therapy Institute (IVAH).

Measures

Three measures were completed by participants and repeated. On a daily basis, all participants noted their sense of closeness to their partner and the level of understanding on two visual analogue scales (VAS), on which high scores indicated a high level of perceived belonging to the partner. The first question (translated here into English) was "How close did you feel to your partner today?", and the poles of the VAS were marked with "not close at all" and "very close". The second question was "How much do you feel understood by your partner?", with poles of "not understood" and "very well understood". We chose these two questions on a clinical basis. In

addition, before each session both partners filled out the BDI-II (Hautzinger, Keller, & Kühner, 2006).

Design

The 12 couples were randomly assigned to the three therapists in two protocols. After an initial session, they received either two ImRs sessions first and two cognitive sessions afterwards (Order A) or the other way round (Order B). Order was balanced per therapist: each therapist provided Order A twice and Order B twice. Thus, all couples received two cognitive and two ImRs sessions, followed by an evaluation and a follow-up session. Only the sequence differed.

Procedure and session content

Introductory session

In the first session, after filling out the diagnostic tools, all couples received a brief introduction to the model, including the concept of core needs, schema induction, child mode activation, coping mode styles and resulting coping mode cycles.

Imagery rescripting exercise

Both partners and the therapist closed their eyes. The active partner started by choosing a recent emotional situation involving their partner, such as a recent conflict with the partner, describing it in a multisensory way and getting in touch with the associated emotions and body sensations. Then, through an affect bridge, a memory of a childhood scene was experienced, and the patient was helped to become aware of their frustrated needs. To resolve the situation in the rescripting part, the observing partner in his or her competent state entered the scene in imagery and took care of the child in the imagery, fulfilling the child's needs appropriately. If necessary, the therapist assisted. Usually, the experience in such an imagery exercise is deeply felt and serves as a crystallising point for a new way to encounter the partner. In the following session, the partners changed roles so that both had the experience of being reparented by their partner.

Cognitive intervention

Based on the mode-cycle model, the cognitive session analysed the situational triggers, the evoked automatic thoughts, activated basic emotions, the resulting coping behaviour and the unmet needs in terms of the mode cycle model using a specific form (the so-called mode cycle clashcard (Simeone-DiFrancesco et al., 2015) in a difficult current relationship

situation. After analysing their maladaptive mode cycle, we assisted the patient to question their old patterns and develop more adaptive thoughts and behaviour strategies, reducing induced negative emotions in the partnership communication today. The passive partner was included in this search process. In the following session, the partners changed roles.

Integration and follow-up sessions

In the integration sessions, we tried to link the emotional experiences in the ImRs sessions with the model developed in the mode cycle based cognitive sessions (in the following called CT sessions). Thus, both partners had the chance to deepen their understanding of the nature of their conflict pattern and their underlying childhood experiences. Based on this experience and the mode-cycle model, the partners were trained in additional ways to step out of the conflict through behaviour pattern breaking. In the follow-up sessions at least a month later, further outcomes were measured and future steps discussed.

The sessions took 90 minutes each and were held at 2-week intervals, except for the follow-up session, which was held a minimum of 4 weeks after the evaluation session.

Statistical analysis

Daily VAS ratings

As the two VAS ratings were highly correlated (>0.93) and followed a highly similar time course, they were combined in one score by averaging them. To deal with the repeated VAS ratings, the (slight) variations between couples in time between sessions, and the nested structure of the data (participants nested in couples), this average score was analysed with SPSS 22.0 mixed regression, with individual patients nested under couple and the day of rating as a continuous time factor (in the repeated part). For the repeated part, two autoregressive covariance structures were tested for the best fit: AR1 and ARMA11. The random part contained, at the patient level, a random intercept and a random slope of time.

The fixed part (in which the hypotheses were tested) contained intercept, time (day of VAS rating – linear trend), to account for a general effect of the passage of time, order of condition (two levels: ImRs–CT vs. CT–ImRs), condition (four levels: Introduction, ImRs, CT, Integration), (individually) centred time within each condition (to test for possible deviations of the time development during a specific condition), the interactions Order × Condition and Order × Time within ImRs resp. CT resp. integration, a (centred) dummy representing the difference between the two ImRs sessions, a (centred) dummy representing the difference between the two

CT sessions, and the two interactions between time within ImRs and the ImRs-session-difference dummy as well as the CT-session-difference dummy by time-within-CT interaction (these interactions test whether the time development differs after the first versus after the second session of ImRs resp. CT).

Each condition represents the daily VAS ratings in the period from its application until the next session (about 2 weeks, but variable among couples). Note that with the centred time within condition covariate, the condition effects represent the means during the period of that condition (and not the initial effect).

The analytical strategy was as follows (note that the possible backwards deletion of non-significant predictors in the fixed part as described below leads to a simpler model): First, the best fitting covariance structure (AR1 vs. ARMA11) was determined with only time in the fixed part. Next, using the optimal covariance structure, the full model was run. If the differences between the two ImRs resp. CT sessions in mean and in slope were not statistically significant, they were deleted from the model. If the interactions involving Order were not significant, they were deleted next. If the main effect of condition was significant, planned contrasts assessed whether ImRs differed significantly from the other conditions. In addition, differences between all conditions were explored with pairwise contrasts. Residuals of the final model were inspected for outliers and for meeting the assumption of normal distribution.

Note that the focus of the analysis is primarily on (i) comparing the main effects of the four conditions, especially the comparison of ImRs and CT; and (ii) investigating the development over time of VAS-ratings after ImRs and CT. The rather complex analysis is necessary to control for factors like the mere passage of time, order of interventions, differential effects of a first versus a second session of ImRs or CT, participants constituting a couple, and autocorrelation of the VAS-ratings.

BDI scores

The distribution of BDI ratings was heavily skewed. Therefore, the data were analysed with generalized linear mixed models using a negative binomial distribution, which is suitable for skewed data. Individual patients were nested under couple. For ImRs and CT, we were primarily interested in the effects after two sessions of their application. Thus, the primary analysis focussed on BDI ratings after the second ImRs and after the second CT session, comparing them to BDI ratings after Introduction, after Integration and at Follow-up. These five assessments constituted a within-participants condition with five levels. For the repeated part, Unstructured, AR1, ARMA11 and CS covariance structures were compared to determine

which structure had the best fit. If a structure other than Unstructured fitted best, random parts were added if possible (unstructured does not allow for random parts). Next, we tested in the fixed part whether the Order × Condition effect was significant, added to the main effects of Condition and Order. If not significant, the interaction was deleted from the fixed part. In the final model, planned contrasts tested differences between ImRs and the other assessments, and we explored differences between the other assessments. Pearson residuals were inspected for outliers. Next, explorative generalized linear model analysis based on a binomial distribution, included both ImRs and both CT sessions, to assess changes from first to second treatment session.

Results

Daily VAS ratings

The ARMA11 covariance structure was significantly better fitting than the AR1 structure, and hence was the basis for all further analyses. The differences in mean and slope between ImRs sessions were not significant, and the same held for the two CT sessions. Thus, they were deleted from the model. The interactions involving Order were not significant, and they were thus also deleted from the model. This led to a simpler model in the fixed part, where time, order, condition (four levels: Introduction, ImRs, CT, Integration), and time within each condition were the predictors. Table 1 shows the final results. In sum, condition was significant, and ImRs produced significantly higher VAS ratings than Introduction and CT, while not significantly differing from the Integration condition. CT did not differ significantly from Introduction, but was significantly lower than Integration. Figure 2 shows the estimated effects (mean and standard deviation) of condition (i.e. the means) of the fixed part. The time within condition slopes were significant for ImRs and for Integration. While there was a significant increase in VAS-ratings after ImRs, the ratings gradually reduced over time. By contrast, the integration session was followed by a steady increase of VAS-ratings over time. Figure 3 illustrates these effects on the basis of the fixed part of the final model for 14-day periods between sessions and 4 weeks after the Integration session (note that as there were individual variations in days in these periods, this figure is based on using 14 days resp. 28 days in the regression equation to estimate the means). Inspection of the residuals showed approximately normal distributions, with one clear outlier: a single observation in the Integration condition. This appeared not to be a data entry error, but related to a temporary drop of the rating by one patient related to a conflict with the partner. Given

Table 1. Results of the mixed regression analysis of the VAS ratings (fixed part).

Fixed effects: *F*-tests				
Source	*F*	df1	df2	*P*
Corrected model	4.040	9	2429	<0.001
Time	1.653	1	2429	0.199
Order	0.288	1	2429	0.592
Condition	4.025	3	2429	0.007
Time within introduction	0.096	1	2429	0.756
Time within ImRs	15.288	1	2429	<0.001
Time within CT	0.229	1	2429	0.632
Time within integration	5.503	1	2429	0.019

Fixed coefficients						
					95% CI	
Parameter	*β*	Std. error	*t* (2429)	*P*	Lower	Upper
Intercept	48.217	4.1649	11.577	<0.001	40.049	56.384
Time (days)	−0.072	0.0560	−1.286	0.199	−0.182	0.038
Order (−0.5, 0.5)	−4.321	8.0559	−0.536	0.592	−20.118	11.477
ImRs (vs. Introduction)	6.383	2.2872	2.791	0.005	1.898	10.868
CT (vs. Introduction)	3.038	2.2722	1.337	0.181	−1.418	7.493
Integration (vs. Introduction)	9.667	3.7505	2.578	0.010	2.312	17.021
Time within Introduction	−0.078	0.2517	−0.310	0.756	−0.572	0.415
Time within ImRs	−0.580	0.1483	−3.910	<0.001	−0.870	−0.289
Time within CT	0.058	0.1218	0.479	0.632	−0.180	0.297
Time within Integration	0.331	0.1413	2.346	0.019	0.054	0.609

Pairwise contrasts						
					95% CI	
Condition: pairwise contrasts	Contrast estimate	Std. error	*t* (2429)	*p*	Lower	Upper
ImRs–Introduction	6.383	2.287	2.791	0.005	1.898	10.868
ImRs–CT	3.345	1.454	2.302	0.021	0.495	6.196
ImRs–Integration	−3.284	2.402	−1.367	0.172	−7.994	1.427
CT–Introduction	3.038	2.272	1.337	0.181	−1.418	7.493
CT–Integration	−6.629	2.363	−2.806	0.005	−11.262	−1.996
Integration–Introduction	9.667	3.750	2.578	0.010	2.312	17.021

the small proportion (0.04% of ratings), the observation was not excluded from the analysis.

BDI scores

The Unstructured covariance structure had the best fit for the repeated part. Therefore, no random parts could be added. The Order × Condition interaction was not significant ($P = 0.58$) and was therefore deleted from the model. Table 2 and Figure 4 show the results of the final model. Following ImRs, the BDI ratings were significantly lower than those after Introduction and CT, but did not differ from Integration and Follow-up. CT, on the other hand, did not differ significantly from Introduction (though the difference was in the expected direction), and was significantly higher than the other conditions. At Integration and Follow-up, the BDI was significantly reduced compared to Introduction. Explorative analyses showed that from first to second ImRs session there was a reduction in BDI ratings (t (91) = −2.53, $P = 0.013$), while there was no change from
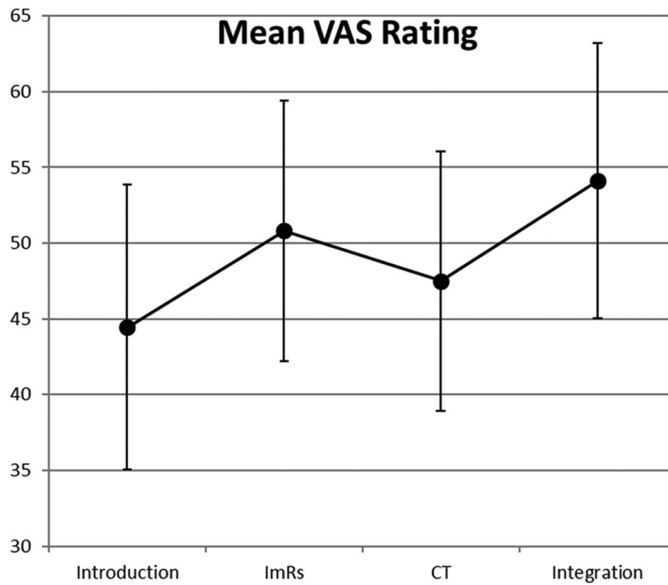
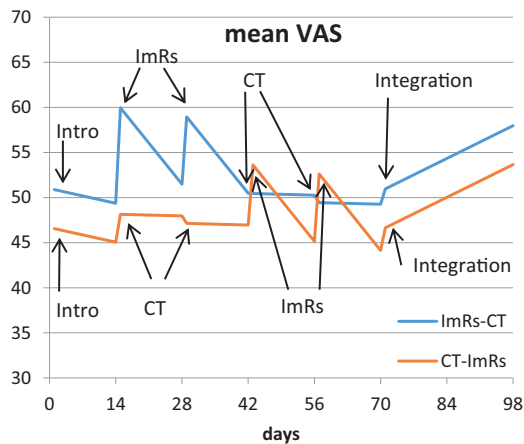**Figure 2.** Estimated mean VAS ratings and 95% CI's per condition.

Figure 3. Estimated mean VAS ratings as a function of time per order, modelled over 14-day periods, except for Follow-up, for which a four-week period was modelled.

CT1 to CT2 (t (91) = −0.82, P = 0.41); the difference between the two slopes was significant (t (94) = −2.12, P = 0.03). Figure 5 shows the mean BDI per session per condition.

Discussion

In this intention-to-treat study, ImRs sessions had stronger effects than cognitive interventions based on the mode-cycle model in changing VAS

Table 2. Results of generalized mixed model analysis (negative binomial regression with log link) of the BDI ratings (fixed part).

Fixed effects: *F*-tests				
Source	*F*	df1	df2	*p*
Corrected model	4.336	5	114	0.001
Order	0.929	1	114	0.337
Condition	5.412	4	114	0.001

Pairwise contrasts						
					95% CI	
Contrast	Contrast estimate	Std. error	*t* (114)	*p*	Lower	Upper
ImRs–Introduction	−0.510	0.135	−3.780	<0.001	−0.777	−0.243
ImRs–CT	−0.275	0.121	−2.263	0.026	−0.515	−0.034
ImRs–Integration	0.028	0.134	0.206	0.837	−0.239	0.294
ImRs–Follow up	0.120	0.142	0.844	0.400	−0.161	0.400
CT–Introduction	−0.235	0.132	−1.775	0.079	−0.497	0.027
CT–Integration	0.303	0.134	2.263	0.026	0.038	0.567
CT–Follow up	0.395	0.142	2.774	0.006	0.113	0.676
Integration–Introduction	−0.538	0.150	−3.591	<0.001	−0.834	−0.241
Integration–Follow up	0.092	0.111	0.827	0.410	−0.128	0.312
Follow up–Introduction	−0.630	0.160	−3.942	<0.001	−0.946	−0.313

Estimates in transformed scale (log link).
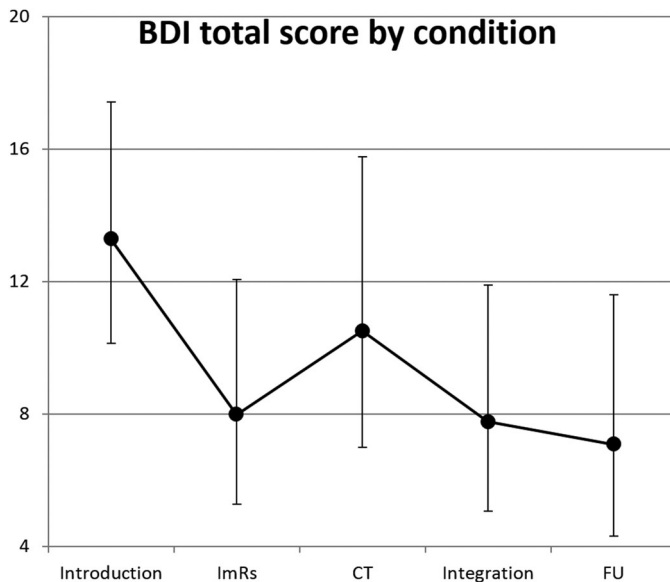
Figure 4. Estimated means of the BDI with 95% CI's of the fixed part of the mixed negative binomial regression – original scale.

ratings that assessed the patient's feelings of belonging to their partner. The cognitive interventions did not have an effect that was significantly different from the baseline condition (Introduction), and were thus remarkably less effective than ImRs in their immediate effects. Our hypothesis that the experiential ImRs technique would have a greater impact than
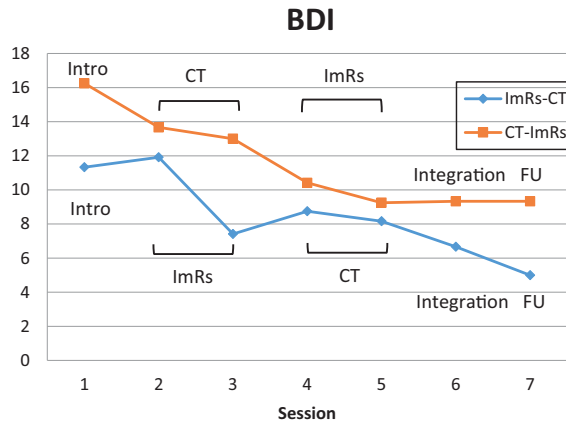
Figure 5. Mean BDI per session per condition.

a schema-model based cognitive intervention could thus be confirmed. Since all therapists were trained in schema-based ImRs as well as in schema-model based cognitive interventions as parts of the complex schema therapy approach, an allegiance effect is not very likely to explain this difference. Although the study was designed by one author who has not been involved into the treatment, the therapists might have guesses about the hypothesis. This can be considered a limitation of the study and further studies should more strictly separate researches from study therapists to minimize possible expectancy effects. Because the interval between all intervention sessions was 2 weeks and only the sequence of the interventions changed, crossover effects, rather than the interventions, are not likely to explain the differences. This is corroborated by the fact that none of the effects involving order of intervention was significant. The sense of belonging further increased after the integration sessions where we tried to connect the emotional experience in the ImRs sessions with the mode-cycle model.

We see two reasons for this. First, we made explicit links between the emotional experience in the conjoint ImRs session and the client's unmet needs from childhood disclosed in the imagery. Second, we then offered a way in which those needs might be met now in the relationship. Third, the mode cycle mode provides the couple with a shared cognitive framework helping to understand the maladaptive impact of childhood based (schema driven) emotional activations and coping behaviour on the present relationship. Connecting the meaning of emotional experience in imagery with its impact on the present relationship is a central feature of the schema therapy model: the three aspects work together, paving the way for emotional reconnection.

While the effect of ImRs alone diminished over the two-week interval up to the next session, the initially powerful effect after the integration session suggests that it was stabilized by the combination of the intensive emotional activation in the experiential session and the biographically based rationale of the mode-cycle model to prepare behaviour pattern breaking. Further studies could combine ImRs with other schema therapy techniques, such as chair dialogues, which are usually applied to "deepen" the insights gained by imagery work in couples therapy (Simeone-DiFrancesco et al., 2015).

Similar results were achieved for depressive symptoms: ImRs had a significantly stronger effect than CT, while follow-up assessments indicated further reductions of depressive symptoms in participants. Our second hypothesis could thus also be confirmed. This is in line with Barbato's and D'Avanzo's meta-analysis (2008) showing positive effects on depression when therapists worked with both partners.

Independently of the comparison of the two interventions, we want to emphasize the significance of the decrease of six BDI points in both conditions during our treatment, which indicates strong correlations between satisfaction in a partnership and emotional well-being. It seems that the combination of an experiential approach (ImRs) and schema therapy mode-cycle based cognitive interventions (CT) have additional effect (see Figure 5).

Limitations of the present study – besides the small sample size – include each partner's participation in only one session per condition. Effects might be stronger and better maintained when the exercise is repeated over several sessions. The time between sessions was rather long. We assume that more frequent sessions would have a longer lasting effect, as timely memory reactivation might aid better consolidation in long-term memory. It would be interesting to use a similar design to study the effects of four sessions of each technique, with two sessions per week. Future studies are needed to investigate whether others can replicate the effects. We have not been able to go into the details of the case vignettes in this article, but that might be the subject of a later contribution.

It should be noted that the present study was not a test of a complete treatment. Rather, it was an experimental test of the short-term effects of an innovative experiential technique in ST-C – conjoint ImRs – with both partners having a role in the process. Further studies are needed to test couple therapy packages that incorporate ImRs and compare them to more traditional approaches, such as communication training for couples and behaviour exercises.

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