The predictive value of therapeutic alliance on overall psychological wellbeing and predictability of change over the course of treatment in traumatized patients

Master thesis Clinical & Health Psychology Utrecht University & Foundation Centrum '45 Supervision UU: dr. Trudy Mooren Supervision Foundation Centrum '45: dr. Niels van der Aa 13-06-2017 T.E. van Berkel (3775666) Wordcount: 4.999 Background: Many sources describe the importance of the therapeutic alliance on the effect of psychological treatment. The therapeutic alliance could form a valuable predictor in the treatment of PTSD (-related symptoms). Also, outcome research indicates that the general trajectory of change in successful psychotherapy is highly predictable. Literature suggests that the predictability of treatmentoutcome could differ for patients with different traumatization backgrounds. Aims: The aim of the current study was to determine whether therapeutic alliance can predict change in overall psychological wellbeing in the treatment of complex traumatized patients and if the change in overall psychological wellbeing during the first phase of treatment is indicative for overall treatment outcome. This study also focused on identifying differences between groups with different traumatization backgrounds (postwar generation, veterans, occupational, asylum-seekers and refugees and other) in the change of overall psychological wellbeing (deteriorated, unchanged or improved) during overall treatment. Methods: Ninety-two patients of Foundation Centrum '45 participated in the current study, by regularly completing the Outcome- and Session Rating Scale. Results: The results indicate that therapeutic alliance can predict change in overall psychological wellbeing. Results further show that, for change in overall psychological wellbeing, the conditions 'deteriorated' and 'unchanged' are most predictable. Results show that across all groups, the conditions 'no change' and 'deterioration' are most predictable. Conclusion: The results of the study confirm the value of therapeutic alliance on the change in overall psychological wellbeing. Further, it was confirmed that change in overall psychological wellbeing of the overall treatment course can be predicted relatively well based on the type of change during the beginning of treatment. Future research is needed with a focus on bigger sample sizes and an extended timeframe.

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Introduction

Most people (80.7%) will be exposed to one (or more) potentially life-threatening traumatic experiences that can influence mental health and result in conditions like posttraumatic stress disorder (PTSD) (Karam et al., 2014). Approximately 7.4% develops PTSD in reaction to such an event (de Vries & Olff, 2009). PTSD is a condition that can develop following exposure to extremely traumatic events such as interpersonal violence, combat, life-threatening accidents or natural disasters (Yehuda et al., 2014). Symptoms of PTSD include distressing and intrusive memories and nightmares of the trauma, irritability, hypervigilance (an enhanced state of threat sensitivity or preoccupation with the potential for danger), difficulty sleeping, poor concentration and emotional withdrawal (American Psychiatric Association, 1994). If the initial trauma exposure was severe and if avoidance persists, the disorder can become chronic. The possibility of long-term effects on mental health and wellbeing and the risk of the symptoms becoming chronic pose the necessity of effective long-lasting treatment (Collie, Backos, Malchiodi & Spiegel, 2006).

Therapeutic alliance

A well-established therapeutic alliance is important in achieving treatment-progress and -success (Elvins & Green, 2008; Hatcher & Barends, 2006; Priebe & McCabe, 2006). Therapeutic alliance has three interacting elements: (1) relational bond between the therapist and the patient, (2) agreement on the goals of therapy and (3) agreement on the tasks of therapy (Bordin, 1979). These elements can lead to feelings of warmth, safety, and support in the patient (Wolfe, Kay-Lambkin, Bowman & Childs, 2013). A strong alliance increases the likelihood that patients will understand and agree with their therapists on tasks and goals of therapy, which will likely affect outcomes and enhance the probability of success (Wampold, Imel, Bhati, & Johnson, 2006; van Yperen, 2003). Miller, Duncan, Brown, Sorrell and Chalk (2006) reported that the quality of the therapeutic alliance accounted for 25-45% of the variance in the rate of therapeutic success, defined by symptom-reduction and an increase in wellbeing. Furthermore, 97% of the difference in outcome between therapists is attributable to therapist variability in the alliance, whereas sources of variability related to the patient (e.g. the ability to form a collaborative relationship) were unrelated to outcome (Baldwin, Wampold & Imel, 2007). The relationship between therapeutic alliance and treatment-outcome holds up across different therapies (e.g. cognitive behavioral therapy, interpersonal therapy and psychodynamic therapy) and does not differ significantly within treatment approaches (Barber, Connolly, Crits-Christoph, Gladis & Siqueland, 2000; Knaevelsrud & Maercker, 2006; Stiles, Agnew-Davies, Barkham & Shapiro, 1998).

There are some indications that patients who experience more severe symptoms at the beginning of treatment, have a less positive relationship with their therapist (Knaevelsrud & Maercker, 2006). This could mean that the effect of therapeutic alliance on overall psychological wellbeing (OPW) is weaker (or even nonexistent) for more severe traumatized patients (Knaevelsrud & Maercker, 2006). Furthermore, there is evidence that positive therapeutic alliance is a good predictor of symptom

reduction (Flückiger, Del Re, Wampold, Symonds & Horvarth, 2012). Comparable results have been found in treatment of psychotrauma (Cloitre, Stovall-McClough, Miranda & Chemtob, 2004; Keller, Zoelnerr & Feeny, 2010; Laska, Smith, Wislocki & Wampold, 2013). The therapeutic alliance can also have a negative predictive value when it is of low quality (Keller et al., 2010); patients reporting a weaker therapeutic alliance, are more likely to drop out (Keller et al., 2010; Sharf & Primavera, 2010). Taken together, these studies suggest that investing in the therapeutic alliance is of critical importance for treatment progress and -outcome.

Monitoring and predicting change during treatment

To increase chances of treatment success, therapists need to be able to assess treatment-progress and identify patients who are at risk for negative treatment-outcomes (Ouirk, Miller, Duncan & Owen, 2012). Standardized feedback instruments can be used to keep track of treatment progress and can help clinicians identify patients change in wellbeing (Hannan et al., 2005). Use of standardized feedback instruments increases treatment-efficacy and decreases dropout (Harmon et al., 2007; Lambert, 2007; Reese, Norsworthy & Rolands, 2009; Winkelhorst, Hafkenscheid & de Groot, 2013). The general trajectory of change in successful psychotherapy is highly predictable, with most change occurring earlier rather than later in the treatment (Howard, Lueger, Maling & Martinovich, 1993; Miller et al., 2006). Most patients experience a change in the first two months (Brown, Dreis & Nace, 1999; Howard, Kopta, Krause & Orlinksy, 1986). According to Howard and colleagues (1986), 60-65% of people experience significant symptomatic relief within one to seven visits. After six months, figures increased to 70-75%, and to 85% at one year. Patients reporting little or no change early on, tend to show no improvement over the entire course of therapy or end up dropping out (Duncan & Miller, 2008). Absence of early improvement in the patient's subjective sense of wellbeing, significantly decreases the chances of symptomatic relief and healthier life functioning by the end of treatment (Howard et al., 1993). However, it seems that complex traumatized patients show little change during treatment (Boehnlein, Kinsie, Sekiya & Riley, 2004; Carlsson, Olsen, Kastrup & Mortensen, 2010). Generally, they show a deviant and more chronic, treatment course (Vermetten, Kleber & van der Hart, 2012).

Additionally, there are indications that change in OPW manifests differently in different types of patients. Multiple studies (Boehnlein et al., 2004; Carlsson et al., 2010) state that refugees and asylum-seekers show a more chronic pattern of PTSD-symptoms and that symptoms decrease less despite intensive treatment and the passing of time. Additionally, it has been reported that veterans benefit less from psychotherapy than non-military PTSD patients (Haagen, Smid, Knipscheer & Kleber, 2015; Watts et al., 2013). Most veterans with PTSD still receive treatment after four years (Congress of the United States, 2012)

Because PTSD can cause serious impairments in daily functioning, it is considered of critical importance to be able to predict treatment-progress and –outcome in (complex) traumatized patients.

Consequently, this information can be used to make sure patients do not get re-traumatized and to advise patients whether to proceed with current treatment.

Aim of the current study

This study aims to find out whether therapeutic alliance can predict treatment course regarding OPW. In accordance with the literature, it is expected that a therapeutic alliance can predict change in OPW.

The second goal is to identify whether early treatment-change in OPW is indicative for overall treatment outcome. It is expected that change in OPW during the first months of treatment is indicative of eventual change due to treatment (Miller et al., 2006).

Lastly, this study aims to identify whether there are differences between the groups with different traumatization backgrounds in the extent to which change in OPW during the start of treatment is indicative for an eventual change in overall psychological wellbeing due to treatment. It is expected that refugees and asylum-seekers and veterans show a more chronic pattern which will likely result in relatively less improvement and more deterioration or no change in OPW than in other groups.

Methods

Participants

In this study, data was collected from patients at Foundation Centrum '45, a Dutch national institute for specialized diagnostics and treatment of psychotrauma-related symptoms resulting from persecution, war and violence (Stichting Centrum 45, n.d.). Data is being collected since March 2013. Patients were included if (1) they were in treatment for at least nine months, and (2) started the Outcome Rating Scale (ORS; Duncan et al., 2003)) and Session Rating Scale (SRS; Duncan et al., 2003) administration upon the start of their treatment.

Table 1 gives an overview of the demographic information. The sample included 92 patients (mean age 48.26, SD=10.38), of which 59 men (mean age 47.80, SD=10.83) and 33 women (mean age 49.08, SD=9.64). Of these patients, 63 finished treatment and for 29 treatment is still ongoing. Patients are divided based on their traumatization background: post-war generation (mean age 54.32, SD=6.83), veterans (mean age 38.74, SD=9.42), uniformed personnel (mean age 44.57, SD=10.93), refugees and asylum seekers (mean age 43.29, SD=7.96) and unknown/other (mean age 52.38, SD=9.14). Patients came from mixed cultural backgrounds and from diverse countries and they received different forms of treatment (e.g. EMDR, BEPP, CBT, NET, HITT, creative therapy, psychomotor therapy). Most patients were enrolled in the day-clinic (n=60) or in outpatient care (n=22). On average treatment-duration was 24 months. The number of completed forms range from 9 to 111 with a mean of 41.66 (SD = 22.79) forms per patient.

Table 1

Demographics of participants

Variabl	e	Number (%)
Particip	pants	92
Gender		
•	Men	59 (64.1)
•	Women	33 (35.9)
Age (M)	48.26
•	Men	47.80
•	Women	49.08
Trauma	tization background	
•	Post-war generation	34 (37.0)
•	Veterans	11 (12.0)
•	Uniformed personnel	25 (27.2)
•	Refugees and asylum-seekers	11 (12.0)
•	Unknown / other	11 (12.0)
Country	y/region of origin	
•	Netherlands	68 (73.9)
•	Middle East	9 (9.8)
•	Europe	4 (4.4)
•	Asia	6 (6.6)
•	Africa	2 (2.2)
•	Other	2 (2.2)
Treatm	ent setting	
•	Day-clinic	65 (70.6)
•	Outpatient care	22 (23.9)
•	Orientation phase	4 (4.3)
•	Other	1 (1.1)
Numbe	r of completed forms (M)	41.66
•	Minimum	9
•	Maximum	111

Instruments

The current study used the SRS (Crouzen, 2010; Duncan et al., 2003) and ORS (Miller, Duncan, Brown, Sparks & Claud, 2003). These instruments use a visual-analogue scale. This is a psychometric instrument that asks the participant to rank the evaluate a construct by placing a mark on a line with a fixed length (Torrance, Feeny & Furlong, 2001). The ORS and SRS were originally developed in English and have been translated into many different languages. The availability of different translations creates a wide usability for the questionnaires.

SESSION RATING SCALE (SRS). The Dutch (group-)SRS (Appendix A) is used to measure the therapeutic alliance. It was designed for clinicians to assess therapeutic alliance during therapy so that changes in the approach or style of the therapist can be implemented if a negative experience is reported by the patient (Duncan et al., 2003). The SRS is based on the classical definition of alliance (Bordin, 1979) and consists of four items. The first three items measure the three main elements of therapeutic alliance: (1) the relationship (on a continuum from "I did not feel heard, understood, and

respected" to "I did feel heard, understood, and respected"), (2) goals and topics (on a continuum from "We did not work on or talk about what I wanted to work on and talk about" to "We did work on or talk about what I wanted to work on and talk about") and (3) approach or method (on a continuum from "The therapist's approach is not a good fit for me" to "The therapist's approach is a good fit for me"). The fourth item asks the patient to evaluate the treatment session (outpatient care) or program of that day (day-clinic) (Hafkenscheid et al., 2010). Each item requires the patient to place a mark on a 10-cm long line. Scores are determined by measuring where the mark is on the 10-cm long line and adding up the item scores into a total score of the quality of the therapeutic alliance, varying from 0 to 40. A high(er) score represents a better quality of the alliance (Crouzen, 2010).

The Dutch versions of both the SRS (Duncan et al., 2003) and group-SRS (Duncan & Miller, 2007) have adequate reliability and validity (Janse, Boezen-Hilberdink, van Dijk, Verbraak & Hutschemaekers, 2013).

OUTCOME RATING SCALE (ORS). The ORS (Appendix B) is a self-report outcome measure designed to track patient progress and daily functioning in every session (Miller et al., 2003). It measures OPW, as experienced by the patient. The ORS is based on Lamberts Outcome Questionnaire (OQ45) and gives feedback about therapy results (Crouzen, 2010). The ORS has four items; the first three cover three areas of patient functioning: individual (personal wellbeing), interpersonal (family, close relationships) and social (work, school, friendships). The fourth item asks the patient to evaluate his/her functioning in the last week (Hafkenscheid et al., 2010). Scores on the ORS items are determined by measuring where the patient placed a mark is on the 10-cm line. Marks more to the left indicate that the patient is more negative about the statement regarding his/her functioning in everyday life over the last week. Marks more to the right symbolize fewer problems regarding the statement (Duncan et al., 2003). The four scores on the scales are added up and form a total score of OPW. Scores range between 0 and 40. The higher the score, the higher OPW a patient experiences at that moment.

The reliability of the original and translated version of the ORS is adequate. The validity of both versions is of lesser, but still respectable, quality (Miller et al., 2003; Hafkenscheid, Duncan & Miller, 2010).

Procedure

To monitor OPW and therapeutic alliance, patients were invited to complete the ORS and SRS. Patients in outpatient care were asked to complete the ORS at the beginning of the session and the SRS at the end of the session. In the day-clinic, the ORS and SRS were completed respectively during the opening and closing of the day. There are two reasons for the difference in procedure: (1) patients in outpatient care only come in for one session at a time, while patients in the day-clinic participate in a full day program every week, and (2) patients in the day-clinic receive multiple and different treatment-components per day. Also, in day-clinic, the group SRS (GSRS) was used. Instead of a focus on the

alliance between one individual and the therapist, the GSRS is designed to measure group-therapy alliance (Duncan & Miller, 2007).

Completed ORS- and SRS-forms were gathered by the researchers of Foundation Centrum '45. The scores were put into an Excel-form, in which total scores were calculated. Every patient has its own Excel form, which were all merged together in SPSS to conduct statistical analyses.

Design & analysis

The data was processed in Microsoft Excel 2010 and analyzed in SPSS20. To test if the quality of the therapeutic alliance predicts change in OPW, three mixed measures ANCOVA were performed. Before the analysis was performed, the assumptions of ANCOVA were tested (i.e. a linear relationship between the dependent variable and the covariate, normality, homogeneity of variance, random independent samples, independence of the covariate and the independent variables and homogeneity of regression slopes). A classification of alliance was needed to be able to say something about the strength of the alliance in relation to OPW. Because there are different ways to classify therapeutic alliance, three classifications (Table 1) were used: (1) a median-split based on the current sample, (2) tertiles based on the current sample and (3) SRS cutoff based on the manual (Crouzen, 2010). Because patients find it difficult to give negative feedback, the SRS handles a narrow window; for a high-quality alliance, scores must be 36 or higher (cutoff \geq 36). Scores between 0 and 34 are low and scores from 34 or higher are reasonable to high (Crouzen, 2010). For this classification, a score of 34 was used as cutoff.

Operationalization	Score	Classification	n (%)
Median	< 30.9	Low alliance	43 (50.6)
	<u>> 30.9</u>	High alliance	42 (49.4)
Tertiles.	< 28	Low alliance	28 (32.9)
	28 -33	Moderate alliance	28 (32.9)
	<u>> 33</u>	High alliance	29 (34.1)
SRS cutoff	< 34	Low alliance	64 (69.6)
(Crouzen, 2010)	> 34	High alliance	28 (30.4)

Classification of therapeutic alliance based on the different operationalization-methods (N=92).

Table 2.

In the ANCOVA, the three classifications of the overall SRS-score during treatment (median-split, tertiles and cutoff) were included as the between-subjects factor. The mean was calculated for every patient by adding up total SRS-scores on every form and dividing this by the number of forms a patient filled in. The mean score of the first three ORS-administrations and the mean score of the last three

administrations were included as the within-subjects factor. To control for treatment-duration, this was added as a covariate.

The second part of this study tested whether change in OPW during the first phase of treatment was predictive of overall treatment outcome. To test this, reliable change indexes (RCIs) were used. RCIs give information about whether a change is statistically significant (Jacobson & Truax, 1991). Based on the criteria proposed by Jacobson and Truax (1991), reliable change in overall wellbeing was classified into; deteriorated (RCI < -1.96), unchanged (RCI between -1.96 and +1.96) or improved (RCI > +1.96). To calculate RCIs, mean ORS-scores at the end of treatment (ORS time 2) and at month 1 to 6 were calculated. To classify change in OPW during overall treatment, an RCI was calculated with the use of the mean ORS-scores from respectively the first three sessions (ORS time 1) and the last three sessions (ORS time 2). Additionally, six RCIs were calculated to classify the type of change at month 1,2,3,4,5,6 as compared to change over the entire treatment (ORS time 2). Subsequently, crosstabs were created to examine how many patients, had deteriorated, stayed unchanged or improved regarding OPW after 1 to 6 months of treatment in relation to change over the full treatment-course.

The last part of this study examined whether there were differences between groups with different traumatization backgrounds (i.e. post-war generation, veterans, uniformed personnel and refugees and asylum-seekers) in the type of change (deteriorated, unchanged or improved) patients reported and whether the change they reported during the first phase of treatment was indicative of eventual change in OPW due to treatment. The same strategy as described for the second hypothesis was used.

Results

Descriptive statistics of therapeutic alliance and overall psychological wellbeing Across the sample, patients scored therapeutic alliance between 20.56 and 39.21 (n=85, M=30.76, SD=5.51). Figure 1 shows the mean therapeutic alliance scores per group.



Figure 1. Therapeutic alliance scores by treatment group (N=85).

Across the sample, scores on OPW at the start of treatment ranged from 1.80 to 28.20 (M=15.78, SD=6.27) and scores at the end of treatment ranged from .47 to 38.20 (M=21.45, SD=10.87). Figure 2 shows the mean scores on OPW at start and end of treatment per group.



Figure 2. Overall psychological wellbeing (M) at first three and last three administrations.

Hypothesis 1: Can therapeutic alliance predict a change in overall psychological wellbeing? Three mixed measures ANCOVAs, with three classifications of therapeutic alliance (median-split, tertiles, cutoff), were performed to examine whether therapeutic alliance can predict a change in OPW. First, assumptions were checked. The assumption of homogeneity was met with a nonsignificant Levene's Test, p > .05. Assumptions of homogeneity of regression slopes and linearity were also met, but the assumption of normality was violated, Shapiro-Wilk p < .05. No transformations or non-parametric tests were possible to correct this. This violation could have an impact on the power of the analysis. However, ANCOVA tolerates violations of normality rather well (Schmider, Ziegler, Danay, Beyer & Bühner, 2010).

All analyses indicated that there was no main effect of treatment-duration on OPW. This demonstrates that treatment-duration does not significantly influence change in OPW, F(1,81) ranges between .003 and .02, p > .05.

The first mixed measures ANCOVA was performed to assess whether the therapeutic alliance, classified by a median-split, is predictive of change in OPW during treatment. After accounting for the effect of treatment duration, results indicated that change in OPW over time significantly interacted with therapeutic alliance, F(1,81) = 4.82, p = .03, partial $\eta^2 = .06$ (figure 3). This is a medium effect size. This effect indicates that patients with a high therapeutic alliance display more improvement over time in comparison to patients with a low therapeutic alliance.



Figure 3. Change in psychological wellbeing over time in patients with low and high therapeutic alliance, categorized by the median.

The second mixed measures ANCOVA was performed to assess if the therapeutic alliance, as classified by tertiles, is predictive of change in OPW during treatment. The results indicated that, after accounting for the effect of treatment duration, there was a significant interaction effect between change in OPW over time and therapeutic alliance, F(2,80) = 3.85, p = .025, partial $\eta^2 = .088$. This is a large effect size. This indicates that therapeutic alliance significantly influences OPW. To break down this interaction, contrasts compared each level of alliance to OPW. This revealed that moderate and high alliance did not significantly differ, p = .78 while low alliance varied significantly from moderate and high alliance, p < .05. This implies that patients with moderate and high alliance experience more improvement in OPW over time as compared to patients with low alliance.



Figure 4. Change in psychological wellbeing over time in patients with low, moderate and high therapeutic alliance, categorized by tertiles.

Last, a mixed measures ANCOVA was performed to analyze if the therapeutic alliance (classified by SRS cutoff) predicts change OPW. Results indicate that OPW did not significantly interact with therapeutic alliance, F(1,81) = 3.67, p = .06, partial $\eta^2 = .04$. This is a small effect size. These results

indicate that alliance does not significantly influence OPW. However, the found p-value is just above the threshold of significance and figure 4 seems to indicate the presence of the relationship. The unequal distribution between low (n=28) and high (n=64) alliance resulting from this classification, may have played a part in limiting significance



Figure 5. Change in psychological wellbeing over time in patients with low and high therapeutic alliance, categorized by SRS cutoff.

Hypothesis 2: Is change in overall psychological wellbeing during the first months indicative for eventual change as a result of treatment?

For the second hypothesis, it was examined whether change in OPW (deteriorated, unchanged, improved) after one, two, three, four, five or six months was predictive for change in OPW of the overall treatment course. Table 3 shows the percentages of the type of change in OPW after 1 to 6 months of treatment compared to change during overall treatment. Additionally, figure 6 gives an illustration of the type of change patients reported in OPW at month 1 to 6 months compared to change during overall treatment 1 to 6 months compared to change during overall treatment.

Results (Table 3) indicate that change in OPW during overall treatment can be predicted based on change in month 1 to 6. Deterioration and no change in OPW seem to be most predictive. Based on change in the first three to six months, deterioration over the eventual treatment can be predicted in 66.7 to 80%. Additionally, 64.3 to 80% of the patients who experience no change during the first one to six months, still show no change at the end of treatment. The results further indicate that improvement in OPW during overall treatment can be predicted in 23.5 to 63.2% of the cases based on change at month 1 to 6. According to current results, improvement in the fifth month is most indicative of a positive change at overall treatment (63.2%). Month 5 and 6, with respectively 63.2 and 46.7%, are most indicative of positive change at overall treatment.

Taken together, change in OPW during treatment based on change in the first one to six months is considerably well predictable from the third month onwards.

Table 3

Change in overall psychological wellbeing during overall treatment as predicted by change in overall psychological wellbeing after one to six months of treatment.

	Deteriorated (%)	Unchanged (%)	Improved (%)
First month (N=70)	28.6 (n=2)	79.3 (n=23)	23.5 (n=8)
Second month (N=38)	50.0 (n=3)	64.3 (n=9)	38.9 (n=7)
Third month (N=45)	80.0 (n=4)	73.3 (n=11)	36.0 (n=9)
Fourth month (N=49)	75.0 (n=3)	81.0 (n=17)	41.7 (n=10)
Fifth month (N=44)	66.7 (n=2)	77.3 (n=17)	63.2 (n=12)
Sixth month (N=54)	75.0 (n=3)	75.0 (n=15)	46.7 (n=14)



Figure 6. Type of change at month 1 to 6 as compared to type of change during overall treatment.

Hypothesis 3: Are there differences between the groups with different traumatization backgrounds in the extent to which change in OPW during the start of treatment is indicative for change of overall treatment?

The last part of this study aims to identify whether there are differences between the groups with different traumatization backgrounds in the extent to which change in OPW during the start of treatment is indicative of change in OPW of overall treatment. Table 4 gives an overview of the type of change per month as compared to the type of change at overall treatment, divided by group. For the empty cells, no observations were available.

Table 4

	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6
Postwar generation						
Deteriorated	-	-	-	-	-	-
Unchanged	90 (n=9)	100 (n=2)	66,7 (n=2)	80 (n=4)	83,3 (n=5)	100 (n=7)
Improved	35,3 (n=6)	57,1 (n=4)	40 (n=4)	40 (n=4)	50 (n=3)	40 (n=6)
Veterans						
Deteriorated	-	-	-	-	-	-
Unchanged	71 ,4 (n=5)	0 (n=0)	100 (n=1)	66,7 (n=2)	-	33,3 (n=1)
Improved	0 (n=0)	-	-	-	33,3 (n=1)	100 (n=1)
Uniformed personnel						
Deteriorated	-	50 (n=1)	50 (n=1)	-	-	50 (n=1)
Unchanged	100 (n=3)	60 (n=3)	60 (n=3)	75 (n=3)	100 (n=6)	60 (n=3)
Improved	14,3 (n=2)	30 (n=3)	38,5 (n=5)	50 (n=5)	77,8 (n=7)	50 (n=6)
Refugees & asylum-seekers						
Deteriorated	100 (n=2)	66,7 (n=2)	100 (n=3)	100 (n=3)	100 (n=2)	100 (n=2)
Unchanged	100 (n=4)	75 (n=3)	100 (n=4)	100 (n=5)	100 (n=5)	66,7 (n=2)
Improved	-	-	-	-	-	-

Type of change in overall psychological wellbeing per month as compared to overall treatment per group (in percentages)

Results (Table 3) indicate that, overall, no change in overall wellbeing at month 1 to 6 is most predictable for change during overall treatment across all groups. For postwar generation, after one to six months, no change in OPW can be predicted in 66,7 to 100% of the cases. Improvement over overall treatment is also relatively well predictable based on change during month 1 to 6 and can be predicted 35.3 to 57.1% of the time.

In veterans, no change can be predicted in 33.3 to 100% of the cases. For this group, especially month 1 (71.4%) and 3 (100%) seems to be highly predictable for the eventual change in OPW. For this group, after one to six months, improvement in OPW can be predicted in 33.3 to 100% of the cases.

For uniformed personnel, based on month 1 to 6, no change can be predicted over 60% of the time. In comparison to the other groups, improvement seems to be a little better predictable (14.3-77.8%) in this group, especially in the fifth month.

Results on the predictability of change in OPW in refugees and asylum-seekers for the overall treatment-course based on the first one to six months shows "unchanged" and "deteriorated" are highly predictable, ranging from 66.7 to 100%.

In conclusion, most groups show relatively comparable patterns, with unchanged being most predictable. However, because of small sample sizes, these results should be interpreted with caution.

Discussion

The aim of this study was to determine whether therapeutic alliance can predict change in overall psychological wellbeing (OPW) in the treatment of complex traumatized patients and if change during the first one to six months is indicative of change of overall treatment.

The first part of this study investigated if the therapeutic alliance can predict changes in OPW. As hypothesized, the therapeutic alliance interacted significantly with OPW, i.e. patients with a high(er) therapeutic alliance display more change in OPW over time in comparison to patients with a low alliance. This has great clinical importance because it confirms that it is of substantial value for treatment-outcome to actively invest in the therapeutic alliance. The relationship was confirmed with two out of three classifications of therapeutic alliance but disappeared when the SRS cutoff was used. This is striking, because, theoretically, this method has the most power. It is possible that different standards apply to the Dutch cut-off for the SRS. This is supported by a recent study that found that 73% of Dutch cases fall below the American cut-off (Janse et al., 2013). Consequently, the current standard could be too strict and not applicable for the current sample. This could explain the disappearing relationship when the SRS-cutoff is used as the classification for alliance. Another possibility is that the association disappears due to the lack of statistical power that results from the uneven distribution of participants between low (n=64) and high (n=28) alliance.

The second part of this study examined whether change in OPW after one to six months was indicative of change in OPW for overall treatment-outcome. As hypothesized, it was confirmed that a substantial percentage of eventual change in OPW can be predicted based on change in overall psychological being during the first one to six months of treatment. Especially after five months, a substantial percentage of eventual change could be predicted. Although a relatively high percentage of improvement could be predicted, no change and deterioration seem even more predictable. An explanation for the higher predictability of deterioration and no change in relation to improvement could be the chronic character of complex trauma, which can result in remaining chronic health problems, despite intensive treatment (Boehnlein et al., 2004; Carlsson et al., 2010). It is also possible that improvement is more difficult to predict due to the chronic relapsing nature of the disorder (Boehnlein et al., 2004).

In the last part of this study, the focus was on differences between the groups with different traumatization backgrounds. The extent to which change in OPW during the first one to six months could be indicative of eventual change in OPW due to treatment was studied. Although the current results seem supportive of the hypothesis, the sample sizes are too small to draw valid and reliable conclusions about differences in the predictability of change between the groups. Current results suggest that refugees and asylum-seekers show a more chronic pattern and that, based on change in the first one to six months, deterioration and no change in OPW are more predictable than improvement. Results also indicate that veterans do not improve much from treatment. In contrast to

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what was hypothesized, improvement in veterans seems more predictable than expected. In comparison, improvement in postwar generation and uniformed personnel seems relatively better predictable. However, also in these groups, no change has a higher predictability.

Strengths and limitations and recommendations for future research

The current study is a valuable addition to the knowledge on trauma-treatment in different ways. First, this study included change in OPW as outcome measure instead of symptom change. This approach is meaningful because patients can experience an increase in OPW without actual symptom reduction (Schut & Stroebe, 2005). Second, the focus is on therapeutic alliance and not on type of treatment. Multiple studies have demonstrated that the strength of the alliance is a stronger predictor of therapy-outcome than other variables, such as type of treatment or therapist-variables (Knaevelsrud & Maercker, 2006; Krupnick et al., 1996).

This study has several limitations. There are some concerns about the different operationalization-methods. The traditional concern with median-splits involves the loss of individual-level information; individuals who score above the median are classified as "high" or "low", regardless if they score only slightly above or below the median. The loss of this information may have reduced power and increased the potential for Type II errors (Iacobucci, Posavac, Kardes, Schenider & Popovich, 2015). The classification based on tertiles faces the same concerns, but here the concerns are less because the scores are divided into three groups instead of two. Second, the assumption of normality was violated. Although it is claimed that ANCOVA is quite robust to this violation, results should be interpreted with caution. The limited sample sizes, when groups are differentiated, don't allow for firm and decisive conclusions about differences in the predictability of change between the groups.

Clinical implications

This study has a couple of important clinical implications. First, it underlines the added clinical value of therapeutic alliance on change in OPW over time in traumatized patients. This means that is worthwhile to actively invest in and monitor the therapeutic alliance. Furthermore, the relatively high percentages of change in OPW during overall treatment as predicted by change in overall psychological wellbeing after one to six months of treatment, suggest that keeping track of changes in OPW during treatment helps predict future outcome. To maximize treatment efficacy, therapists are strongly advised to actively invest in monitoring alliance and change in wellbeing. By gaining this valuable information, treatment can be offered in a more targeted and effective manner. Also, the ORS and SRS are short instruments, which cost only a little time and effort, but have substantially added value for (predicting) eventual treatment outcome.

Recommendations for future research

Because of the proven substantial (clinical) value of monitoring therapeutic alliance and treatment progress, it is encouraged to use standardized feedback instruments in clinical practice and to continue research built upon the current results. Future research with larger sample sizes across the different groups can provide more information about the predictability of change in OPW per group. Moreover, the current study looked at the predictability of OPW during overall treatment based on the first one to six months. Because of the chronic course of PTSD, it could be valuable to extend the timeframe to see if this predictability of change increases based on following months.

Conclusion

In conclusion, current results confirm that therapeutic alliance has a valuable, predictive value on a change in OPW. Additionally, it is concluded that change in OPW is relatively well predictable based on change during the first one to six months. For clinical practice, this emphasizes the necessity to invest in the therapeutic alliance and to actively monitor alliance and change in overall psychological wellbeing during treatment. In relation to differences in the predictability of overall treatment-outcome for patients with different traumatization backgrounds, sample sizes were too small to draw valid conclusions. Therefore, it is advised to replicate this study with larger sample sizes of the different groups.

References

- American Psychiatric Association (1994). Diagnostic and Statistical Manual of Mental Disorder, ed.4. Washington: APA. doi:10.1001/jama.1994.03520100096046.
- Baldwin, S., Wampold, B., & Imel, Z. (2007). Untangling the alliance outcome correlation: Exploring the relative importance of therapist and patient variability in the alliance. *Journal of Consulting and Clinical Psychology*, 75, 842–852. doi:10.1037/0022-006X.75.6.842
- Barber, J.P., Connolly, M.B., Crits-Christoph, P., Gladis, L. & Siqueland, L. (2000). Alliance predicts patients' outcome beyond in-treatment change in symptoms. *Journal of Consulting and Clinical psychology*, 68(6), 1027-1032. doi: 10.1037/1949-2715.S.1.80
- Boehnlein, J., Kinsie, D., Sekiya, U., & Riley, C. (2004). A ten-year treatment outcome study of traumatised Cambodian refugees. *Journal of Nervous & Mental Disease*, 192(10), 658–663. doi:10.1097/01.mnd.0000142033.79043.9d
- Bordin, E.S. (1979). The generalizability of the psychoanalytic concept of the working alliance. *Psychotherapy: theory, research and practice, 16*(3), 252-260. doi:10.1037/h0085885
- Brown, J., Dreis, S., & Nace, D.K. (1999). What really makes a difference in psychotherapy outcome?
 Why does managed care want to know? In M.A. Hubble, B.L. Duncan, and S.D. Miller (Eds.). *The heart and soul of change: What works in therapy* (pp. 389-406). Washington, D.C.: American Psychological Association Press, Boulet, J., & Boss, M. (1991). Reliability and validity of the Brief Symptom Inventory. *Journal of Consulting and Clinical Psychology, 3*(3), 433-437. doi:10.1036/11132-012
- Carlsson, J. M., Olsen, D. R., Kastrup, M., & Mortensen, E. L. (2010). Late mental health changes in tortured refugees in multidisciplinary treatment. *Journal of Nervous & Mental Disease*, 198(11), 824–828. doi:10.1097/NMD.0b013e3181f97be3
- Cloitre, M.K., Stovall-McClough, C., Miranda, R., & Chemtob, C.M. (2004). Therapeutic alliance, negative mood regulation, and treatment outcome in child abuse-related posttraumatic stress disorder. *Journal of Consulting and Clinical Psychology*, 72(3), 411-416. doi:0.1037/0022-006X.72.3.411
- Collie, K., Backos, A., Malchiodi, C., & Spiegel, D. (2006). Art Therapy for Combat-Related PTSD: Recommendations for Research and Practice. *Journal of the American Art Therapy Association*, 23(4), 157-164. doi:10.1080/07421656.2006.10129335
- Congress of the United States (2012). *The Veterans Health Administration's treatment of PTSD and traumatic brain injury among recent combat veterans*. Washington, DC: Congressional Budget Office.
- Crouzen, M. (2010). *Handleiding voor Client Directed Outcome Informed (CDOI)*. Geraadpleegd op 24 oktober 2013 via http://www.oplossingsgericht.nu/assets/Uploads/Documenten/CDOI-handleiding-Crouzen-September-2010.pdf

Duncan, B. L., & Miller, S. D. (2007). The Group Session Rating Scale. Jensen Beach, FL: Author.

- Duncan, B.L. & Miller, D.S. (2008). *When I'm good, I'm very good, but when I'm bad I'm better': a new mantra for psychotherapists*. Retrieved on 10 january, 2017, from https://www.psycho therapy.net/article/therapy-effectiveness.
- Duncan, B.L., Miller, D.S., Sparks, J.A., Claud, D.A., Reynolds, L.R., Brown, J. & Johnson, L.D. (2003). The Session Rating Scale: Preliminary Psychometric Properties of a "Working" Alliance Measure. *Journal of Brief Therapy*, 1(3), 3-12.
- Elvins, R., & Green, J. (2008). The conceptualization and measurement of therapeutic alliance: An empirical review. *Clinical Psychology Review*, 28(7), 1167-1187. doi:10.1016/j.cpr.2008.04.002
- Flückiger, C., Del Re, A.C., Wampold, B.E., Symonds, D., & Horvath, A.O. (2011). How Central Is the Alliance in Psychotherapy? A Multilevel Longitudinal Meta-Analysis.*Journal of Counseling Psychology*, 59(1), 10-17. doi:0.1037/a0025749.
- Hafkenscheid, A., Duncan, B.L. & Miller, S.D. (2010). The Outcome and Session Rating Scales: A Cross-Cultural Examination of the Psychometric Properties of the Dutch Translation. *Journal* of Brief Therapy, 7(1&2), 1-11.
- Hannan, C., Lambert, M. J., Harmon, C., Nielsen, S. L., Smart, D. W., Shimokawa, K., & Sutton, S.
 W. (2005). A lab test and algorithms for identifying clients at risk for treatment failure. *Journal of Clinical Psychology*, *61*, 155–163. doi:10.1002/jclp.20108
- Harmon, S. C., Lambert, M. J., Smart, D. M., Hawkins, E. J., Nielsen, S. L., Slade, K. & Lutz, W. (2007). Enhancing outcome for potential treatment failures: therapist-client feedback and clinical support tools. *Psychotherapy Research*, 17(4), 379-392. doi:10.1080/1050330060 0702331
- Haagen, J.F.G, Smid, G.E., Knipscheer, J.W., Kleber, R.J. (2015). The efficacy of recommended treatments for veterans with PTSD: A metaregression analysis. *Clinical Psychology Review*, 40, 184-194. doi: 10.1016/j.cpr.2015.06.008
- Hatcher, R. L., & Barends, A. W. (2006). How a return to theory could help alliance research. *Psychotherapy: Theory, Research, Practice, Training*, 43(3), 292–299. doi:10.1037/0033-3204.43.3.292
- Howard, K.I., Kopta, S.M., Krause, M.S. & Orlinsky, D.E. (1986). The dose-effect relationship in psychotherapy. *American Psychologist*, *41*(2), 159-164. doi:10.1037/0003-066X.41.2.159
- Howard, K.I., Lueger, R.J., Maling, M.S. & Martinovich, Z. (1993). A Phase Model of Psychotherapy Outcome: Causal Mediation of Change. *Journal of Consulting and Clinical Psychology*, 61(4), 678-685. doi: 10.1037/0022-006X.61.4.678
- Iacobucci, D., Posavac, S., Kardes, F.R., Schneider, M.J & Popovich, D.L. (2015). The median split: Robust, refined, and revived. *Journal of Consumer Psychology*, 25(4), 1-15. doi:10.1016/j.jcps.2015.06.014

- Jacobson, N.S. & Truax, P. (1991). Clinical significance: A Statistical Approach to Defining Meaningful Change in Psychotherapy Research. *Journal of Consulting and Clinical Psychology*, 59(1), 12-19. doi:10.1037/0022-006X.59.1.12
- Janse, P., Boezen-Hilberdink, L., van Dijk, M.K., Verbraak, M.J.P.M. & Hutschemaekers, G.J.M (2013). Measuring feedback from clients: the psychometric properties of the Dutch Outcome Rating Scale and Session Rating Scale. *European Journal of Psychological Assessment*, 30(2), 86-92. doi:10.1027/1015-5759/a000172
- Karam, E.G., Friedman, M.J., Hill, E.D., Kessler, R.C., McLaughlin, K.A., Petukhova, M., Sampson, L., ..., & Koenen, K.C. (2014). Cumulative traumas and risk thresholds: 12-month PTSD in the world mental health (WMH) surveys. *Depression and Anxiety*, *31*(2), 130-142. doi: 1002/da.22169
- Keller, S.M., Zoellner, L.A., & Feeny, N.C. (2010). Understanding factors associated with early therapeutic alliance in PTSD treatment: Adherence, childhood sexual abuse history. *Journal* of Consulting and Clinical Psychology, 78(6), 974-979. doi:10.1037/a0020758
- Knaevelsrud, C. & Maercker, A. (2006). Does the Quality of the Working Alliance Predict Treatment Outcome in Online Psychotherapy for Traumatized Patients? *Journal of Medical Internet Research*, 8(4), 1-7. doi:10.2196/jmir.8.4.e31
- Krupnick, J.L., Sotsky, S.M., Simmens, S., Moyer, J., Elkin, I., Watkins, J. & Pilkonis, P.A. (1996).
 The Role of the Therapeutic Alliance in Psychotherapy and Pharmacotherapy Outcome:
 Findings in the National Institute of Mental Health Treatment of Depression Collaborative
 Research Program. *Journal of Consulting and Clinical Psychology*, 64(3), 532-539.
 doi:10.1037/0022-006X.64.3.532
- Lambert, M. J. (2007). Presidential address: What we have learned from a decade of research aimed at improving psychotherapy outcome in routine care. *Psychotherapy Research*, *17*(1), 1-14. doi:10.1080/10503300601032506
- Laska, K.M., Smith, T.L, Wislocki, A.P., & Wampold B.E. (2013). Uniformity of evidence-based treatments in practice? Therapist effects in the delivery of cognitive processing therapy of PTSD. Journal of Counseling Psychology, 60 (1), 31-41. doi:10.1037/a0031294
- Miller, S. D., Duncan, B. L., Brown, J., Sparks, J., & Claud, D. (2003). The Outcome Rating Scale: A preliminary study of the reliability, validity, and feasibility of a brief visual analog measure. *Journal of Brief Therapy*, 2(2), 91-100.
- Miller, S.D., Duncan, B.L., Brown, J., Sorrell, R. & Chalk, M.B. (2006). Using Formal Client Feedback to Improve Retention and Outcome: Making Ongoing, Real-time Assessment Feasible. *Journal of Brief Therapy*, 5(1), 5-18.
- Priebe, S., & McCabe, R. (2006). The therapeutic relationship in psychiatric settings. Acta Psychiatrica Scandinavica, 113(Suppl. 429), 69–72.

- Quirk, K., Miller, S., Duncan, B. & Owen, J. (2012). Group Session Rating Scale: Preliminary psychometrics in substance abuse group interventions. *Counselling and Psychotherapy*, 13(3), 194-200. doi:10.1080/14733145.2012.744425.
- Reese, R.J., Norsworthy, L.A. & Rowlands, S.R. (2009). Does a continuous feedback system improve psychotherapy outcome? Psychotherapy Theory, Research, Practice, Training, 46(4), 418-431. doi:10.1037/a0017901
- Schmider, E., Ziegler, M., Danay, E., Beyer, L. & Bühner, M. (2010). Reinvesting the Robustness of ANOVA against Violations of the Normal Distribution Assumption. *Methodology*, 6(4), 147-151. doi: 10.1027/1614-2241/a000016
- Sharf, J. & Primavera, J.H. (2010). Dropout and therapeutic alliance: A meta-analysis of adult individual psychotherapy. *Psychotherapy Theory, Research, Practice, Training,* 47(4), 637-645. doi:10.1037/a0021175.
- Stichting Centrum '45 (n.d.). U staat er niet alleen voor. Patiënteninformatie. Retrieved on november 10, 2016, from http://www.centrum45.nl/sites/default/files/domain-6/documents/c45-u-staat-er-niet-alleen-voor-2014-6-14344081461001890990.pdf
- Stiles, W.B., Agnew-Davies, R., Hardy, G.E., Barkham, M. & Shapiro, D.A. (1998). Relations of the alliance with psychotherapy outcome: findings in the Second Sheffield Psychotherapy Project. *Journal of Consulting Clinical Psychology*, 66(5), 791-802. doi:10.1037/0022-006X.66.5.791
- Torrance, G.W., Feeny, D., & Furlong, W. (2001). Visual Analog Scales: Do they have a role in the measurement of preferences for health states? *Medical Decision Making*, 21(4), 329-334. doi:10.1177/02729890122062622
- Vermetten, E., Kleber, R. J., & Van der Hart, O. (2012). *Handboek posttraumatische stressstoornissen*. Utrecht: de Tijdstroom.
- Vries, G.J. de & Olff, M. (2009). The lifetime prevalence of traumatic events and posttraumatic stress disorder in the Netherlands. *Journal of Traumatic Stress*, 22(4), 259-267. doi:10.1002/jts.20429
- Wampold, B. E., Imel, Z. E., Bhati, K. S., & Johnson, M. D. (2006). Insight as a common factor. In L.G. Castonguay & C. E. Hill (Eds.), *Insight in psychotherapy* (pp. 119–140). Washington, DC: American Psychological Association.
- Watts, B.V., Schnurr, P.P., Mayo, L., Young-Xu, Y., Weeks, W.B., & Friedman, M.J. (2013). Metaanalysis of the efficacy of treatments for posttraumatic stress disorder. *Journal of Clinical Psychiatry*, 74(6), 541–550. http://dx.doi.org/10.4088/JCP.12r08225.
- Winkelhorst, Y., Hafkenscheid, A. & de Groot, E. (2013). Verhoogt Routine Monitoring (RPM) de effectiviteit van behandeling. *Tijdschrift voor Psychotherapie*, *39*(3), 146-156. doi:10.1007/s12485-013-0028-2

- Yehuda, R., Hoge, C.W., McFarlane, A.C, Vermetten, E., Lanius, R.A., Nievergelt, C.M., Hobfoll, S.E., ... & Hyman, S.E. (2014). Post-traumatic stress disorder. *Nature reviews/Disease* primers, 1, 1-22. doi:10.1038/nrdp.2015.57
- Yperen, T.A. van (2003). *Resultaten in de jeugdzorg: begrippen, maatstaven en methoden*. Utrecht: NIZW Jeugd.

Appendices

Appendix A

Group Session Rating Scale: Hoe vond u het dagprogramma?

Naam:		M / V
Datum: _	(dag) (maand) 20 (jaar)	
Geboorte	datum: (dag) (maand) (jaar)	
Beoordee beschrijv te positie des te ne	el het dagprogramma van vandaag door op elke lijn een kruisje te ing die het beste past bij uw gevoel. Hoe meer u het kruisje naar r ver is uw gevoel over het dagprogramma. Hoe meer u het kruisje gatiever is uw gevoel over het dagprogramma.	plaatsen bij de echts plaatst, des naar links plaatst,
lk voelde me <i>niet</i> gehoord, begrepen en/of gerespecteerd door de behandelaar(s) en/of groep.		lk voelde me gehoord, begrepen en gerespecteerd door de behandelaar(s) en/of groep.
We hebben <i>niet</i> gewerkt of gepraat over de dingen waaraan ik wilde werken of waarover ik wilde praten.	Doelen en Onderwerpen	We hebben gewerkt of gepraat over de dingen waaraan ik wilde werken of waarover ik wilde praten.
De manier van werken van de behandelaar(s) en/of groep paste <i>niet</i> goed bij mij.	Aanpak en/of Werkwijze	De manier van werken van de behandelaar(s) en/of groep paste goed bij mij.
Er miste iets in het dagprogramma van vandaag – Ik voelde mij <i>geen</i> deel uitmaken van de groep.	Algeheel	Over het geheel genomen vond ik het dagprogramma van vandaag in orde – lk voelde mij deel uitmaken van de groep.

Appendix B Outcome Rating Scale: Hoe gaat het met u?

Naam:	M / V
Datum: (dag) (maand) 20 (jaar)	
Geboortedatum: (dag) (maand) (jaar)	
Terugkijkend op de afgelopen week, inclusief vandaag: hoe is het met u gegaan	op de
volgende levensgebieden? Zet op elke lijn een kruisje.	
Hoe meer u het kruisje naar links plaatst, des te slechter is het met u gegaan.	
Hoe meer u het kruisje naar rechts plaatst, des te beter is het met u gegaan.	
Individueel	
(persoonlijk welbevinden)	
Relationeel	
(familie, intieme vrienden)	
Sociaal	
(werk, opleiding, sociale contacten)	
Algeheel	
(algemeen welbevinden)	

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Appendix C – SPSS output

Hypothesis 1, median split

General Linear Model

Within-Subjects Factors

Measure:	MEASURE_1
	Dependent
time	Variable
1	TOT_ORS_t1
2	TOT_ORS_t2

Between-Subjects Factors

		Value Label	N
Indeling van therapeutische	1,00	Low alliance	
alliante obv mediaansplit		(onder de	45
		mediaan)	
	2,00	High alliance	
		(boven de	39
		mediaan)	

Descriptive Statistics

	Indeling van therapeutische alliante oby mediaansplit	Mean	Std. Deviation	Ν
Algemeen welbevinden - tijdstip 1	nden - tijdstip Low alliance (onder de mediaan)		5,59584	45
	High alliance (boven de mediaan)	16,1047	6,81716	39
	Total	15,5113	6,17947	84
Algemeen welbevinden - tijdstip 2	Low alliance (onder de mediaan)	18,1570	10,13185	45
	High alliance (boven de mediaan)	24,8645	10,55048	39
	Total	21,2712	10,80308	84

Box's Test of Equality of

Covariance Matrices^a

Box's M	1,681
F	,546
df1	3
df2	3747841,412
Sig.	,651

Multivariate Tests ^a							
Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
time	Pillai's Trace	,000	,003 ^b	1,000	81,000	,959	,000
	Wilks' Lambda	1,000	,003 ^b	1,000	81,000	,959	,000
	Hotelling's Trace	,000	,003 ^b	1,000	81,000	,959	,000
	Roy's Largest Root	,000	,003 ^b	1,000	81,000	,959	,000
time * eerst_laatst	Pillai's Trace	,058	4,974 ^b	1,000	81,000	,028	,058
	Wilks' Lambda	,942	4,974 ^b	1,000	81,000	,028	,058
	Hotelling's Trace	,061	4,974 ^b	1,000	81,000	,028	,058
	Roy's Largest Root	,061	4,974 ^b	1,000	81,000	,028	,058
time * SRS_Mediaan	Pillai's Trace	,056	4,818 [♭]	1,000	81,000	,031	,056
	Wilks' Lambda	,944	4,818 ^b	1,000	81,000	,031	,056
	Hotelling's Trace	,059	4,818 ^b	1,000	81,000	,031	,056
	Roy's Largest Root	,059	4,818 [♭]	1,000	81,000	,031	,056

a. Design: Intercept + eerst_laatst + SRS_Mediaan

Within Subjects Design: time

b. Exact statistic

Mauchly's Test of Sphericity^a

Measure: MEASURE_1

					Epsilon ^b		
		Approx. Chi-			Greenhouse-		
Within Subjects Effect	Mauchly's W	Square	df	Sig.	Geisser	Huynh-Feldt	Lower-bound
time	1,000	,000	0		1,000	1,000	1,000

Tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variables is proportional to an identity matrix.

a. Design: Intercept + eerst_laatst + SRS_Mediaan

Within Subjects Design: time

b. May be used to adjust the degrees of freedom for the averaged tests of significance. Corrected tests are displayed in the Tests of Within-Subjects Effects table.

Tests of Within-Subjects Effects

Measure: MEASURE_1

							Partial
		Type III Sum of					Eta
Source		Squares	df	Mean Square	F	Sig.	Squared
time	Sphericity Assumed	,138	1	,138	,003	,959	,000
	Greenhouse-Geisser	,138	1,000	,138	,003	,959	,000
	Huynh-Feldt	,138	1,000	,138	,003	,959	,000
	Lower-bound	,138	1,000	,138	,003	,959	,000
time * eerst_laatst	Sphericity Assumed	252,245	1	252,245	4,974	,028	,058
	Greenhouse-Geisser	252,245	1,000	252,245	4,974	,028	,058
	Huynh-Feldt	252,245	1,000	252,245	4,974	,028	,058

	Lower-bound	252,245	1,000	252,245	4,974	,028	,058
time * SRS_Mediaan	Sphericity Assumed	244,302	1	244,302	4,818	,031	,056
	Greenhouse-Geisser	244,302	1,000	244,302	4,818	,031	,056
	Huynh-Feldt	244,302	1,000	244,302	4,818	,031	,056
	Lower-bound	244,302	1,000	244,302	4,818	,031	,056
Error(time)	Sphericity Assumed	4107,469	81	50,709			
	Greenhouse-Geisser	4107,469	81,000	50,709			
	Huynh-Feldt	4107,469	81,000	50,709			L .
	Lower-bound	4107,469	81,000	50,709			

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	time	Type III Sum of Squares	df	Mean Square	F	Sia	Partial Eta Squared
()	Linger	100	<u> </u>	100		0.9.	000
time	Linear	,138	1	,138	,003	,959	,000
time * eerst_laatst	Linear	252,245	1	252,245	4,974	,028	,058
time * SRS_Mediaan	Linear	244,302	1	244,302	4,818	,031	,056
Error(time)	Linear	4107,469	81	50,709			

Levene's Test of Equality of Error Variances^a

	F	df1	df2	Sig.
Algemeen welbevinden - tijdstip 1	2,419	1	82	,124
Algemeen welbevinden - tijdstip 2	,023	1	82	,881

Tests the null hypothesis that the error variance of the dependent variable is equal across

groups.

a. Design: Intercept + eerst_laatst + SRS_Mediaan

Within Subjects Design: time

Tests of Between-Subjects Effects

Measure: MEASURE_1

Transformed Variable: Average

	Type III Sum of					Partial Eta
Source	Squares	df	Mean Square	F	Sig.	Squared
Intercept	8643,419	1	8643,419	92,969	,000	,534
eerst_laatst	,111	1	,111	,001	,973	,000
SRS_Mediaan	622,479	1	622,479	6,695	,011	,076
Error	7530,634	81	92,971			

Hypothesis 1, tertiles

Within-Subjects Factors

Measure:	MEASURE_1			
	Dependent			
time	Variable			
1	TOT_ORS_t1			
2	TOT_ORS_t2			

Between-Subjects Factors

		Value Label	N
Indeling van therapeutische	1,00	Low alliance	
alliantie obv tertielen		(eerste tertiel, <	32
		28)	
	2,00	Moderate	
		alliance (tweede	25
		tertiel, 28 - 33)	
	3,00	High alliance	
		(derde tertiel, >	27
		33)	

Descriptive Statistics

	Indeling van therapeutische			
	alliantie obv tertielen	Mean	Std. Deviation	Ν
Algemeen welbevinden - tijdstip 1	Low alliance (eerste tertiel, < 28)	14,3229	5,53749	32
	Moderate alliance (tweede tertiel, 28 - 33)	16,5827	6,51897	25
	High alliance (derde tertiel, > 33)	15,9278	6,56431	27
	Total	15,5113	6,17947	84
Algemeen welbevinden - tijdstip 2	Low alliance (eerste tertiel, < 28)	15,9328	9,44595	32
	Moderate alliance (tweede tertiel, 28 - 33)	23,6700	9,22834	25
	High alliance (derde tertiel, > 33)	25,3772	11,37771	27
	Total	21,2712	10,80308	84

Box's Test of Equality of

Covariance Matrices ^a						
Box's M	2,738					
F	,440					
df1	6					
df2	127419,331					
Sig.	,853					

Mauchly's Test of Sphericity^a

Measure: MEASURE_1

					Epsilon ^b		
		Approx. Chi-			Greenhouse-		
Within Subjects Effect	Mauchly's W	Square	df	Sig.	Geisser	Huynh-Feldt	Lower-bound
time	1,000	,000,	0		1,000	1,000	1,000

Tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variables is proportional to an identity matrix.

a. Design: Intercept + eerst_laatst + SRS_tertielen

Within Subjects Design: time

b. May be used to adjust the degrees of freedom for the averaged tests of significance. Corrected tests are displayed in the Tests of Within-Subjects Effects table.

Tests of Within-Subjects Effects

Measure: MEASURE_1

							Partial
		Type III Sum of					Eta
Source		Squares	df	Mean Square	F	Sig.	Squared
time	Sphericity Assumed	,996	1	,996	,020	,888,	,000
	Greenhouse-Geisser	,996	1,000	,996	,020	,888,	,000
	Huynh-Feldt	,996	1,000	,996	,020	,888,	,000
	Lower-bound	,996	1,000	,996	,020	,888,	,000
time * eerst_laatst	Sphericity Assumed	236,571	1	236,571	4,768	,032	,056
	Greenhouse-Geisser	236,571	1,000	236,571	4,768	,032	,056
	Huynh-Feldt	236,571	1,000	236,571	4,768	,032	,056
	Lower-bound	236,571	1,000	236,571	4,768	,032	,056
time * SRS_tertielen	Sphericity Assumed	382,401	2	191,200	3,854	,025	,088
	Greenhouse-Geisser	382,401	2,000	191,200	3,854	,025	,088
	Huynh-Feldt	382,401	2,000	191,200	3,854	,025	,088
	Lower-bound	382,401	2,000	191,200	3,854	,025	,088
Error(time)	Sphericity Assumed	3969,371	80	49,617			
	Greenhouse-Geisser	3969,371	80,000	49,617			

Huynh-Feldt	3969,371	80,000	49,617		
Lower-bound	3969,371	80,000	49,617		

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	time	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
time	Linear	,996	1	,996	,020	,888,	,000
time * eerst_laatst	Linear	236,571	1	236,571	4,768	,032	,056
time * SRS_tertielen	Linear	382,401	2	191,200	3,854	,025	,088
Error(time)	Linear	3969,371	80	49,617			

Levene's Test of Equality of Error Variances^a

	F	df1	df2	Sig.
Algemeen welbevinden - tijdstip 1	1,077	2	81	,345
Algemeen welbevinden - tijdstip 2	,518	2	81	,598

Tests the null hypothesis that the error variance of the dependent variable is

equal across groups.

a. Design: Intercept + eerst_laatst + SRS_tertielen

Within Subjects Design: time

Tests of Between-Subjects Effects

Measure: MEASURE_1

Transformed Variable: Average

Source	Type III Sum of	đ	Mean Square	F	Sig	Partial Eta
Juice	oquales	u	Mean Square	1	oig.	Squareu
Intercept	8922,347	1	8922,347	101,112	,000	,558
eerst_laatst	1,182	1	1,182	,013	,908	,000
SRS_tertielen	1093,730	2	546,865	6,197	,003	,134
Error	7059,383	80	88,242			

Hypothesis 1, cutoff

Within-Subjects Factors

Measure:	MEASURE_1		
	Dependent		
time	Variable		
1	TOT_ORS_t1		
2	TOT_ORS_t2		

Between-Subjects Factors

		Value Label	N
Indeling therapeutische	1,00	Low alliance	
alliantie obv srs cutoff		(onder cutoff,	59
		<34)	
	2,00	High alliance	
		(boven de	25
		cutoff, > 34)	

Descriptive Statistics

	Indeling therapeutische alliantie obv srs cutoff	Mean	Std. Deviation	Ν
Algemeen welbevinden - tijdstip 1	Low alliance (onder cutoff, <34)	15,3904	5,96860	59
	High alliance (boven de cutoff, > 34)	15,7967	6,77102	25
	Total	15,5113	6,17947	84
Algemeen welbevinden - tijdstip 2	Low alliance (onder cutoff, <	19,6525	10,03247	59
	High alliance (boven de cutoff, > 34)	25,0913	11,77834	25
	Total	21,2712	10,80308	84

Box's Test of Equality

of Covariance Matrices^a

Box's M	1,444
F	,465
df1	3
df2	42285,395
Sig.	,707

		М	ultivariate Te	ests ^a			
Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
time	Pillai's Trace	,000	,021 ^b	1,000	81,000	,884	,000
	Wilks' Lambda	1,000	,021 ^b	1,000	81,000	,884	,000
	Hotelling's Trace	,000	,021 ^b	1,000	81,000	,884	,000
	Roy's Largest Root	,000	,021 ^b	1,000	81,000	,884	,000
time * eerst_laatst	Pillai's Trace	,068	5,875 ^b	1,000	81,000	,018	,068
	Wilks' Lambda	,932	5,875 ^b	1,000	81,000	,018	,068
	Hotelling's Trace	,073	5,875 ^b	1,000	81,000	,018	,068
	Roy's Largest Root	,073	5,875 ^b	1,000	81,000	,018	,068
time * SRS_cutoff	Pillai's Trace	,043	3,673 ^b	1,000	81,000	,059	,043
	Wilks' Lambda	,957	3,673 ^b	1,000	81,000	,059	,043
	Hotelling's Trace	,045	3,673 ^b	1,000	81,000	,059	,043
	Roy's Largest Root	,045	3,673 ^b	1,000	81,000	,059	,043

a. Design: Intercept + eerst_laatst + SRS_cutoff

Within Subjects Design: time

b. Exact statistic

Mauchly's Test of Sphericity^a

Measure: MEASURE_1

					Epsilon ^b		
		Approx. Chi-			Greenhouse-		Lower-
Within Subjects Effect	Mauchly's W	Square	df	Sig.	Geisser	Huynh-Feldt	bound
time	1,000	,000	0		1,000	1,000	1,000

Tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variables is proportional to an identity matrix.

a. Design: Intercept + eerst_laatst + SRS_cutoff

Within Subjects Design: time

b. May be used to adjust the degrees of freedom for the averaged tests of significance. Corrected tests are displayed in the Tests of Within-Subjects Effects table.

Tests of Within-Subjects Effects

Measure: MEASURE_1

							Partial Eta
		Type III Sum of					Square
Source		Squares	df	Mean Square	F	Sig.	d
time	Sphericity Assumed	1,092	1	1,092	,021	,884	,000
	Greenhouse-Geisser	1,092	1,000	1,092	,021	,884	,000

			1		1	1	
	Huynh-Feldt	1,092	1,000	1,092	,021	,884	,000
	Lower-bound	1,092	1,000	1,092	,021	,884	,000
time * eerst_laatst	Sphericity Assumed	301,928	1	301,928	5,875	,018	,068
	Greenhouse-Geisser	301,928	1,000	301,928	5,875	,018	,068
	Huynh-Feldt	301,928	1,000	301,928	5,875	,018	,068
	Lower-bound	301,928	1,000	301,928	5,875	,018	,068
time * SRS_cutoff	Sphericity Assumed	188,764	1	188,764	3,673	,059	,043
time * SRS_cutoff	Greenhouse-Geisser	188,764	1,000	188,764	3,673	,059	,043
	Huynh-Feldt	188,764	1,000	188,764	3,673	,059	,043
	Lower-bound	188,764	1,000	188,764	3,673	,059	,043
Error(time)	Sphericity Assumed	4163,007	81	51,395			
	Greenhouse-Geisser	4163,007	81,000	51,395			
	Huynh-Feldt	4163,007	81,000	51,395			
	Lower-bound	4163,007	81,000	51,395			

Tests of Within-Subjects Contrasts

Measure: MEASUR	Ξ_1						
		Type III Sum of					Partial Eta
Source	time	Squares	df	Mean Square	F	Sig.	Squared
time	Linear	1,092	1	1,092	,021	,884	,000
time * eerst_laatst	Linear	301,928	1	301,928	5,875	,018	,068
time * SRS_cutoff	Linear	188,764	1	188,764	3,673	,059	,043
Error(time)	Linear	4163,007	81	51,395			

	Levene's Tes	st of Equa	ality of Erro	r Variances ^a
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	F	df1	df2	Sig.
Algemeen welbevinden - tijdstip 1	1,156	1	82	,285
Algemeen welbevinden - tijdstip 2	,317	1	82	,575

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + eerst_laatst + SRS_cutoff

Within Subjects Design: time

Tests of Between-Subjects Effects

Measure: MEASURE_1

Transformed Variable: Average

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Intercept	8401,897	1	8401,897	86,575	,000	,517
eerst_laatst	7,994	1	7,994	,082	,775	,001
SRS_cutoff	292,287	1	292,287	3,012	,086	,036
Error	7860,826	81	97,047			

Hypothesis 2

Maand 1

Case Processing Summary								
		Cases						
	Va	lid	Mis	sing	То	tal		
	N	Percent	Ν	Percent	N	Percent		
RCI full treatment vs first month * RCI start vs end	70	76,1%	22	23,9%	92	100,0%		

RCI start vs first month * RCI start vs end Crosstabulation

			R	CI start vs end		
			Deteriorated	Unchanged	Improved	Total
RCI full treatment vs first	Deteriorated	Count	2	0	0	2
month		% within RCI start vs end	28,6%	0,0%	0,0%	2,9%
	Unchanged	Count	5	23	26	54
		% within RCI start vs end	71,4%	79,3%	76,5%	77,1%
	Improved	Count	0	6	8	14
		% within RCI start vs end	0,0%	20,7%	23,5%	20,0%
Total		Count	7	29	34	70
		% within RCI start vs end	100,0%	100,0%	100,0%	100,0%

Maand 2

Case Processing Summary

		Ca	ses		
Va	ılid	Mis	sing	То	tal
N	Percent	N	Percent	N	Percent

RCI full treatment vs second	20	11 20/	54	59 7%	02	100.0%
month * RCI start vs end	30	41,3%	54	50,7%	92	100,0%

	RCI start	vs second month * RCI sta	art vs end Crosst	abulation		
			R	CI start vs end		
			Deteriorated	Unchanged	Improved	Total
RCI full treatment vs second	Deteriorated	Count	3	2	3	8
month		% within RCI start vs end	50,0%	Crosstabulation RCI start vs end ated Unchanged Improved 3 2 3 50,0% 14,3% 16,7% 3 9 8 50,0% 64,3% 44,4% 0 3 7 0,0% 21,4% 38,9% 6 14 18 00,0% 100,0% 100,0%	21,1%	
	Unchanged	Count	3	9	8	20
		% within RCI start vs end	50,0%	64,3%	44,4%	52,6%
	Improved	Count	0	3	7	10
		% within RCI start vs end	0,0%	21,4%	38,9%	26,3%
Total		Count	6	14	18	38
		% within RCI start vs end	100,0%	100,0%	100,0%	100,0%

Maand 3

Case Processing Summary

	Cases							
	Valid		Missing		Total			
	Ν	Percent	Ν	Percent	N	Percent		
RCI full treatment vs third month * RCI start vs end	45	48,9%	47	51,1%	92	100,0%		

RCI start vs third month * RCI start vs end Crosstabulation

			R	CI start vs end		
			Deteriorated	Unchanged	Improved	Total
RCI full treatment vs third	Deteriorated	Count	4	4	0	8
		% within RCI start vs end	80,0%	26,7%	0,0%	17,8%
	Unchanged	Count	1	11	16	28
		% within RCI start vs end	20,0%	73,3%	64,0%	62,2%
	Improved	Count	0	0	9	9
		% within RCI start vs end	0,0%	0,0%	36,0%	20,0%
Total		Count	5	15	25	45
		% within RCI start vs end	100,0%	100,0%	100,0%	100,0%

Maand 4

Case Processing Summary

	Cases						
	Valid Missing		sing	Total			
	Ν	Percent	Ν	Percent	Ν	Percent	
RCI full treatment vs fourth month * RCI start vs end	49	53,3%	43	46,7%	92	100,0%	

RCI start vs fourth month * RCI start vs end Crosstabulation

			R			
			Deteriorated	Unchanged	Improved	Total
RCI full treatment vs fourth	Deteriorated	Count	3	4	2	9
month		% within RCI start vs end	75,0%	19,0%	8,3%	18,4%
	Unchanged	Count	1	17	12	30
		% within RCI start vs end	25,0%	81,0%	50,0%	61,2%
	Improved	Count	0	0	10	10
		% within RCI start vs end	0,0%	0,0%	41,7%	20,4%
Total		Count	4	21	24	49
		% within RCI start vs end	100,0%	100,0%	100,0%	100,0%

Maand 5

Case Processing Summary										
	Cases									
	Va	llid	Miss	sing	Total					
	N	Percent	Ν	Percent	Ν	Percent				
RCI full treatment vs fifth	44	47.8%	48	52.2%	92	100.0%				
month * RCI start vs end		,070	10	32,270	02	100,070				

RCI start vs fifth month * RCI start vs end Crosstabulation RCI start vs end Deteriorated Unchanged Improved Total RCI full treatment vs fifth Deteriorated Count 2 3 5 0 month % within RCI start vs end 13,6% 0,0% 11,4% 66,7% 7 Unchanged Count 1 17 25 % within RCI start vs end 33,3% 77,3% 36,8% 56,8% Improved Count 0 2 14 12 0,0% % within RCI start vs end 9,1% 63,2% 31,8% Total Count 3 22 19 44 % within RCI start vs end 100,0% 100,0% 100,0% 100,0%

Maand 6

Case Processing Summary

	Cases								
	Valid		Mis	sing	Total				
	N	Percent	N	Percent	Ν	Percent			
RCI full treatment vs sixth month * RCI start vs end	54	58,7%	38	41,3%	92	100,0%			

RCI start vs sixth month * RCI start vs end Crosstabulation RCI start vs end Deteriorated Unchanged Improved Total RCI full treatment vs sixth Deteriorated Count 3 5 2 month % within RCI start vs end 25,0% 18,5% 75,0% 6,7% Unchanged Count 1 15 14 % within RCI start vs end 25,0% 75,0% 46,7% 55,6% 0 Improved Count 0 14 0,0% 25,9% % within RCI start vs end 0,0% 46,7% Total Count 4 20 30 100,0% 100,0%

100,0%

% within RCI start vs end

37

10

30

14

54

100,0%

Hypothesis 3

RCI full treatment vs first month * RCI start vs end Crosstabulation
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				F	RCI start vs end		
Hoofddoelgroep				Deteriorated	Unchanged	Improved	
Naoorlogse	RCI full treatment vs first month	Unchanged	Count	2	9	11	22
generatie			% within RCI start vs end	100,0%	90,0%	64,7%	75,9%
		Improved	Count	0	1	6	7
			% within RCI start vs end	0,0%	10,0%	35,3%	24,1%
	Total		Count	2	10	17	29
			% within RCI start vs end	100,0%	100,0%	100,0%	100,0%
Veteranen	RCI full treatment vs first month	Unchanged	Count	1	5	1	7
			% within RCI start vs end	100,0%	71,4%	100,0%	77,8%
		Improved	Count	0	2	0	2
			% within RCI start vs end	0,0%	28,6%	0,0%	22,2%
	Total		Count	1	7	1	9
			% within RCI start vs end	100,0%	100,0%	100,0%	100,0%
Beroepsgerelatee	RCI full treatment vs first month	Unchanged	Count	2	3	12	17
rde			% within RCI start vs end	100,0%	100,0%	85,7%	89,5%
getraumatiseerde		Improved	Count	0	0	2	2
n			% within RCI start vs end	0,0%	0,0%	14,3%	10,5%
	Total		Count	2	3	14	19
			% within RCI start vs end	100,0%	100,0%	100,0%	100,0%
Vluchtelingen,	RCI full treatment vs first month	Deteriorated	Count	2	0		2
asielszoekers &			% within RCI start vs end	100,0%	0,0%		33,3%
ongedocumentee		Unchanged	Count	0	4		4
rden			% within RCI start vs end	0,0%	100,0%		66,7%
	Total		Count	2	4		6
			% within RCI start vs end	100,0%	100,0%		100,0%
Onbekend / niet	RCI full treatment vs first month	Unchanged	Count		2	2	4
ingevuld			% within RCI start vs end		40,0%	100,0%	57,1%
		Improved	Count		3	0	3
			% within RCI start vs end		60,0%	0,0%	42,9%
	Total		Count		5	2	7
			% within RCI start vs end		100,0%	100,0%	100,0%

RCI start vs second month * RCI start vs end Crosstabulation

				R	CI start vs end		Total
				Deteriorate			
Hoofddoelgroep				d	Unchanged	Improved	
Naoorlogse	RCI full treatment vs second month	Deteriorated	Count		0	1	1
generatie			% within RCI start vs end		0,0%	14,3%	11,1%
		Unchanged	Count		2	2	4
			% within RCI start vs end		100,0%	28,6%	44,4%
		Improved	Count		0	4	4
			% within RCI start vs end		0,0%	57,1%	44,4%
	Total		Count		2	7	9
			% within RCI start vs end		100,0%	100,0%	100,0%
Veteranen	RCI full treatment vs second month	Unchanged	Count	1	0	1	2
			% within RCI start vs end	100,0%	0,0%	100,0%	50,0%
		Improved	Count	0	2	0	2
			% within RCI start vs end	0,0%	100,0%	0,0%	50,0%
	Total		Count	1	2	1	4
			% within RCI start vs end	100,0%	100,0%	100,0%	100,0%
Beroepsgerelatee	RCI full treatment vs second month	Deteriorated	Count	1	1	2	4
rde			% within RCI start vs end	50,0%	20,0%	20,0%	23,5%
getraumatiseerde		Unchanged	Count	1	3	5	9
n			% within RCI start vs end	50,0%	60,0%	50,0%	52,9%
		Improved	Count	0	1	3	4
			% within RCI start vs end	0,0%	20,0%	30,0%	23,5%
	Total		Count	2	5	10	17
			% within RCI start vs end	100,0%	100,0%	100,0%	100,0%
Vluchtelingen,	RCI full treatment vs second month	Deteriorated	Count	2	1		3
asielszoekers &			% within RCI start vs end	66,7%	25,0%		42,9%
ongedocumentee		Unchanged	Count	1	3		4
rden			% within RCI start vs end	33,3%	75,0%		57,1%
	Total		Count	3	4		7
			% within RCI start vs end	100,0%	100,0%		100,0%
Onbekend / niet	RCI full treatment vs second month	Unchanged	Count		1		1
ingevuld			% within RCI start vs end		100,0%		100,0%
	Total		Count		1		1
			% within RCI start vs end		100,0%		100,0%

				RC	I start vs end		Total
Hoofddoelgroep				Deteriorated	Unchanged	Improved	
Naoorlogse generatie	RCI full treatment vs third month	Deteriorated	Count		1	0	1
			% within RCI start vs end		33,3%	0,0%	7,7%
		Unchanged	Count		2	6	8
			% within RCI start vs end		66,7%	60,0%	61,5%
		Improved	Count		0	4	4
			% within RCI start vs end		0,0%	40,0%	30,8%
	Total		Count		3	10	13
			% within RCI start vs end		100,0%	100,0%	100,0%
Veteranen	RCI full treatment vs third month	Unchanged	Count		1	2	3
			% within RCI start vs end		100,0%	100,0%	100,0%
	Total		Count		1	2	3
			% within RCI start vs end		100,0%	100,0%	100,0%
Beroepsgerelateerde	RCI full treatment vs third month	Deteriorated	Count	1	2	0	3
getraumatiseerden			% within RCI start vs end	50,0%	40,0%	0,0%	15,0%
		Unchanged	Count	1	3	8	12
			% within RCI start vs end	50,0%	60,0%	61,5%	60,0%
		Improved	Count	0	0	5	5
			% within RCI start vs end	0,0%	0,0%	38,5%	25,0%
	Total		Count	2	5	13	20
			% within RCI start vs end	100,0%	100,0%	100,0%	100,0%
Vluchtelingen,	RCI full treatment vs third month	Deteriorated	Count	3	0		3
asielszoekers &			% within RCI start vs end	100,0%	0,0%		42,9%
ongedocumenteerden		Unchanged	Count	0	4		4
			% within RCI start vs end	0,0%	100,0%		57,1%
	Total		Count	3	4		7
			% within RCI start vs end	100,0%	100,0%		100,0%
Onbekend / niet	RCI full treatment vs third month	Deteriorated	Count		1		1
ingevuld			% within RCI start vs end		50,0%		50,0%
		Unchanged	Count		1	,	1
			% within RCI start vs end		50,0%		50,0%
	Total		Count		2		2
			% within RCI start vs end		100,0%		100,0%

RCI full treatment vs third month * RCI start vs end Crosstabulation

RCI full treatment vs	fourth month * RCI start vs e	nd Crosstabulatior	1				
				R	CI start vs end		Total
Hoofddoelgroep				Deteriorated	Unchanged	Improved	
Naoorlogse	RCI start vs fourth month	Deteriorated	Count		1	1	2
generatie			% within RCI start vs end		20,0%	10,0%	13,3%
		Unchanged	Count		4	5	9
			% within RCI start vs end		80,0%	50,0%	60,0%
		Improved	Count		0	4	4
			% within RCI start vs end		0,0%	40,0%	26,7%
	Total		Count		5	10	15
			% within RCI start vs end		100,0%	100,0%	100,0%
Veteranen	RCI start vs fourth month	Deteriorated	Count		1	0	1
			% within RCI start vs end		33,3%	0,0%	16,7%
		Unchanged	Count		2	3	5
			% within RCI start vs end		66,7%	100,0%	83,3%
	Total		Count		3	3	6
			% within RCI start vs end		100,0%	100,0%	100,0%
Beroepsgerelateerd	RCI start vs fourth month	Deteriorated	Count	0	1	1	2
е			% within RCI start vs end	0,0%	25,0%	10,0%	13,3%
getraumatiseerden		Unchanged	Count	1	3	4	8
			% within RCI start vs end	100,0%	75,0%	40,0%	53,3%
		Improved	Count	0	0	5	5
			% within RCI start vs end	0,0%	0,0%	50,0%	33,3%
	Total		Count	1	4	10	15
			% within RCI start vs end	100,0%	100,0%	100,0%	100,0%
Vluchtelingen,	RCI start vs fourth month	Deteriorated	Count	3	0		3
asielszoekers &			% within RCI start vs end	100,0%	0,0%		37,5%
ongedocumenteerd		Unchanged	Count	0	5		5
en			% within RCI start vs end	0,0%	100,0%		62,5%
	Total		Count	3	5		8
			% within RCI start vs end	100,0%	100,0%		100,0%
Onbekend / niet	RCI start vs fourth month	Deteriorated	Count		1	0	1
ingevuld			% within RCI start vs end		25,0%	0,0%	20,0%
		Unchanged	Count		3	0	3
			% within RCI start vs end		75,0%	0,0%	60,0%
		Improved	Count		0	1	1
		<u> </u>	% within RCI start vs end		0,0%	100,0%	20,0%
	Total		Count		4	1	5
			% within RCI start vs end		100,0%	100,0%	100,0%

				F	RCI start vs end		Total
Hoofddoelgroep				Deteriorated	Unchanged	Improved	
Naoorlogse	RCI full treatment vs fifth month	Deteriorated	Count		1	0	1
generatie			% within RCI start vs end		16,7%	0,0%	8,3%
		Unchanged	Count		5	3	8
			% within RCI start vs end		83,3%	50,0%	66,7%
		Improved	Count		0	3	3
			% within RCI start vs end		0,0%	50,0%	25,0%
	Total	-	Count		6	6	12
			% within RCI start vs end		100,0%	100,0%	100,0%
Veteranen	RCI full treatment vs fifth month	Unchanged	Count		0	2	2
			% within RCI start vs end		0,0%	66,7%	40,0%
		Improved	Count		2	1	3
			% within RCI start vs end		100,0%	33,3%	60,0%
	Total		Count		2	3	5
			% within RCI start vs end		100,0%	100,0%	100,0%
Beroepsgerelateerd	RCI full treatment vs fifth month	Unchanged	Count	1	6	2	9
е			% within RCI start vs end	100,0%	100,0%	22,2%	56,3%
getraumatiseerden		Improved	Count	0	0	7	7
			% within RCI start vs end	0,0%	0,0%	77,8%	43,8%
	Total		Count	1	6	9	16
			% within RCI start vs end	100,0%	100,0%	100,0%	100,0%
Vluchtelingen,	RCI full treatment vs fifth month	Deteriorated	Count	2	0		2
asielszoekers &			% within RCI start vs end	100,0%	0,0%		28,6%
ongedocumenteerd		Unchanged	Count	0	5		5
en			% within RCI start vs end	0,0%	100,0%		71,4%
	Total		Count	2	5		7
			% within RCI start vs end	100,0%	100,0%		100,0%
Onbekend / niet	RCI full treatment vs fifth month	Deteriorated	Count		2	0	2
ingevuld			% within RCI start vs end		66,7%	0,0%	50,0%
		Unchanged	Count		1	0	1
			% within RCI start vs end		33,3%	0,0%	25,0%
		Improved	Count		0	1	1
		-	% within RCI start vs end		0,0%	100,0%	25,0%
	Total		Count		3	1	4
			% within RCI start vs end		100,0%	100,0%	100,0%

RCI full treatment vs fifth month * RCI start vs end Crosstabulation

				F	CI start vs end		Total
Hoofddoelgroep				Deteriorated	Unchanged	Improved	
Naoorlogse	RCI full treatment vs sixth month	Deteriorated	Count		0	1	1
generatie			% within RCI start vs end		0,0%	6,7%	4,5%
		Unchanged	Count		7	8	15
			% within RCI start vs end		100,0%	53,3%	68,2%
		Improved	Count		0	6	6
			% within RCI start vs end		0,0%	40,0%	27,3%
	Total		Count		7	15	22
			% within RCI start vs end		100,0%	100,0%	100,0%
Veteranen	RCI full treatment vs sixth month	Deteriorated	Count		2	0	2
			% within RCI start vs end		66,7%	0,0%	50,0%
		Unchanged	Count		1	0	1
			% within RCI start vs end		33,3%	0,0%	25,0%
		Improved	Count		0	1	1
			% within RCI start vs end		0,0%	100,0%	25,0%
	Total		Count		3	1	4
			% within RCI start vs end		100,0%	100,0%	100,0%
Beroepsgerelateerd	RCI full treatment vs sixth month	Deteriorated	Count	1	2	1	4
е			% within RCI start vs end	50,0%	40,0%	8,3%	21,1%
getraumatiseerden		Unchanged	Count	1	3	5	9
			% within RCI start vs end	50,0%	60,0%	41,7%	47,4%
		Improved	Count	0	0	6	6
			% within RCI start vs end	0,0%	0,0%	50,0%	31,6%
	Total		Count	2	5	12	19
			% within RCI start vs end	100,0%	100,0%	100,0%	100,0%
Vluchtelingen,	RCI full treatment vs sixth month	Deteriorated	Count	2	1		3
asielszoekers &			% within RCI start vs end	100,0%	33,3%		60,0%
ongedocumenteerd		Unchanged	Count	0	2		2
en			% within RCI start vs end	0,0%	66,7%		40,0%
	Total		Count	2	3		5
			% within RCI start vs end	100,0%	100,0%		100,0%
Onbekend / niet	RCI full treatment vs sixth month	Unchanged	Count		2	1	3
ingevuld			% within RCI start vs end		100,0%	50,0%	75,0%
		Improved	Count		0	1	1
			% within RCI start vs end		0,0%	50,0%	25,0%
	Total		Count		2	2	4
			% within RCI start vs end		100,0%	100,0%	100,0%

RCI full treatment vs sixth month * RCI start vs end Crosstabulation