Schema therapy as treatment for adult autism spectrum disorder and comorbid personality disorder: a multiple baseline case series study: testing cognitive-behavioral and experiential interventions

Introduction

Research indicates significantly more personality pathology and personality disorders in adults with autism spectrum disorder (ASD) than in controls. To our knowledge, there is no treatment program available for adults with ASD and comorbid personality disorder. We have chosen for schema therapy for several reasons. First, there is more and more evidence-based support for this therapy as a valuable treatment for personality disorders (Blatt et al., 2014). Second, the treatment relationship is directive with regard to the treatment process, which we consider as helpful for people with ASD who are characterized by low self-directiveness (Anckerstrøm et al., 2008; Szot et al., 2009; Szot et al., 2013; Sodersten et al., 2002; Vajk et al., et al., 2012).

The current objective is to study in detail the effects of the major technique groups of schema therapy, that is, cognitive-behavioral techniques and experiential techniques, on the stress of negative core beliefs in comorbid ASD-PD patients. The research question is “Will schema therapy lead to less stress of negative core beliefs in comorbid ASD-PD patients?” We hypothesize that schema therapy leads to less stress of negative core beliefs of

A secondary objective is dysfunctional schema modes (i.e. personality pathology) being less frequent. The research question is “Will schema therapy lead to dysfunctional schema modes (i.e. personality pathology) being less frequent and positive modes more often present in comorbid ASD-PD patients?” We hypothesize that schema therapy leads to dysfunctional schema modes (i.e. personality pathology) being less frequent, and that positive modes more often present.

A third objective is remission of diagnostic criteria of a personality disorder. The research question is “Will diagnostic criteria of a comorbid personality disorder in comorbid ASD-PD patients be in remission after schema therapy?” We hypothesize that schema therapy leads to personality traits being less present.

A fourth objective is in change in severity of psychopathological symptoms, related to syndromal disorders like depression and anxiety disorders. The research question is “Will psychopathological symptoms in comorbid ASD-PD patients diminish by schema therapy? We hypothesize that psychopathological symptoms will be diminished by the given treatment.

Lastly, we hypothesize that schema therapy will lead to improvement in social interaction and communication. The research question is “Will social interaction and communication in comorbid ASD-PD patients improve by schema therapy?” Our hypothesis is that more insight into one’s own functioning by the given treatment will lead to improvement in social interaction and communication.

Study population

The present study participants are 12 adults with the mental health clinic of the Erasmus MC Centre for Autism in Rotterdam, the Netherlands. This clinic is specialized in the psychodiagnostic assessment and psychopathological treatment for adults with an autism spectrum disorder.

Inclusion criteria are a primary diagnosis of DSM-IV (or DSM-III-R, in the case of the childhood autism spectrum disorder and personality disorder, age 21-65 years, with at least normal intelligence (IQ > 80), at least a completed primary school and secondary education or the equivalent of a higher education in a personal own personality and remission of psychotic symptoms (at least 2 years). Exclusion criteria are schizophrenia or other psychotic disorder, autistic PD, eating disorder, psychiatric disorders secondary to medical conditions, mental retardation (IQ < 60), addiction (that needs clinical detox) and presence of current suicidal ideation. Participants are not followed up following psychiatric treatment at the same time. Pharmacotherapy can be used as a co-intervention during the treatment when already started before the study intervention. This is no reason for exclusion from the study. In a longitudinal investigation of psychopathological functioning, among adults with autism spectrum disorder, this was found that 88% of adults used at least one medication and 40% used three or more different types of medication. When participants have to start with pharmacotherapy prior to the start of this study intervention, for example in close cases of acute crisis, this will not lead to exclusion from the study. As long as this will be the case due to therapy changes, we will document these changes.

Study design and procedure

This study is a non-concurrent multiple baseline design with a baseline varying in length from 5 to 10 weeks. In this study, there are two treatment conditions (CET and experiential techniques) and two control conditions (baseline and explorative conditions). As we work with an adult spectrum disorder, we first chose to do a multiple baseline design (in multiple within participants with a group size of four). We chose to use a multiple baseline design when the treatment groups and the critical times of the baseline phases are difficult to control for and it is not possible to control for the effects of the treatment design. We randomize the baseline phases across participants to increase the internal validity of the case-series design by varying the baseline duration from 5 to 10 weeks per participant. The variation in baseline length makes it possible to differentiate between baseline and stress of behavioral and experiential interventions. After baseline, a 5-week exploration phase introduces weekly sessions during which current and past functioning, psychological symptoms, and schema modes are explored. Negative core beliefs are identified and explored, and information about the treatment will be given. The exploration phase is also used as a control for the effects of attention to the participants discriminative and no treatment. This 15-week period with cognitive-behavioral interventions will be followed by 15 weekly sessions with experiential interventions (or vice versa). Finally, there will be a 10-month follow-up.

Participants respond during weekly and monthly at follow-up sessions on Stressful negative core beliefs (V AS) and Fill-in on SMI, SCL-90 and SRS and times during screening procedure (i.e. before baseline), after baseline, after exploration, after cognitive and behavioral interventions, after experiential interventions, and after the 10-month follow-up. The SCD-II will be administered during screening procedure (i.e. before baseline), at 5- and 10-month follow-up.

Content of the sessions and interventions

Screening procedure – 2 sessions

Session 1: Screening on the In- and Exclusion criteria, administering BMI, SCL-90, SRS-1 and SCS-2.

Session 2: Completing administering SCD-II and formulating core beliefs, assessing background information.

Exploration phase – 5 weekly sessions

Session 1: Introduction into schema therapy, and cognitive-behavioral and experiential interventions. Bonding

Session 2: Psycho-education about core needs, functional and dysfunctional behavior, links between present problems to childhood experiences, and cognitive-behavioral and experiential interventions. Bonding

Session 3: Psycho-education about core needs, functional and dysfunctional behavior, links between present problems to childhood experiences, and cognitive-behavioral and experiential interventions. Bonding

Session 3-5: Conceptual mode of the personality disorder. Schema-focused case conceptualization and childhood antecedents of PD-problems. Bonding

Treatment phase – 15 weekly sessions cognitive-behavioral interventions

Sessions 1-11: Correcting negative core beliefs, early maladaptive schema modes less present in daily life by completing schema mode sheet, and a choice from psycho-education, past and actual self, pros and cons analysis, writing a positive diary, making a flash card or a relapse prevention plan.

Sessions 12-14: Replacing negative core beliefs and behaviors with new, healthy cognitive and behavioral options, making early maladaptive schema modes less present in daily life, behavioral pattern breaking by behavioral experiment-play

Session 15: Evaluation.

Treatment phase – 15 weekly sessions experiential interventions

Session 1: Psycho-education experiential interventions, introducing imaging rescripting and two-week chart, and starting an imaging of a safe place.

Session 2: Choice from two chart work or imaging rescripting of childhood memories, present or future situations.

Session 15: Evaluation.

Follow-up phase – 10 monthly booster sessions

Sessions 1-10: Maintaining and deepening changes.

Statistical analysis

We are not aware of a systematic way to perform power analysis for the non-concurrent multiple baseline design. As an indication, the study would have 80% power to detect a change of Cohen’s d ≥ 1 or higher at alpha = .05, two-tailed, if the paired t-test of the pre to post change were used to evaluate the treatment effect. A mixed regression analysis will be used for time, condition and time-within-treatment, which has been applied successfully in previous cases series studies. Mixed regression analysis will be used to assess the differences between the exploration, treatment (cognitive-behavioral and experiential) and follow-up phase comparison to the baseline phase for each individual participant. For each participant, we refer to the article of Arntz et al. (2013).

The analytic strategy for analyzing treatment effects by mixed regression is as follows:

• the effect of time will be tested by 7 moments of assessment during screening procedure (i.e. before baseline), after baseline, after exploration, after cognitive-behavioral intervention phase, after experiential intervention phase, at 5-month follow-up, and at 10-month follow-up. Assesment, starting with zero is a covariate.

• condition will be retested by 2 levels: baseline, exploration phase, cognitive-behavioral intervention phases, experiential intervention phase, and follow-up phase.

• time-within-treatment will be tested after 15 sessions cognitive-behavioral interventions, after 15 sessions experiential interventions, and at 5-month and 10-month follow up.

• the reduction in number of symptoms for the initially diagnosed personality disorder using the SCD-II between first (during screening procedure), second (at 5-month follow-up) and last (at 10-month follow-up) measurement will be tested using Wilcoxon’s Signed Rank test.

References


