The effectiveness of a dramatherapeutic self-image module on the self-esteem of people with a personality disorder

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Abstract

Background: Personality disorders are among the most prevalent psychiatric disorders. Low levels of self-esteem are a diagnostic criterion but often an unaddressed concept in the treatment of personality disorders. Dramatherapy has already shown to be effective in increasing self-esteem in other mental disorders but there is only a scarce research base exploring its effectiveness in the treatment of personality disorders. **Objective**: The general aim of the study was to assess the effect of a drama therapeutic self-image module on the self-esteem of people with a personality disorder. **Methods:** The study design of the research was a multiple baseline single-case design, consisting of a 6-week drama therapeutic self-image module (DZM) and weekly measures of participants' self-esteem. In total 14 participants were included. **Results:** Analysis of the visual analysis showed an overall effectiveness of the intervention. Individual level analysis of effect size (Hedges'g) had moderate effect sizes for between-level analysis of baseline and intervention (g = .68) and large effect size for baseline and follow-up (g = 1.14). There was an improvement in RSES total-scores from baseline (M = 20.6, SD = 2.9) to intervention (M = 22.4, SD = 2.0) and follow-up phase (M = 23.8, SD = 2.4). Repeated measures analysis showed that the level of self-esteem was significantly affected by the intervention, (F (1.3, 11.8) = .7.99, p = .011, ω2 = .24). There was a significant interaction effect comparing the level of self-esteem of the intervention phase to the baseline (F(1, 9) = 7,571, p = .022) and follow-up to baseline (F(1, 9) = 9,330, p = .014). **Conclusion:** The findings offered some support for the effectiveness of a drama therapeutic self-image module in improving level of self-esteem in people with a personality disorder.

Keywords: Personality Disorder, Self-esteem, Dramatherapy

Introduction

People with a Personality Disorder (PD) show lower levels of self-esteem compared to the normal population. Therefore, self-esteem is a highly relevant but often unaddressed concept in the treatment of PD (Rizwan & Ahmad, 2015; Lynum et al., 2008). A frequently used treatment approach to low self-esteem is dramatherapy which puts the therapeutic focus on the acquisition of a life- and emotion-regulation skills (Orkibi et al., 2014). There is a scarce database supporting dramatherapy (Haeyen 2018), and therefore, only limited evidence for the effectiveness of drama therapeutic interventions on self-esteem in patients with a PD. This study serves the field of research and the field of practice by exploring the effectiveness of a dramatherapeutic module in promoting self-esteem in patients with a PD.

Personality Disorders and the Special Role of Self-esteem

With a prevalence of 5-15%, personality disorders are one of the most common psychiatric disorders in the general population. The development of a PD usually starts in adolescence or young adulthood (Davey, 2014; Doomen, 2018). A PD causes disruption in daily activities and high levels of distress and can lead to significant impairments in self- and interpersonal functioning (Sheehan, Niewgloswki & Corrigan, 2016; Haeyen et al., 2018). Further characteristics are stable, pervasive, and inflexible patterns of emotional instability, impulsivity and disturbed relationships that lead to distress and impairment (Haeyen, Van Hooren, Van der Veld, & Hutschemaekers, 2018, Davey, 2014, p.409)

According to Carr and Francis (2010), personality pathology can be explained by the concept of early maladaptive schemas that cause to hold inflexible beliefs about the self, others and the world, leading to dysfunctional interactional patterns. These maladaptive schemata influence a person's thoughts, emotions and behaviour, causing not only intra- but also interpersonal distress (Lynum, Wilberg, & Karterud, 2008). The symptomatology of PD becomes apparent in the interaction with others, where “profound misjudgements of intentions'” (Havsteen-Franklin, Haeyen, Grant, & Karkou, 2019, p.1) can produce emotional

instability and impulsive behaviours. Another characteristic is the level of self-esteem that determines the overall level of personality function and therefore, is a transdiagnostic concept for the diagnosis of a PD (Berghuis & Ingenhoven, 2015; APA, 2014). Therefore, self-esteem is a relevant concept for the diagnosis of a PD.

Self-esteem

Self-esteem is conceptualised as a person's perception and subjective evaluation of the self (Forrester et al., 2017; Sowislo & Orth, 2013) and includes feelings of self-acceptance and self-respect (Orth & Robins, 2014). Self-esteem reflects and affects a person's interaction with the social environment (Lynum et al., 2008; Rizwan & Ahmad, 2015). Therefore, people scoring high on self-esteem experience more positive feelings about themselves, are well-anchored and have improved interpersonal functioning (Rizwan & Ahmad, 2015; Bordens & Horowitz, 2008). Self-esteem instability is associated with diminished self-concept clarity and self-acceptance leading to a greater tendency to not only experience more negative emotions and thoughts, but also, to being prone to aggressive outbursts and maladaptive coping styles ((Rizwan & Ahmad, 2015; Bordens & Horowitz, 2008; Santangelo et al., 2017). The importance and relevance of self-esteem becomes apparent in the diagnosis of mental disorders. Research indicated a significant difference in the level of self-esteem among people with a mental disorder and people without a mental disorder (Rizwan & Ahmad, 2015). Low self-esteem occurs in several mental disorders such as depression, anxiety, eating disorders and personality disorders (Leary & McDonald, 2003). There is some controversy around the relationship between low self-esteem and mental disorders. Some researchers argue that low self-esteem makes people vulnerable to mental disorders whereas others assume that the disorder itself causes a decrease in self-esteem (Rizwan & Ahmad, 2015). Therefore, the insight that one has a mental disorder may lead to a fall in self-esteem, resulting in denial and reluctance as a way of protecting themselves from the cognitive dissonance when trying to integrate stigmatised illness to one’s self-concept (Rizwan & Ahmad, 2015). On the contrary,

their illness limits their coping mechanisms and impairs problem-solving and decision-making skills, causing them to feel less trustworthy and negative about themselves which lowers their self-esteem even further.

Even though the level of self-esteem is often used as a diagnostic criterion for personality disorder, research on the relationship between self-esteem and personality disorder is scarce. Most studies on self-esteem based their research on non-clinical samples or relied on self-reported PD (Lynum et al., 2008). Nevertheless, the perception and interpretation of the self is one of the core features of a PD (Lynum et al., 2008). Therefore, self-esteem is not only a diagnostic criterion but also, as a relevant concept in the treatment of PD.

Dramatherapy

Over the past years, therapists used a broad range of different therapeutic procedures to the treatment of PD (e.g., drug treatment, dialectical behavioural therapy, schema-focused therapy), each with varying effectiveness and treatment focus (Sheehan, Niewgloswki & Corrigan, 2016; Davey, 2014, pp.441-444). Dramatherapy has grown in importance as psychosocial therapy, especially for people with a personality disorder (Havsteen-Franklin, 2019, Haeyen et al., 2018). Dramatherapy is a method of working and playing that uses action methods to facilitate creativity, imagination, learning, insight, and personal growth that all have a central focus in the therapeutic relationship (Bourne, Andersen-Warren & Hackett, 2018). The core processes within drama therapy are: “dramatic projection, therapeutic performance process, drama therapeutic empathy and distancing, role playing and personification, interactive audience and witnessing, embodiment, playing, life-drama connection and transformation” (Orkibi et al., 2014, p.459).

Drama therapy can have a preventive or interventive function in building skills, fostering personal growth, or achieving behaviour change (Dunphy et al., 2014). Even though drama therapy differs from usual theatre it builds on the central features of drama in which communication and interactivity remain dominant. Dramatherapy builds on the belief that

direct experience enables clients better to re-experience feelings and thoughts and to find out about themselves (Keulen-de Vos et al., 2017). Within the “fake reality” and extended realm of dramatic action, patients actively and safely explore themselves. In this “fail-safe” environment, patients learn different ways of coping without risking negative consequences (Orkibi et al., 2014).

The added value of Dramatherapy. Dramatherapy is seen as contributing to the treatment of several mental disorders as it provokes experiences, emotions and puts the personal expression at the heart of the treatment process. It is assumed that dramatherapy is highly effective and relevant to the treatment of people with a personality disorder for whom inter- and intra-personal dysfunctionalities (e.g., low self-esteem) are among their main symptomatology (Haeyen et al., 2018). Studies show that applying dramatherapy in a group addresses relevant avoidant interpersonal strategies of people with a personality disorder as the ability to tolerate, mentalise and interact socially can be improved by dealing with interpersonal challenges in the group setting (Haeyen et al., 2018). Therefore, dramatherapy is assumed to be highly effective and relevant to the treatment of people with a personality disorder for whom inter- and intra- personal dysfunctionalities (e.g., low self-esteem) are among their main symptomatology.

There is a strong need for research within the field of dramatherapy as even though it is used regularly in therapy, little is known about its actual effectiveness on the symptomatology of people with a personality disorder (Dunphy et al., 2014; Haeyen et al., 2018). Previous research has shown the effectiveness of diverse psychodrama therapeutic techniques in which meta-play and roles are addressed. A pilot-study by Keulen-de Vos (2017) conducted a five-session based dramatherapy with clients with PD in a forensic psychiatry. They found an increase in emotional vulnerability. This showed to be a highly relevant effect for this population as clients with PD tend to suppress emotions such as anger or hostility. A single-case design study by Orkibi et al., (2004) found that dramatherapy

improved the self-esteem of patients with a mental disorder. A meta-analysis by Kipper and Richie (2003) found that the effect size (Cohen's d) of psychodrama therapeutic techniques was estimated between -.28 and 1.75 with an average score of .95, showing that effectiveness varies. Comparable to the aforementioned studies, this meta-analysis does not tell much about the actual effectiveness of a specific technique in a given population on a particular variable (Kipper, & Ritchie, 2003). Another aspect is the difficulty to establish the quality and effectiveness of experiential techniques employed in dramatherapy. Previous studies lack methodological in-depth detail, quantitative elements or the detailed process of data analysis (Bourne et al., 2018). Therefore, quantitative evidence of quantifiable effects of dramatherapy is rare. Also, details about how such therapy works with a PD population remain largely unexplored (Havsteen-Franklin, 2019). Therefore, more research into the field of dramatherapeutic programmes and their effect on the symptomatology of PD, especially on levels of self-esteem, is necessary.

Need for Research

Even though the level of self-esteem is used as a diagnostic criterion for personality disorder, research on the relationship between self-esteem and personality disorder is scarce. Over the past years, dramatherapeutic techniques and programmes which focus on the self-esteem in people with a mental disorder give indication of its unique contribution to treatment outcomes. One of such a drama therapy programmes is the DZM (Dramatherapeutische Zelfbeeldmodule), which is a short module aimed at improving self-esteem, self-acceptance and social functioning in people with a mental disorder (Haeyen et al., 2015; Hilderink, 2015). This module had been studied in a clinical setting for patients diagnosed with anxiety disorder, where it showed to be effective in increasing the patients' self-esteem (Hilderink, 2015). Nevertheless, it has not been implicated in a non-clinical setting nor with patients diagnosed with PD (Hilderink, 2015). Due to the transdiagnostic factor of self-esteem, applying the DZM to the treatment of low self-esteem in patients with a PD is highly relevant.

Therefore, the evaluation of the dramatherapeutic self-image module (DZM) and its effect on the self-esteem in patients with PD previously to the treatment with schematherapy is highly relevant and contributes to evidence-based practices, theory and future applications of the DZM.

Research Question and Hypothesis

This study is designed to study the effect of a dramatherapeutic group module (DZM) on people with a PD. Special focus lies on the level of self-esteem in patients with a PD and how it is affected by the DZM. The context in which this research takes place is the outpatient centre for personality disorder at de Boerhaven. While being on the waiting list for the schematherapy, participants will engage in the DZM so that the unique contribution of the DZM can be observed. The research question guiding this study is formulated as followed: *How effective is a drama therapeutic self-image module in promoting self-esteem in people with a personality disorder?*

To answer the research question above several sub questions are formulated to give a more detailed insight into the actual effect of the dramatherapeutic module.

1. Which changes can be observed in individual participants before, during and after the module?
2. Are there clusters of participants with similar variability in self-esteem?
3. What is the difference in level of self-esteem of participants before, during and after the intervention?
4. What is the effect of the DZM across participants?

Method

Design

The study was set up and data collection was supervised by Marieke Mulders and took place at de Boerhaven expertisecentrum voor persoonlijkheidsstoornissen van Mediant GGZ. The study design of the research was a multiple baseline single-case design that consisted of a 6-week drama therapeutic self-image module (DZM) and weekly measures of participants' self-esteem by the RSES scale. The length of the baseline differed for each participant as they were based on convenience. The study got approval from the BMS Ethics Committee (EC) (request number: 190260).

This study aims to assess the effectiveness of a dramatherapeutic self-image module on the well-being and self-esteem in clients with a PD. Therefore, participants were monitored by weekly measures of their self-esteem. Participants were on a waiting list before starting actual treatment of schematherapy. During this period, also called “phase 1”, participants got psychoeducation, set up a treatment plan and were prepared for the schematherapy in phase 2. At the beginning of phase 1, clients participated in four group sessions of psychoeducation. Then, they engaged in the DZM module which consisted of six group sessions. For some participants there were longer waiting periods between the end of the psychoeducation and the start of the DZM. In between these breaks, baseline measurements were taken. As the waiting periods varied for each participant, there were multiple single case experimental designs. Overall, participants filled in the questionnaire on their self-esteem before and a maximum of three weeks after the DZM ended, making a minimum of 10-13 and a maximum of 20-25 measurements moments.

Dramatherapeutic Self-Image Module (DZM)

The Dramatherapeutic Self Image Module (DZM) has the aim of developing a realistic and positive self-esteem. The DZM is a short module consisting of 6 sessions of 75 minutes each, with homework assignments in between (Hilderink, 2015). Participants were offered the

module after completing the psychoeducation about schematherapy. A drama therapist working at De Boerhaven conducted the DZM. The overall aim was to assess the effect on participants' self-esteem before they enter phase 2 of their treatment process.

The module consisted of dramatherapeutic techniques (e.g., role play, imagination) which enable participants to develop and exercise with the positive-realistic self-image/self-esteem. The DZM has two goals, namely, (1) to change negative cognitions into positive ones and (2) to learn to use different perspectives to develop empathy. As people differ regarding their ability to take perspective, the module can be adjusted to the individual's levels. In the first session, participants worked on their self-image by engaging in "Dramatic Play". The overall goal of this session was to develop self-confidence and self-esteem and to build up strengths. In the second session, participants worked on their self- and alter-image, thus making a crucial distinction between the "me" and the "other". Participants engaged in scene work, in which they collected information about the difference between how you think about yourself and what others think about you. In session three, people also engaged in scene work. In the fictional situations, participants tried out different behaviours and the reactions of others, without risking becoming too emotionally engaged or risking negative consequences. Further, the development of a more positive perspective of the self is fostered. In session four, participants engaged in role play again, with the aim to look at the self from an outside and self-reflective perspective. In the fifth session, participants learnt to look at themselves in past situations and to react with a different perspective on themselves. In the last sessions of the DZM, participants engaged in an imagination exercise in which they imagined reacting from the newly developed positive-realistic self-esteem and to incorporate it into their self-image (Hilderink, 2015).

Participants

The inclusion criteria were that participants must have been diagnosed with a personality disorder, cluster B or C. They had to score low (<.27) on the Rosenberg self-

esteem scale and were willing and able to work in groups. Furthermore, participants were going to get ambulant treatment in the specialised GGZ and were in phase 1 of their treatment. The exclusion criteria comprised suicidal, mentally disabled, aggressive or addicted people. People diagnosed with a personality disorder cluster A (paranoid-, schizoid- and schizotypal) or with a dissocial personality disorder were also excluded. These criteria were checked for by experienced psychologists at De Boerhaven. Participants received an intake interview, followed by consultation with a psychologist after a few weeks. Between the intake and the consultation, the client was discussed in the multidisciplinary treatment team. Clients for whom the treatment advice was the participation in an outpatient schematherapy group were eligible for the study. During the consultation, they got an information letter, a consent form, the RSES and an envelope to send the documents back to the institution if the client was willing to participate in the study. Clients who were already in treatment phase 1 but did not participate in the psychoeducation could still be recruited for the study. These clients were contacted via telephone and received the relevant documents via mail.

In total, 55 potential participants had been approached of which 15 were included. There were different reasons for not wanting to participate in this study, such as not having enough time or energy for the module or perceiving it as too confronting. Other reasons where about the DZM being too experimental or requiring too much travelling from Enschede to Hengelo. From the sample of 15 participants, two clients (7 and 10) did not meet the inclusion criteria (e.g., scores on the RSES were too high). The data of participant 11 and 15 were not usable for the analysis as one of them started with the SFT before the DZM and the other did not fill out most of the questionnaires correctly. Therefore, data of 11 participants (female = 11, male = 0), aged between 22 and 55 (M = 35), were used for this study. Overall, participants were diagnosed with other specified PD (8), borderline PD (1) and avoidant PD (2).

Materials

For the study by Marieke Mulders, the Dutch version of the Rosenberg Self-Esteem scale and the Dutch version of the MHC-SF were used to collect quantitative data on participants' level of self-esteem and mental well-being. Regarding the research question, only data from the RSES was used and analysed.

Rosenberg Self-Esteem Scale (RSES). The Rosenberg Self-Esteem scale (RSES) is a self-report questionnaire, assessing a person's subjective self-esteem. The RSES consists of 10 items that are made up of two subscales. The subscale of self-competence is made up of the first five items of the RSES (e.g., I feel that I have a number of good qualities). The subscale of self-liking consists of the last five items (e.g. on the whole, I am satisfied with myself). The items are scored on a 4-point Likert scale, ranging from 1 (strongly disagree) to 4 (strongly agree). The RSES contains an equal number of positively and negatively worded items of which the negatively worded items must be coded reversly in the data analysis. There is one total score ranging from a minimum score of 10 to a maximum score of 40. The total score is tested against the Dutch norm group (M = 31.6, SD = 4.48), with higher scores indicating higher levels of self-esteem (Schmidt & Allik, 2005). A score of < 23. is seen as clinical threshold for negative self-image (Hilderink, 2015). A score of 27 or lower is an inclusion criterion of participants.

According to Schmidt and Allik (2005) the RSES shows a good internal consistency (Cronbach’s alpha = .81) and good convergent and divergent validity across various samples. For the Dutch version of the RSES the psychometric properties are good (Cronbach’s alpha = .96) (Franck et al., 2008). A total score of 28 on the RSES is seen as the boundary between healthy and unhealthy self-esteem (Korrelboom, Marissen, van Assendelft, 2011).

Data analysis

The data set was transferred to and analysed with the statistics programme IBM SPSS statistics Version 24. According to Lobo et al. (2017), a multiple baseline single case design

can be analysed in three steps. First, the data was graphed and visually analysed to determine the “functional relation between the intervention and the outcome”. Therefore, participants' data were graphically displayed to show their changes in self-esteem over time. This also gave a first indication of the similarity or variability of scores which give some indication to the second sub-question and to structure the data set for further analysis. According to Lobo et al. (2017), the visual analysis is used for the within-phase data examination (i.e., level change, trend, stability of data) and the between-phase comparison (i.e., immediacy of effect, consistency of data, overlap of data between baseline and intervention phases). The outcome of this analysis was used to answer the first sub-question of individual changes before, during and after the intervention. According to Lobo et al. (2017), if there is evidence of an effect, the data can be quantitatively analysed to evaluate “the magnitude of the intervention effect” (Lobo et al., 2017). Therefore, effect sizes were calculated for each participant. As the number of measurements for each participant was small, the effect size was calculated using Hedges’g, which corrected for the small sample size. This analysis gave an answer to the third sub-question. At the last step, the effect sizes of each case were combined to estimate the overall effect of the intervention. Therefore, the repeated measures ANOVA was used for calculating the average score from baseline, intervention, and follow-up phase to estimate the overall effectiveness of the DZM on participant’s self-esteem and to answer the last sub-question of this research.

Results

Results of the Visual analysis

In the following, results of the visual analysis are reported. The visual analysis is divided into two parts, the within- and the between-condition analysis. The within-condition analysis refers to the evaluation of data within each condition and the between-condition analysis refers to the comparison of data across all conditions.

Within-condition analysis

For the within-condition analysis the stability, level change and trend direction of the data are estimated. The stability of data refers to the degree to which data points fall into the stability envelope. They are indicative for a change in a therapeutic direction rather than a variable change due to external factors. The level change refers to the relative value or magnitude of the data by looking at the difference between the condition's median scores (relative level change) and/or the difference between the first and the last value of the condition (absolute level change) Usually, both relative and absolute level change are reported for the within-condition analysis but as the relative level change is more overlapping with the trend direction of the data, the absolute level change will not be reported. The analysis of trend refers to the direction data (levels of self-esteem) is progressing towards (e.g., deteriorating, improving).

Which changes can be observed in individual participants before, during and after the module? Results of the within-condition analysis show that, overall, data is stable across all conditions. For participant 5, 6 and 12 data is variable during baseline but stable during intervention and follow-up (see Table 1). During baseline, there is a decreasing level change for 45% of the participants and an improving (36%) or zero-celerating change (18%) for participants. For most participants (72%), relative level change measures indicate improvement during the intervention phase. During follow-up, there is overall no relative

level change (50%) or a decreasing change (30%). For two participants (20%) there is also an increase in level change during follow-up (see Table 1).

Evaluation of trend direction indicates a decreasing trend in 45%, a zero-celerating trend in 10% and an accelerating trend in 45% of participants. There is an overall accelerating trend (81%) during the intervention phase for participants. Participants 4 and 6 show a decreasing, deteriorating trend during intervention even though absolute level changes are increasing (see Table 1). Trend direction during follow-up is mainly zero-celerating (50%), to 30% decelerating and to 20% accelerating across participants (see Table 1). Taken together, results of the within-condition analysis show an improvement across all level changes, high stability of data and an accelerating, improving trend of levels of self-esteem during the intervention phase for most of the participants

To conclude, the analysis of changes in individual participants show that there is not only a lot of variation in the participants' data but that for some participants, the intervention yields larger improvements in self-esteem than for others. All in all, many variations and changes within and among participants can be observed

Table 1

Within-condition analysis

Participant	Stability			Relative level change			Trend direction		
	A	B	C	A	B	C	A	B	C
3	100%	100%	100%	-0.5	+1	0	D	A	Z
9	100%	100%	100%	0	+1	0	Z	A	Z
14	100%	100%	100%	0	+0.5	-2	A	A	D
1	100%	100%	100%	-1	-1	+0.5	D	A	A
2	100%	100%	100%	-2	+2.6	+1	D	A	A
8	100%	100%	-	+2	+1	-	A	A	-
13	100%	100%	100%	+3	+1	0	A	A	Z
4	100%	100%	100%	-3	-1	-2	D	D	D
5	75%	100%	100%	-3	+4.5	-0.5	D	A	D
6	80%	100%	100%	+5	-1	0	A	D	Z
12	93.3%	100%	100%	+2	+3.5	0	A	A	Z

Note. A= baseline, B= intervention, C= follow-up. D= Decelerating, A= Accelerating, Z = zero-celerating

Are there clusters of participants with similar variability in self-esteem? To answer the second sub-question of whether certain clusters of same levels of self-esteem emerge during the analysis, the individual data has been displayed in line graphs (see Appendix 1.1-1.3). Then, the graphs were compared to each other to see whether and what kind of similarities/differences emerged among participants' data. Results of the within-condition analysis show that there is a lot of individual variety in the data but that some patterns emerged across participants. The results of participants with similar variation in level of self-esteem were grouped and reported together. Therefore, making up three groups that are based on either small, medium or large variation of the participants' data:

Small variation. The visual analysis of the scores of participants 3, 9 and 14 show little variation on the RSES scale which was the basis for grouping them together. Participants

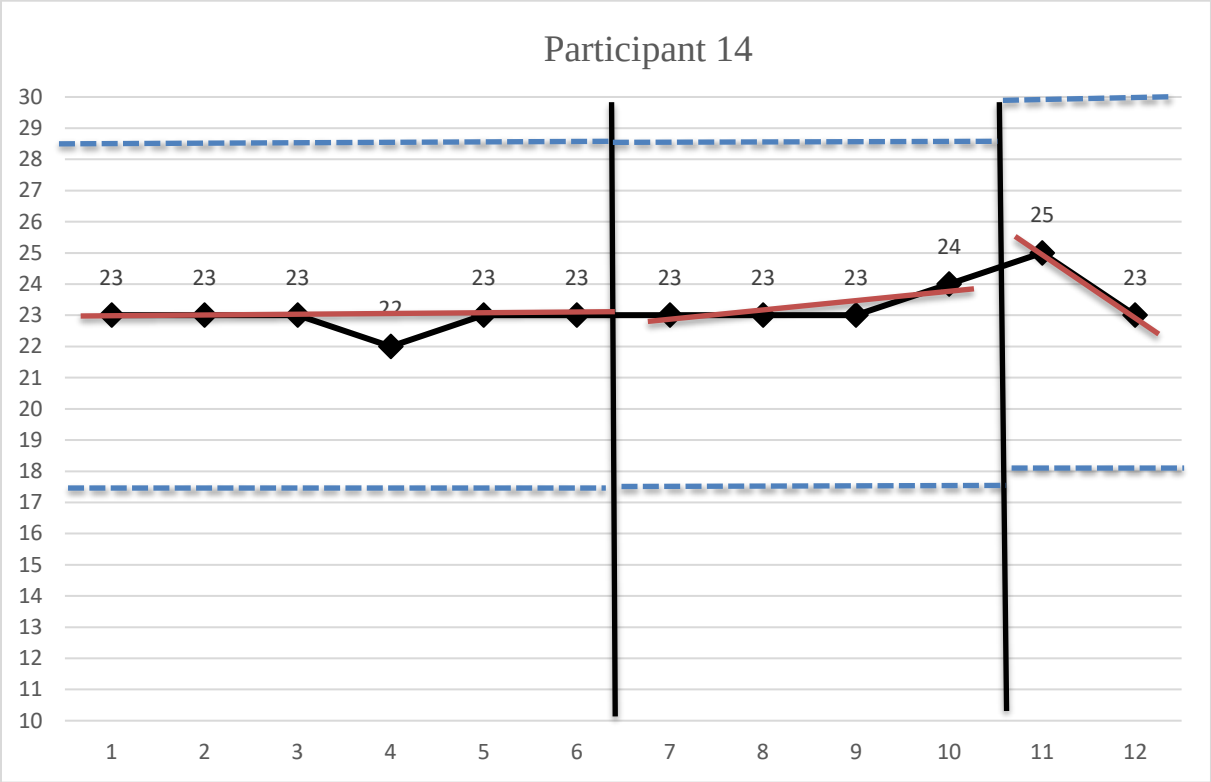
in this group show none or exceedingly small level changes and little variation of scores on the RSES scale (e.g., no extremes; scores are all around baseline level). Another similarity is an accelerating trend during the intervention phase and a deteriorating or zero-celerating trend during baseline and/or follow-up (see Table 2).

The results of participant 14 (see Figure 1) are taken as an example of this group: the evaluation of each condition indicates that data was stable across all three conditions. The evaluation of the level change within conditions indicates that level of self-esteem was not changing for the baseline condition, improving during the intervention and deteriorating during follow up (see Table 2). The application of the split-middle method of trend estimation indicates a zero-celerating trend during baseline, an accelerating trend during intervention phase and a decelerating trend during follow-up. The data is considered stable following the application of a stability envelope to trend lines (see Figure 1 and Table 2).

The results of participants 3 and 9 (see Appendix 1.1) show a similar visual representation as displayed above. The within-condition analysis for participant 3 and 9 also indicates stable data across all conditions (see Table 2). The evaluation of level change within conditions also shows no change for baseline and follow-up and improvement in RSES scores during intervention (see Table 2). As for participant 14, there is a small accelerating trend during intervention that changes to a zero-celerating trend during follow-up.

Figure 1

Graphical display of test results of participant 14



Note: Scores on the y-axis display total scores on the RSES. Numbers on the x-axis display number of sessions. Vertical black line = dividing the three different conditions, red line = trend line, blue lines = stability envelope.

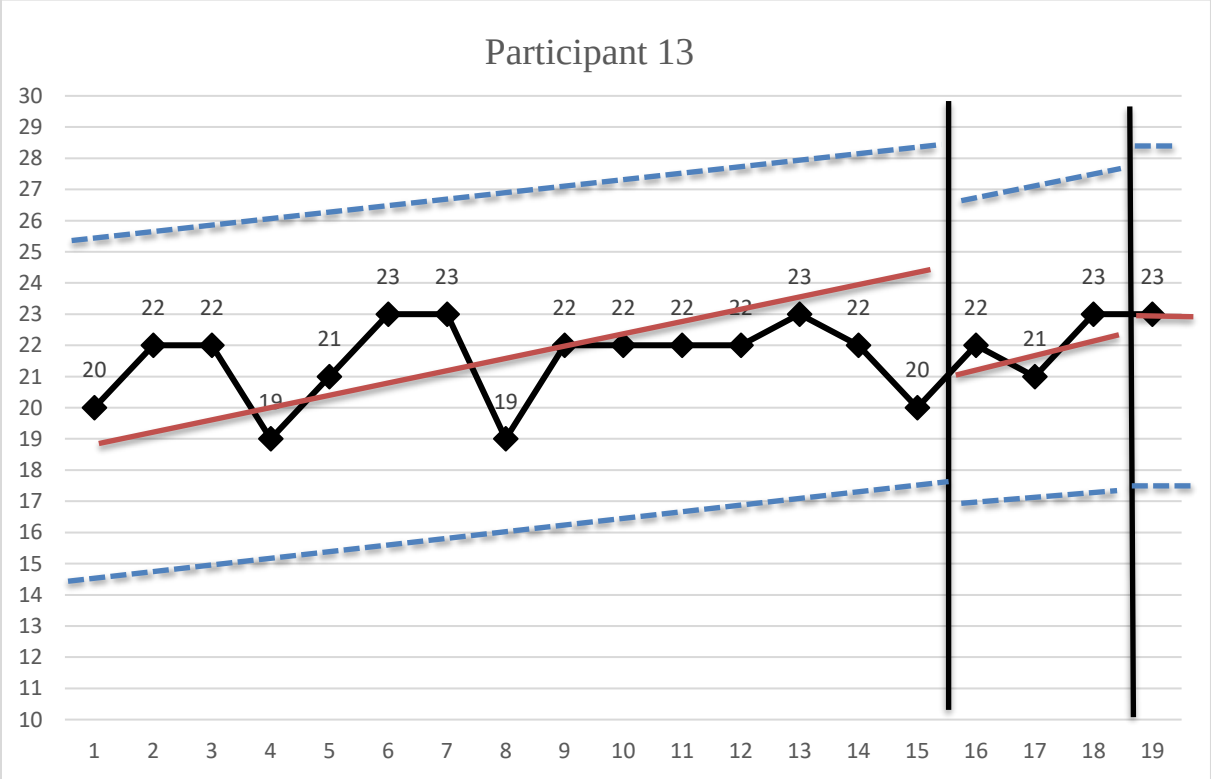
Moderate variation. The visual analysis of scores from participants 1, 2, 8 and 13 shows similar variation of scores and improvement in level of self-esteem. For these participants, the RSES scores during intervention phase and follow-up are distinctively higher compared to baseline. Moreover, their scores display an overall accelerating trend during intervention and follow-up conditions. Overall, the participants' scores show greater variation from baseline level than the scores of the low-variation group.

The results of participant 13 (see Figure 2) are discussed: the evaluation of each condition indicates stability of data across all conditions. The evaluation of level change within conditions indicates that level of self-esteem was zero-celerating during baseline and

follow-up (see Table 2). During intervention, levels of self-esteem are improving (see Table 2). The split-middle method of trend estimation indicates an accelerating trend during baseline and intervention and a zero-celerating trend during follow-up. The data is stable following the application of a stability envelope to trend lines. The results of participants 1, 2 and 8 (see Appendix 1.2) show similar visual representation as the graph of participant 13. The evaluation of level change within conditions for client 1 shows a decelerating trend during baseline and intervention that changes to an increasing trend during follow-up. The same goes for client 2 with the differences of a more extreme improving trend during intervention (see Table 2). Participant 8 has only two conditions of which both display an improving trend. For all participants, the data is very stable (see Appendix 1.2).

Figure 2

Graphical display of test results of participant 13



Note: Scores on the y-axis display total scores on the RSES. Numbers on the x-axis display number of sessions. Vertical black line = dividing the three different conditions, red line = trend line, blue lines = stability envelope

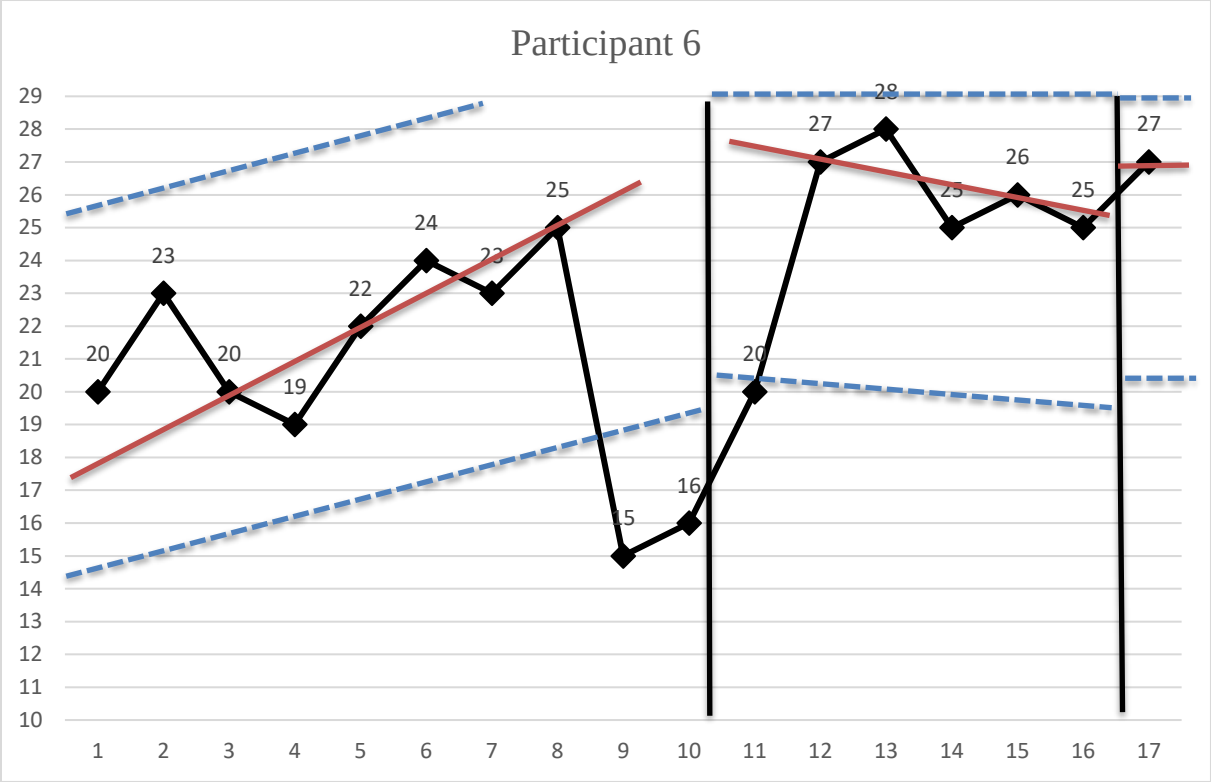
High variation. The participants 4, 5, 6 and 12 show extreme variations in their scores, changing from moderate to extremely low and high scores. Overall, there is a high increase in self-esteem during follow-up when compared to the baseline. The data of these participants (except for participant 4) is variable during baseline and/or stable during the other conditions.

The graphical display of participant 6 (see Figure 3) is used to illustrate this group: As aforementioned, the evaluation of each condition indicates data is variable during baseline and intervention and stable during follow-up. The level of self-esteem is improving during baseline and intervention and deteriorating during intervention. The level of self-esteem is stable and zero-celerating during follow-up. The split-middle method of trend estimation indicates an accelerating trend during baseline, decelerating during intervention and zero-celerating during follow-up. Overall, data is considered variable following application of stability envelope to trend lines.

The visual analysis of participants 4, 5 and 12 (see Appendix 1.3) shows similar variations in the graphs. The evaluation of level change within conditions indicates that level of self-esteem were deteriorating during baseline for participant 4 and 5 and improving during intervention for participant 5 and 12. During follow up, levels of self-esteem were deteriorating for participant 4 and 5, whereas it was stable for participant 12. Trend estimation indicates a decelerating trend across all conditions for participant 4. For participant 5, there is a decelerating trend during baseline and follow-up and an accelerating trend during intervention. For participant 12, there is an accelerating trend during baseline and intervention and a zero-celerating trend during follow up. Except of participant 4, the data was considered variable following application of a stability envelope to trend lines (see Table 2 and Appendix 1.3).

Figure 3

Graphical display of test results of participant 6



Note: Scores on the y-axis display total scores on the RSES. Numbers on the x-axis display number of sessions. Vertical black line = dividing the three different conditions, red line = trend line, blue lines = stability envelope

To conclude, there exists data with similar variability in level of self-esteem. This data could be grouped together according to the degree of level change and variation of scores, making up three clusters of small-, medium-, and large variation.

Between-condition analysis

The between-condition analysis refers to the comparison of data across all conditions. Therefore, level changes (relative-, median, -mean level) across conditions are reported. The evaluation of change in level of self-esteem across conditions and participants indicates that only one variable was introduced across all conditions.

What is the difference in level of self-esteem of participants before, during and after the intervention? Results of the between-condition analysis are used to answer the third sub-question of changes in self-esteem across conditions. Considering the within-condition analysis of trend, a change in self-esteem across conditions was overall improving for participants. For Participant 3, all level changes indicate deterioration across conditions. For Participants 4, 5, 6 and 12, all level changes indicate the greatest improvement across conditions (see Table 2).

Further, the (non)overlap of data is analysed, which gives indication of the degree to which data is identical across conditions. Nonoverlapping data is an indication of performance differences between conditions. Thus, higher percentages of PND indicate a larger magnitude of effect in a therapeutic direction (cf. Parker, Vannest, & Davis, 2011) Following between-condition analysis of percentage of (non)overlapping data (PND/POD), data was mainly overlapping between baseline and intervention with having 100% overlap of data points in 4 cases, 60-83% overlap in 4 cases, 50% in 2 cases and 16.67% in one case (see Table 3). Between-condition analysis between baseline and follow up indicates 100% overlap of data in 3 cases and 50-67% overlap in 3 cases. Percentage of overlap of data is consistent between conditions but not across participants.

Further, the effect size of the intervention across conditions per participant and the overall effect size of the intervention is displayed. Individual level analysis of effect size (Hedges'g) showed overall large effect sizes for between-condition analysis of baseline and intervention. Large effect sizes (g = 0.84 to g = 2.12) can be found in 6 cases, followed by small to medium effect sizes (g = 0.25 and g = 0.76) in two cases. For participant 1 there is no effect comparing baseline and intervention. For participant 3 and 13 there is a very small and a medium sized negative effect for the intervention phase. Following between-condition analysis for baseline and follow-up there is an overall large effect across all participants. In 4 cases no effect size could be reported due to missing follow up measurements. For participant

3, there is a large negative effect size (g = -2,71). On average, the effect size for between condition analysis of baseline and intervention is g = 0.68 and of baseline and follow-up g = 1.14

To conclude, the level of self-esteem is on average, improving during the intervention and remained, for most participants, still higher during follow-up compared to their baseline measurements. For some participants, the intervention yields larger effect and improvements in level of self-esteem than for others. Only for two participants (3, 13) the effect of the intervention was negative, i.e. self-esteem decreased. As medium to large effect sizes were replicated across the other participants a functional relation between the participation in dramatherapy and an increase in self-esteem is observed.

Table 2: *Level changes across conditions and participants. Displaying of (non)-overlapping data and effect size across conditions per participant*

Participant	Relative level change		Absolute level change		Median level change		Mean level change		PND		POD		Hedges' g	
	A-B	A-C	A-B	A-C	A-B	A-C	A-B	A-C	A-B	A-C	A-B	A-C	A-B	A-C
3	0	-1	-1	-1	-0.5	-1	-0.5	-1.25	0%	0%	100%	100%	-0.73	-2.71
9	+2	0	0	0	+2	0	+2.3	+0.3	83.3%	0%	16.67%	100%	+2.12	-
14	0	+2	0	+2	0	+1	+0.45	+1.2	25%	50%	75%	50%	+0.84	+1.47
1	+1	+2	+1	+3	0	+2	0	+2	0%	40%	100%	60%	0	+2.27
2	+0.5	+2.5	0	+2	+0.5	+2	+0.5	+2.5	17%	33%	83.3%	67%	+0.25	+1.37
8	+2	-	-2	-	+1	-	+1.4	-	0%	-	100%	-	+0.76	-
13	0	+1	+2	+3	-0.5	+1	0	+1.5	0%	0%	100%	100%	-0.05	-
4	+4.5	+8.5	+3	+6	+2	+5.5	+1.9	+6	40%	100%	60%	0 %	+0.84	+2.41
5	+3.5	+12.5	+8	+16	+1.5	+9	+4	+8.75	40%	100%	60%	0%	+1.0	+0.91
6	+2	+2	+4	+11	+4.5	+6	+4.4	+6.3	50%	100%	50%	0%	+1.34	-
12	+3	+6	-2	+2	+4.5	+6	+4.95	+6.2	50%	100%	50%	0%	+2.04	+2.49
Total													+0.68	+1.14

Note: A= baseline, B= intervention, C= follow-up. PND = percentage of non-overlapping data. POD= percentage of overlapping data. Hedges'g has been corrected

What is the Effect of the DZM across Participants?

Descriptive statistics. The descriptive statistics for the RSES scale showed a total mean of 20.6 (*SD* = 2.9) for condition A, 22.4 (*SD* = 2.0) for condition B and a mean of 23.8 (*SD* = 2.4) for condition C (see Table 3). Overall, there is an increase in mean and median across conditions for each participant. An exception is participant 3 for which the statistics decline from condition A onwards, leading to an average lower score on the RSES during intervention and follow-up compared to baseline. The mean scores of participants 9 and 14 show only minimal improvement (≤ 1) or even deterioration during follow up compared to the other participants (see Table 3). The mean scores of participants 1, 2, 8 and 13 improved moderately across conditions (see Table 3). Participants 4, 5, 6 and 12 show the highest increase in mean score on the RSES (see Table 3). Taking a closer look at the individual scores, 80% of the participants scored above the threshold with a range score on the RSES from 23 to 27 during follow-up. Compared to the baseline of 20.6 there is a significant improvement of 3.2 on the RSES.

Repeated measures analysis. Mauchly's test indicated that the assumption of sphericity has been violated, ($\chi 2$ (2) =5.922, p = .052). The degrees of freedom are adjusted using the Greenhouse-Geisser estimate (ε = .657). The results show that the level of self-esteem was significantly affected by the intervention, (F(1.3, 11.8) = .7.99, p = .011, $\omega 2$ = .24). Breaking down this interaction effect, contrasts were performed comparing level of self-esteem for intervention phase and follow-up to the baseline (see Table 4). This revealed significant interaction when comparing the level of self-esteem of the intervention phase to the baseline (F(1, 9) = 7,571, p = .022) and follow-up to baseline (F(1, 9) = 9,330, p = .014). Thus, there is a significant and positive effect of the DZM across participants on the individuals' level of self-esteem, therefore, answering the fourth sub-question guiding this research.

Table 3

Mean, Median, Range and Standard deviation per participant

Participant	Mean			Median			Range			SD		
	A	B	C	A	B	C	A	B	C	A	B	C
3	21.3	20.7	20.0	21	20.5	20	21-22	20-22	20	0.5	0.8	0
9	20.7	23	21	21	23	21	20-21	21-24	21	0.6	1.0	-
14	22.8	23.3	24	23	23	24	22-23	23-24	23-25	0.4	0.5	1.4
1	21.2	21.2	23.2	21	21	23	20-22	20-22	22-24	0.8	0.8	0.7
2	23.8	24.3	26.3	24	24.5	26.3	21-26	22-27	26-27	1.9	1.9	0.6
8	24.6	26	-	25	26	-	22-27	25-27	-	2.5	0.9	-
13	21.6	21.5	23	22	21.5	23	19-23	20-23	23	1.3	1.3	-
4	18.5	20.4	24.5	18	20	23.5	19-21	18-23	23-28	1.9	2.0	2.4
5	16	20	26.8	17.5	19	26.5	10-18	18-25	26-28	4.0	2.9	0.9
6	20.7	25.1	27	21	25.5	27	15-25	20-28	27	3.3	2.8	-
12	15.8	20.8	22	16	20.5	22	21-20	18-24	22	2.3	2.5	-
Total	20.6	22.4	23.8	21	23	23.5				2.9	2.0	2.4

Note: A= baseline, B= intervention, C= follow-up. SD= standard deviation

Discussion

Low levels of self-esteem are a transdiagnostic construct among several mental disorders and especially in personality disorders. As the DZM has already proven to be effective in increasing self-esteem in people with an anxiety disorder (Hilderink, 2015), it was assumed that the module could also be effective in increasing the level of self-esteem in people with a PD. The aim of this study was to investigate the effect of a dramatherapeutic self-image module in promoting self-esteem in people with a personality disorder.

The first sub-question investigated changes that occurred in individual participants before, during and after the module. Results showed a lot of variation within and between participants. The dramatherapeutic self-image module had an overall positive impact on each participant (except for two participants), but this impact differed in its degree. The purpose of the second sub-question was to determine if there were clusters of participants with similar variability in self-esteem. Results indicated that data with the same variability occurred and that this data could be grouped together according to the degree of variation, making up three clusters of small-, medium-, and large variation. The third sub-question investigated the differences in level of self-esteem of participants before, during and after the intervention. It was shown that, for most participants, the level of self-esteem improved during the intervention. Also, the level of self-esteem remained higher at follow-up when compared to the baseline level. For two participants, there was a negative trend of self-esteem during and after the intervention. Overall, medium to large effect sizes were replicated across participants, indicating a functional relationship between the participation in the DZM and an increase in self-esteem. The fourth sub-question was posed to determine the effect of the DZM across participants. Results showed that around 80% of the participants scored above threshold during and after the intervention with significant improvement compared to baseline. There is a significant and positive effect of the DZM across participants on the individuals' level of self-esteem. To answer the overall research question guiding this

research, the results show that engaging in a dramatherapeutic self-image module significantly increases the level of self-esteem in people with a personality disorder.

Overall, results of this study are consistent with previous findings from literature (c.f. Orkibi et al., 2014; Hilderink 2015b), showing that drama-based intervention helps to actively address and improve self-esteem in people with mental disorders. Similar effect sizes of a drama-based group therapy on self-esteem were found in people with a mental disorder, i.e. borderline PD, bipolar disorder, schizoaffective disorder (cf. Orkibi et al., 2014) and in therapy resistant anxiety disorders (Hilderink, 2015b). In all studies, the level of self-esteem significantly increased through the intervention. In Hilderink (2015b), patients even did no longer meet the clinical subcriterion for negative self-image. Another similarity of both studies is that the level of self-esteem remained stable and significantly higher during follow-up when compared to the baseline level (c.f. Orkibi et al., 2014; Hilderink, 2015b). Despite the differences among the studies (e.g., different sample; design; sample size), it is apparent that after the application of a dramatherapeutic programme, levels of self-esteem increase significantly.

This supports not only the findings of this study but also gives further indication of the unique contribution to increasing self-esteem in people with a personality disorder. Moreover, the positive effect of the intervention in increasing self-esteem in people with diverse mental disorders (e.g., anxiety, bipolar, schizoaffective disorder) supports the transdiagnostic nature of self-esteem. On the one hand, according to the DSM-IV, both anxiety- and personality disorders share self-esteem as a diagnostic criterion (Haeyen et al., 2018; APA, 2014). On the other hand, a dramatherapeutic module mainly focuses on changing negative cognitions into positive ones and teach the patients to use different perspectives to develop empathy (Hilderink, 2015b). Following current theories about the development of personality disorders but also of anxiety or affective disorders, maladaptive cognition is seen as one of the maintaining factors. The negative cognition not only alters negative thoughts about the self,

others or the world, they also impact our emotions and how we feel about ourselves (c.f. Kennerly). This causes people suffering from a mental disorder to evaluate themselves more negatively and experiencing dysfunctional feelings and thoughts about the self (cf. Rizwan & Ahmad, 2015; Bordens & Horowitz, 2008). As the DZM focuses on adjusting negative cognitions to positive ones, to adapt a different perspective and to develop a more realistic as well as positive self-image, these maladaptive thoughts are challenged. This shows the transdiagnostic role of self-esteem in several mental disorders and highlights the unique contribution of dramatherapy to improving self-esteem. Therefore, it can be argued for dramatherapeutic modules such as the DZM as being an essential part in the treatment process for low self-esteem. Furthermore, cautious claims can be made that results of the aforementioned studies show some support for the positive impact of a dramatherapeutic module on self-esteem in people with a PD.

Strengths and Limitations

The strengths and limitations of this study relate to the design of the study, the generalizability of results and the burden of participants. The multiple-single case design of this study is suitable for studying individual changes over time and between varying conditions of baseline, intervention and follow-up. An advantage of this design is that individuals serve as their own control group which controls for confounding variables that might impact the effect. A critical remark is that most of the participants had only few or even no follow-up measurements. This might have confounded the estimation of stability, level changes and trend estimation, limiting the interpretation of results. This issue is of particular relevance as no conclusions can be drawn about the exact levels of self-esteem during follow-up nor about how long the intervention effect lasts.

The design allows the evaluation of intervention effect and causal inference making. As a functional relationship was demonstrated, inference between participation in the intervention and an increase in self-esteem can be drawn. Another advantage of the design is

the sample size, allowing not only the visual examination of the data with a rich information base of individual changes but also statistical analysis of effect sizes. This makes the comparison of results and effect sizes more feasible.

The nature of the generalizability of results should be made carefully. The study design and the analysis that was conducted allow generalizability of the results to a certain extent. Some aspects such as the calculated effect sizes limit the generalizability. On the one hand, comparing the results of 11 baseline measurements to only one or two follow-up measurements causes validation to the effect sizes between baseline and follow-up condition. One the other hand, having only one measurement moment during follow-up, makes it impossible to calculate the effect sizes. Therefore, relevant information gets lost, causing claims about the effectiveness of the intervention being not indicative for some participants. Another threat to the generalizability of the study is that only one dramatherapist conducted the DZM. Thus, results of individual changes on the RSES might be influenced by how well the dramatherapist conducted the module or whether the participants could benefit from the dramatherapist's teaching skills.

The burden of participants is also a relevant aspect of the study. Due to the voluntary participation, participants were more likely intrinsically motivated to take part in the study instead of feeling pressured to do so. Also, participants filled in the questionnaires online and only once a week even though more detailed information could have been obtained by daily measurements saving them time. Some participants had already shown a huge increase in scores on the RSES during baseline which might be either due to increased hope or well-being from taking the decision to seek treatment, which speaks for a lowered burden of the study on participants. On the other hand, the increase in scores might be caused by a maturation process influencing within- and between condition analysis of level changes. Another remark could be that some participants had extremely long baseline measurements which might have put an even higher burden on them.

Implications and Future Research

Practical implications. In Hilderink (2016), there is a cautious indication that dramatherapy could be used as a stand-alone, combination treatment or as a part of a multidisciplinary treatment of anxiety disorders. A dramatherapeutic programme indicates effectiveness on the self-esteem and well-being (Bodde, 2020) of people with a personality disorder. Nevertheless, its usage as a standalone treatment to PD is critical, as it does not address other relevant factors maintaining a PD (e.g., dysfunctional schemata). Previous studies showed its contribution in combination treatment such as schema focused drama therapy (Doomen, 2018), indicating that dramatherapeutic programmes should get more attention as an essential part in combination or multidisciplinary treatment to PD. In this study, the DZM has been delivered to patients on a waiting list before actual schema-therapy and showed increasing average scores on the RSES above the clinical subthreshold. Therefore, it is recommended to offer special treatments to enhance self-esteem, such as the DZM, prior or as adjudication to regular treatments of PD. The individual differences of people should be kept in mind as some participants might benefit highly from such interventions and others might not. An example are the results of participant 3 who did not experience any positive effect on their self-esteem and scored even lower during follow-up than during baseline. Engaging in psychoeducation and the intervention might have put an additional burden on this participant. A different programme or implementation might lead to different results. It is also possible that a person might need specific attention in the group intervention. Especially people with a borderline personality disorder appear to have more difficulties to express their emotions and disclose themselves in a group setting (Bourne, Andersen-Warren, & Hackett, 2018), making the role play aspect of the DZM more challenging to them.

Future research. Future research should focus on offering dramatherapeutic programmes to other mental disorders sharing self-esteem as a transdiagnostic concept (e.g.,

depression, eating disorders) and to see whether similar results can be achieved. In Orkibi et al., (2014) it was advised to extend the follow-up measurements to make a more profound judgement about whether the intervention was responsible for this change. The same issue applies to this study, as only few measurement moments at follow-up were given. Therefore, future research should investigate the extent to which the effect of the intervention lasts and whether it can be spoken of a carryover effect, which would indicate that the impact of the DZM continues until the next phase. Even though neither study can make claims about how long the effect lasts it can be assumed that engaging in the DZM will have some impact on the further treatment or their treatment outcomes. A study by Vall and Wade (2015), found that higher level of self-esteem predicted better treatment outcomes in people with an eating disorder. Looking at the benefits and positive impact of levels of self-esteem, it is probable that a same effect can be found in people with a PD. On the one hand, higher levels of self-esteem enable people to evaluate themselves more positively, give rise to feelings of security and self-worth and foster more functional feelings and thoughts (cf. Rizwan & Ahmad, 2015; Bordens & Horowitz, 2008). This might have a positive impact on the symptomatology of a PD, as higher levels of self-esteem might alleviate the perceived distress and benefit the overall intra- and interpersonal functioning of people with a PD (Berghuis & Ingenhoven, 2015). On the other hand, successfully increasing levels of self-esteem might make the person more capable to break through the inflexible beliefs and thoughts about the self and others that are so persistent in people with a PD (cf. Haeyen, 2018; Carr & Francis, 2010). This would make the person more capable of changing the maladaptive schemata and dysfunctional interactional patterns that are the focus of schematherapy later (cf. Davey, 2014). Therefore, future research should investigate the actual effect of increasing self-esteem in people with mental disorders, but people with a PD in particular-

Another path of research could be to find out whether participation in a dramatherapeutic programme causes better treatment outcomes of the personality disorder in general, especially when it is offered before treatment starts. Therefore, it would also be necessary to have more variation in the types of personality disorders, as in this study, people mainly had the same PD. Thus, including more different PD could already yield different or same results. This would not only substitute the scarce field of research around the concept of self-esteem and its impact on overall discourse of mental illness but also its relation to other transdiagnostic concepts. Lastly, it is crucial to assess whether the individual variation stems from individual- or even disorder specific differences leading to varying benefits from the programme. If a causal relation between type of PD and small, moderate or high variation in RSES scores is found this might show that adaption of the intervention to the specific subcategory of PD is required to increase the effect.

Conclusion

The overall level of self-esteem in patients with a personality disorder changes significantly through the dramatherapeutic self-image module. These results indicate the effectiveness of the DZM not only for people with an anxiety disorder (Hilderink, 2015) but also for people with a personality disorder. In summary, there is some support for offering separate treatment for self-esteem, as a relevant but often unaddressed transdiagnostic concept, to patients with a personality disorder.

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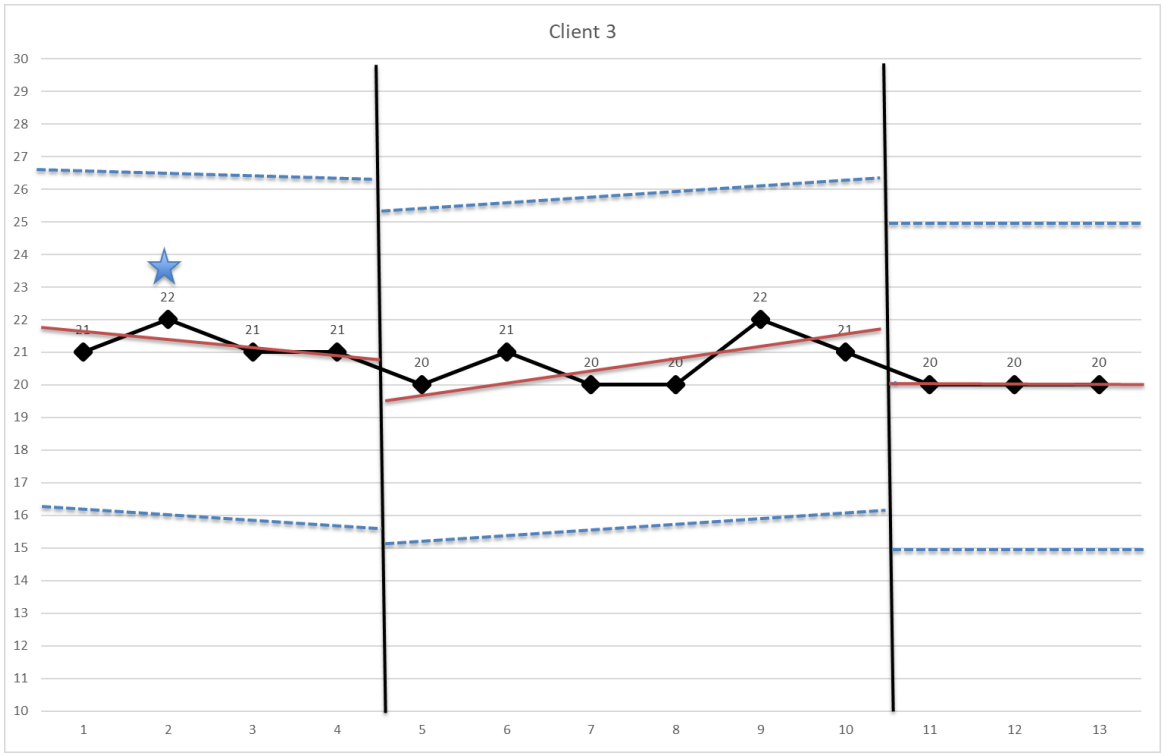
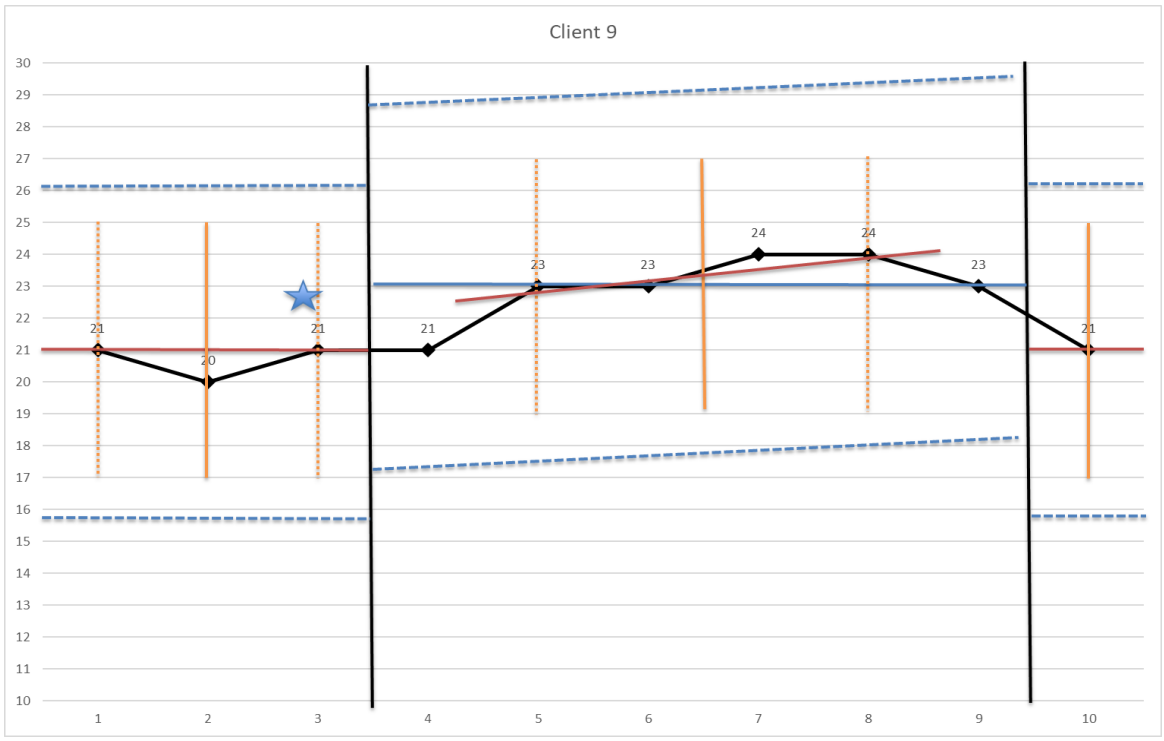
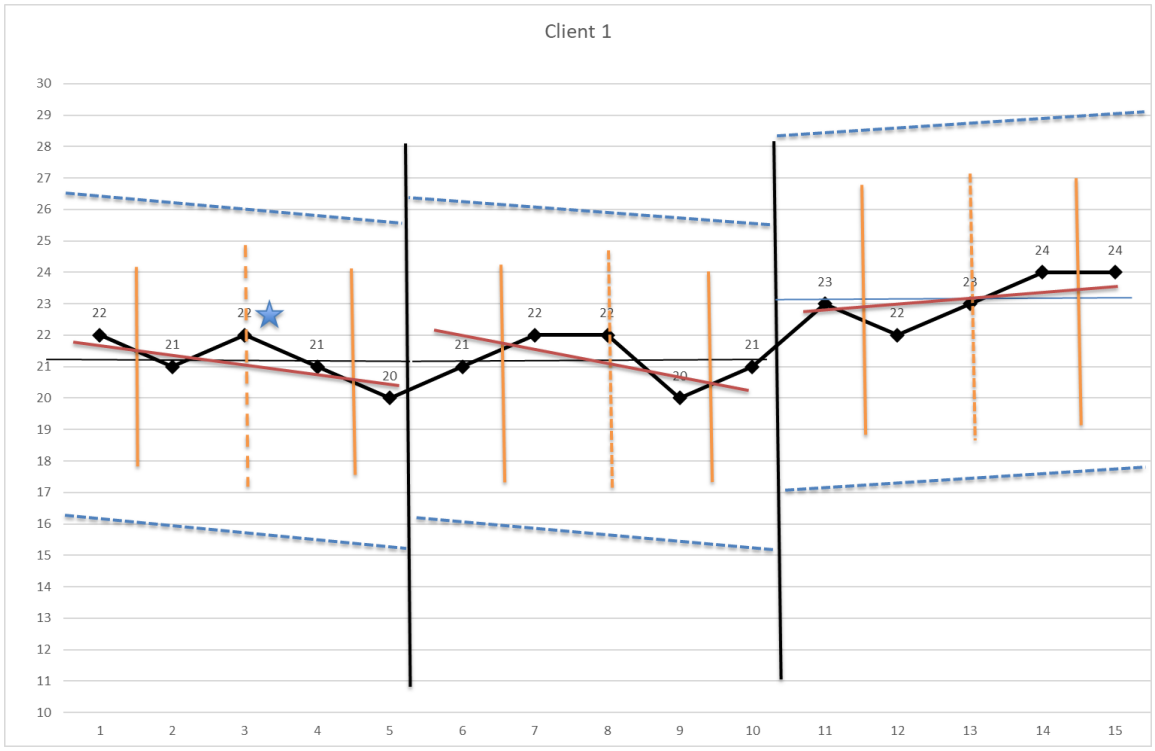
Appendix

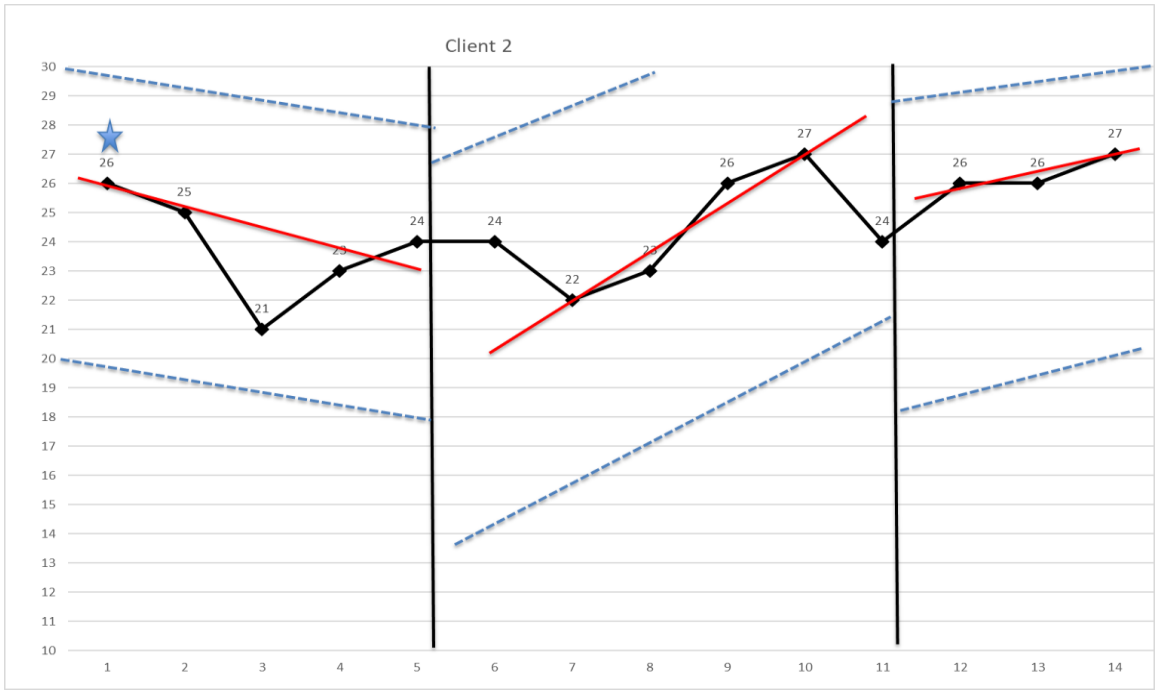
1.1 Small variation

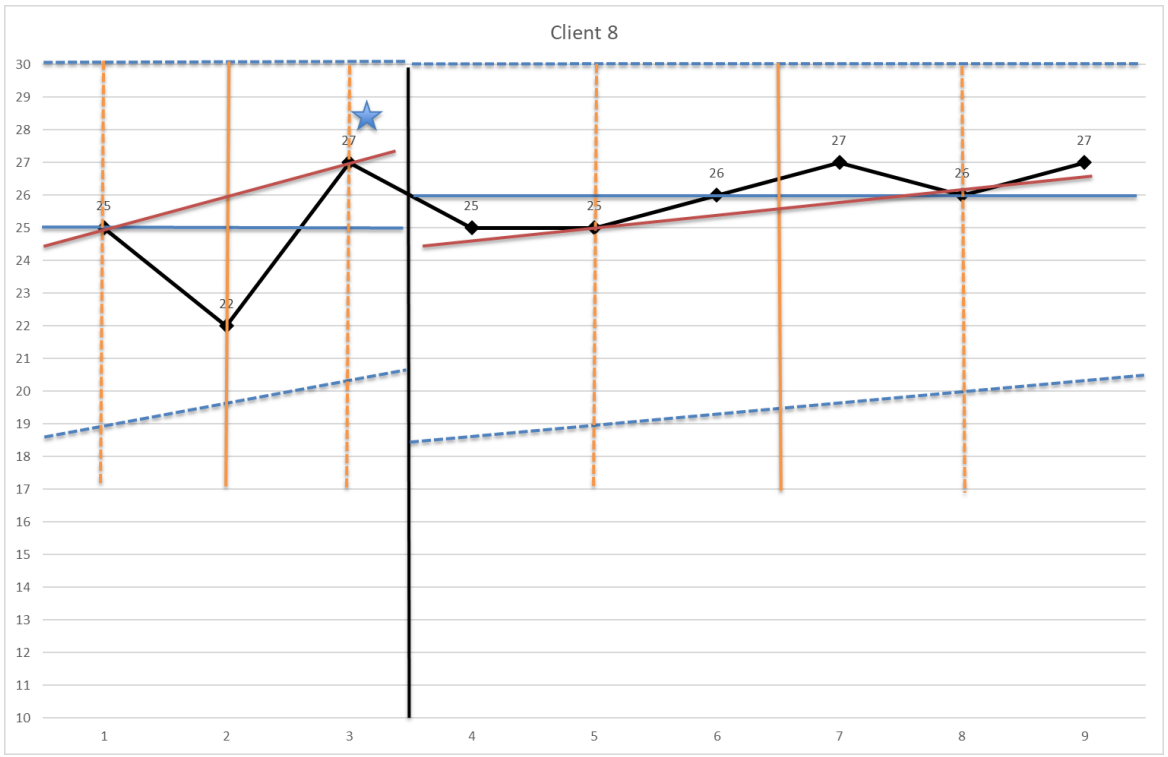




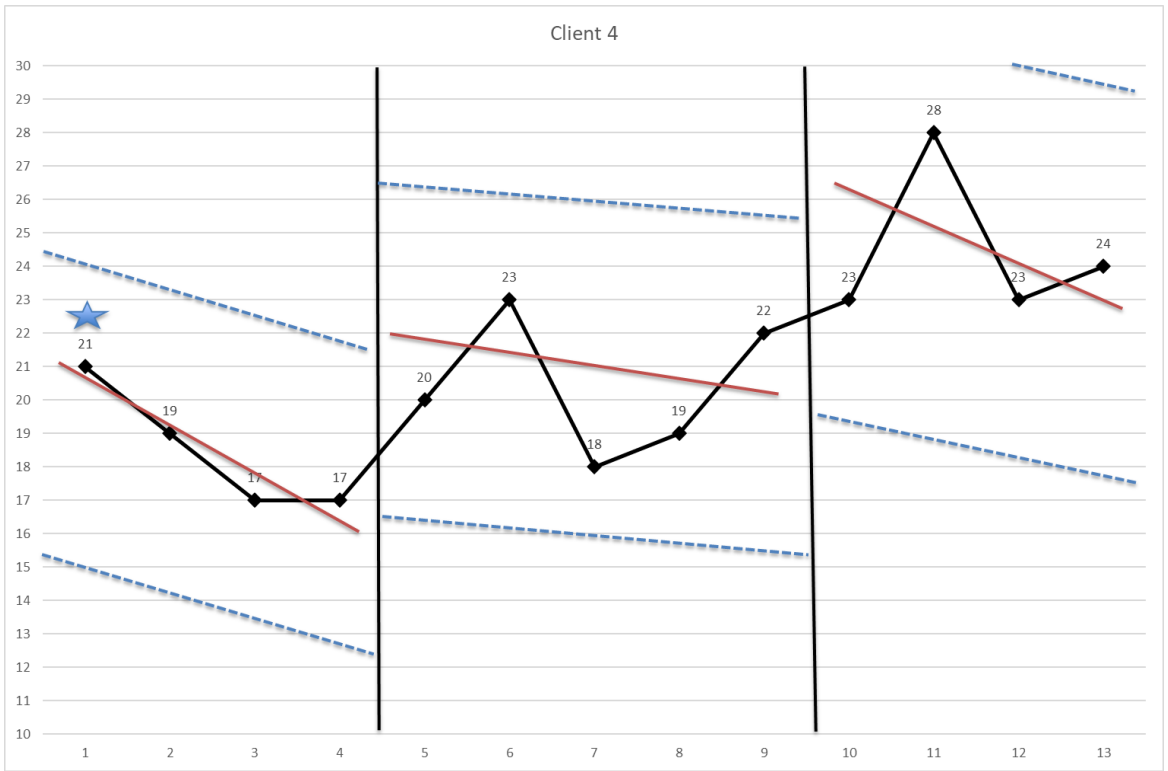
1.2 Moderate Variation

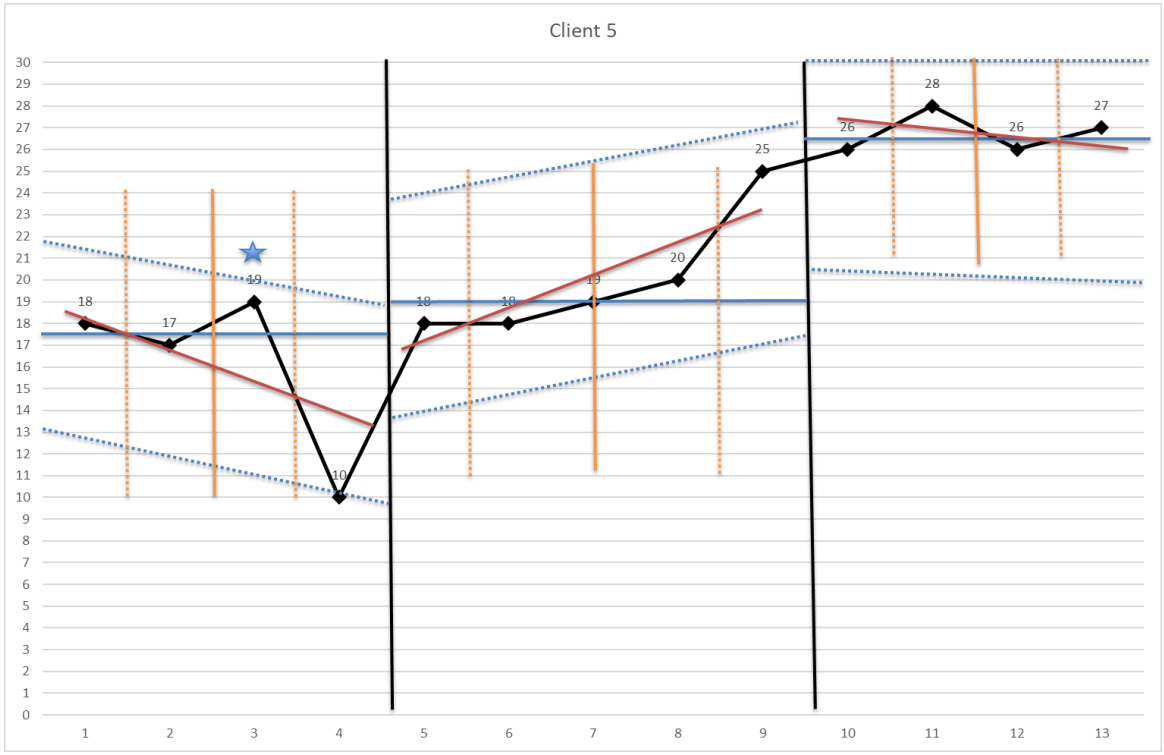






1.3 High Variation

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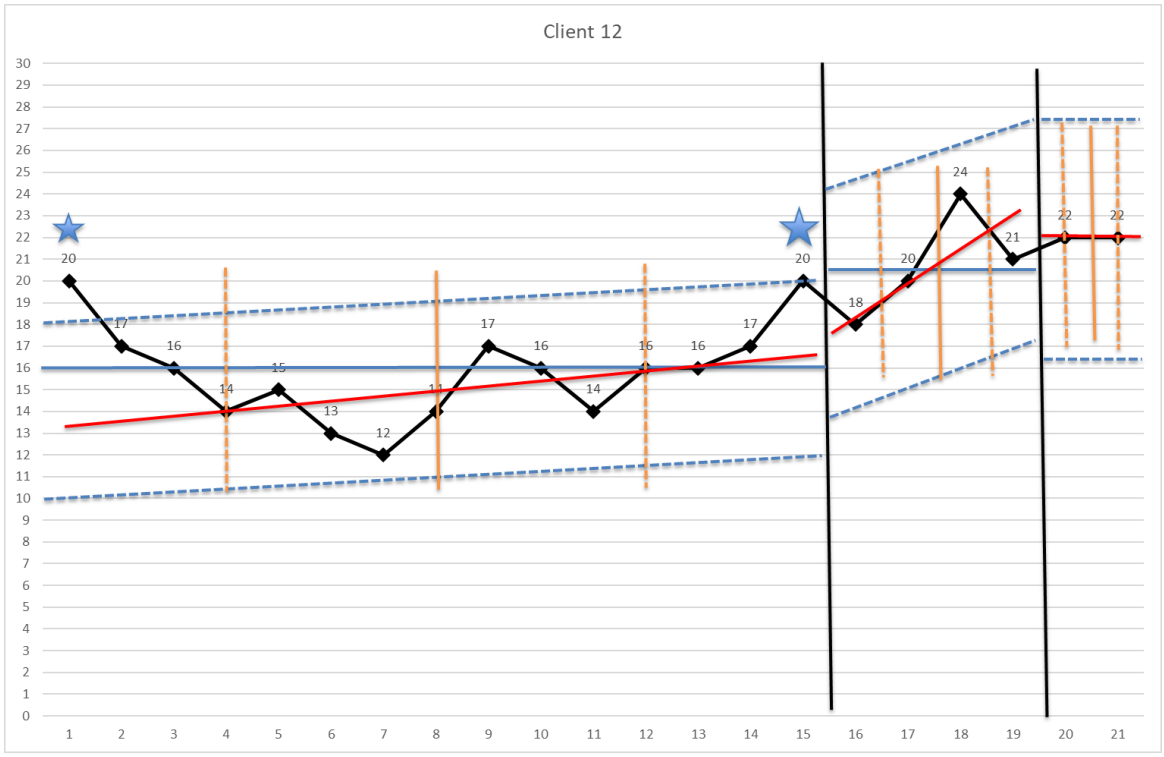
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