DEVELOPING A RELEVANT AND EFFECTIVE ASSIGNMENT TOOL FOR PATIENTS

DIAGNOSED WITH A PERSONALITY DISORDER: ASSIGNING PATIENTS TO A

SUPPORTIVE-STRUCTURING TREATMENT OR AN INSIGHT-PROVIDING

TREATMENT

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Abstract

In clinical practice, life-stories are often valued as a relevant source of information supporting the assignment process, but relevant research and systematic assignment methods are lacking. The purpose of this study is to develop an assignment instrument to provide effective assignment to 1) treatment based on Dialectical Behavioural Therapy, or 2) treatment based on Schema Focused Therapy in a clinical setting. This study is conducted in two parts; the first part presents and gathers expert knowledge on the topic, while the second part tests the reliability and validity of the instrument developed on the basis of this knowledge. In study 1, possible distinctive characteristics of life-stories of the two patient groups are gathered through a focus group meeting consisting of eight clinicians, all employed at the same expertise centrum for personality disorders in the Netherlands. In study 2, the developed instrument is tested on reliability and validity by nine clinicians operating in a Dutch expertise centrum for personality disorders and nine psychology students from the University of Twente in the Netherlands. Results of study 1 reveal possible discriminants on 10 dimensions: Handwritten, Language proficiency, Structure, Upbringing, Education, Intimate relationships, Self-reliance, Self-control, Attribution and Insight. Results from study 2 indicate that the instrument may be considered reliable. Validity testing showed that differences in language proficiency, self-reliance and self-control were related to whether patients were in the supportive-structuring program or the insight-providing program. Differences in structure, upbringing, pedagogical neglect, education, attribution and insight, provide interesting results for further research. Results suggest that clinician expertise is highly beneficial to research related to treatment assignment, and that the instrument developed in this study may be a useful tool for the process of systematic treatment assignment.

1. Introduction

1.1   Assignment to treatment modality

The effectiveness of psychotherapies in order to treat Personality Disorders (PDs) is gaining increasing attention in scientific literature (Svrakic, Draganic, Hill, Bayon Przybeck and Cloninger, 2002; Verheul, 2009; Hadjipavlou & Ogrodniczuk, 2010). Currently, different effective treatments exist for PDs. An important question that arises is how to provide adequate treatment assignment/recommendation for patients with different characteristics. Unfortunately, there is little research regarding what treatment is suitable for patients with different characteristics who are diagnosed with a PD.

It is widely found that people diagnosed with a PD are likely to suffer a great deal from it. In addition to the personal suffering of the patient, treatment for PDs are expensive, and combined with government cuts in general healthcare budgets (Voskes, Theunissen & Widdershoven, 2011), mental health care is forced to adopt cost-effective psychological treatments and methods for assigning patients to the right treatment.

In the Netherlands, GGNet Scelta is a specialist organisation that provides treatment for patients struggling with personality problems. GGNet offers multiple treatment methods for patients with personality problems, each tailored to the specific needs and characteristics of patients. At GGNet Scelta, two clinical programs are available for patients suffering from a PD. The first clinical treatment is based on Dialectical Behavioral Therapy, developed by Marsha Linehan (Linehan, 1993). The second clinical treatment is based on Schema Focused Therapy, originally developed by Jeffrey Young (Young, 2003).

In order solve the problem of assigning patients to the adequate treatment program, patients are asked to write their life-stories alongside their application. Life-stories are read by the person responsible for their intake, i.e. a general health psychologist, clinical psychologist or psychiatrist. After the intake and treatment assignment, patients' life-stories are stored in

the digital patient system. Patients' assignment to one of the two treatments for those suffering from a PD forms the focus of the present paper. This method of using the life-stories of patients for treatment assignment has been used extensively in the past, but is based on implicit expert knowledge. In this introduction we address PDs in general, the treatment of PDs, similarities and differences between PD treatments, and research on life-stories related to psychological health.

1.2   *Personality disorders*

According to the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), in brief, personality disorders *"are based on enduring patterns of behavior, cognition, and inner experience, which are exhibited across many contexts and deviate markedly from those accepted by the individual's culture. These patterns are associated with significant distress or disability, developed in childhood and are difficult to change"* (5th ed.; *DSM-5;* American Psychiatric Association, 2013). It is important that these inner experiences and behaviour cannot be attributed to a different psychological disorder.

Epidemiological studies published between 2004 and 2010 suggest that approximately 10% of the community meet the diagnostic criteria for at least one personality disorder (Oltmanns, Rodrigues, Weinstein & Gleason, 2014). According to the results of the Epidemiologic Survey on Alcohol and Related Disorders conducted in the US, approximately 15% of the population meet the diagnostic criteria for at least one personality disorder (Grant et al., 2004). In a population of psychiatric patients, Andrea and Verheul (2009) found that the prevalence of personality disorders is approximately 49%, with high comorbidity between personality disorders and symptom disorders.

Svrakic et al. (2002) state that a personality disorder is a chronic and debilitating disorder. Symptoms usually first appear in adolescence, but can occur even earlier. Symptoms

peak in the early twenties and then persist for decades. Symptoms cause personal suffering, family dysfunction and social deviance, including criminality and addiction.

Aside from personal and social difficulties, suffering from a personality disorder is likely to cause high direct and indirect costs for society (van Asselt, Dirksen, Arntz, Severens, 2007). A study by Rendu, Moran Patel, Knapp and Mann (2002), found that healthcare and non-healthcare costs of patients with a personality disorder were significantly higher compared to those without a personality disorder. Examples of these direct costs were psychiatric and general hospital costs, general practitioner costs, and medication costs, whereas indirect costs referred to forensic psychiatric institution costs, informal costs and costs of the loss of productivity due to 1) absence of work, 2) disability and 3) suicide.

1.3   *Treatment of personality disorders*

As the previous sections have shown, it is important that patients receive effective treatment. Research on the effectiveness of PD treatment has gained increasing attention in recent decades. Historically, it was suggested that psychotherapy was not effective for treating (PDs), but there is growing evidence that it may indeed be the treatment of choice (Budge, Moore, Del Re, Wampold, Baardseth, & Nienhuis, 2013).

When evaluating recent scientific research focusing on the effectiveness of treatment of personality disorders, it is important to note that most research has focused on the treatment of two personality disorders: Borderline Personality Disorder (BPD) and Antisocial Personality Disorder (ASPD). Treatment for patients with BPD has been examined most often, and to a much lesser extent, as has treatment for ASPD (Bateman, Gunderson & Mulder 2015). The remaining 9 PDs: paranoid, schizoid, schizotypical, antisocial, histrionic, narcissistic, avoidant, dependent, obsessive-compulsive have been less frequently studied (Hadjipavlou & Ogrodniczuk, 2010).

Research suggests that there are various effective psychotherapies that can be used to treat personality disorders. However, it is not clear which type of psychotherapy is most effective. According to Paris (2015), there is no evidence that one method of psychotherapy is more effective and preferable over another, and when two or more well-structured approaches are compared, it is likely that no difference in effect will be found between treatments. Budge et al. (2013) performed a meta-analysis including 42 studies that examine the effects PD treatments. This meta-analysis confirms the findings of Paris (2015). Treatments of personality disorders all have a psychodynamic or cognitive-behavioural background, and that despite name differences, all effective treatments could be categorized into two approaches: psychodynamic or cognitive-behavioral (Budge et al., 2013).

1.3.1 Dialectical Behavioural Therapy

Dialectical Behavioural Therapy (DGT) was the first effective treatment for BPD and was originally developed by Marsha Linehan for outpatient settings (Linehan, 1993). Until now, DBT is still considered to be the leading evidence-based treatment for BPD (Paris, 2015). DGT is an adaptation of Cognitive Behavioural Therapy combined with interventions derived from other approaches, such as behavioural therapy and mindfulness. In DGT, emotional dysregulation and impulsive behaviours are the most important treatment targets.

The first published randomized controlled trial (RCT) examining the effect of DGT was performed in 1991. Significant differences in high-risk impulsive behaviour were found compared to treatment as usual (TAU) receiving outpatient counselling (Linehan, Armstrong, Suarez, Allmon, & Heard, 1991). Years later, another RCT was carried out as a response to criticism of the 1991 study that differences would be too easily found if compared to a TAU. This study, performed in 2006, favoured DBT. Linehan et al. (2006) compared DBT to a

therapy used by experts interested in BPD and experienced in the treatment of BPD and suicidal behaviour. They found that DBT was more effective than the expert treatment.

A study by Verheul, van den Bosch, Koeter, de Ridder Stijnen and van den Brink (2003) showed similar effects: DBT for BPD patients was superior to TAU in reducing high risk-risk behaviours and also had better retention rates. TAU patients attended a maximum of two therapy sessions per month conducted by the original referral source. This study is an important contribution to the existing research on DBT as it was the first study not to have been conducted by its developer, and was carried out outside of the USA (Verheul et al., 2003). A meta-analysis conducted in 2010 by Kliem, Kröger, and Kosfelder (2010) found that DBT is more effective than traditional ways of treating BPD patients (TAU treatments), but no evidence was found that DBT is more effective than other borderline-specific treatments.

1.3.2   *Schema focused therapy*

In addition to the evidence based on DBT, another approach to treating BPD is becoming more popular: schema focused therapy (SFT). Although this approach is examined less frequently compared to DBT, it is gaining promising evidence as an effective treatment for BPD (Montgomery-Graham, 2015).

SFT is an integrative form of psychotherapy embedded with the techniques and insights of different approaches such as learning theory, cognitive theory, client-centered theory, psychodynamic theory and attachment theory (van Genderen & Arntz, 2010). In SFT, Schemata refer to a person's maladaptive beliefs about themselves, others and the world around them. Early adopted, non-adjusted schemata might lead to the development of a personality disorder. The aims of SFT are, in short, to adjust early adopted and dysfunctional schemata and enabling resisting dysfunctional behavior.

According to Farrell, Shaw and Webber (2009) SFT is an effective treatment for BPD that can lead to recovery and improved overall functioning. The authors rely on a RCT of Giesen-Bloo et al. (2006). Giesen-Bloo et al. (2006) performed a RCT comparing Schema Focused Therapy (SFT) with Transference-Focused Psychotherapy (TFP). SFT was favoured over TFP on all measures; for example, they found a reduction in all BPD symptoms and general psychopathologic dysfunction, improved quality of life and changes in associated personality features. In the study of Farrell et al. (2009), significant results between SFT and TFP emerged after a 12-month period, and extended to the end of the study (36 months).

1.4   Differences and similarities between DBT and SFT

As described above, it is clear that DBT and SFT can both be effective in treating BPD. Both approaches share characteristics that contribute to effective treatment; for example they both use the same cognitive and behavioural principles (Montgomery-Graham, 2015). Furthermore, both treatments use some of the same techniques such as exposure, reinforcement and skills training (Kelloggs & Young, 2006).

Another similarity between the two approaches is that both DBT and SFT recognise that patients with BPD tend to have difficulties in mentalization, which means that they have difficulties in recognizing their own emotions and often do not know how to deal with these emotions (Paris, 2015). Two of the main diagnostic criteria for BPD are based on these difficulties in mentalization. Both treatment approaches facilitate mentalization, although it is reached in different ways (Montgomery-Graham, 2015).

Although the two approaches have a lot in common, they also differ from one another. According to Montgomery-Graham (2015), STF and DBT differ regarding the conceptualization and etiology of BPD. In DBT, unstable or reduced mentalizing capacity is a core feature of borderline personality disorder (Fonagy & Bateman, 2007). In SFT, BPD is

conceptualized as a disturbance on a continuum of dissociative identity disorder, stressing the importance of unintegrated schemas (Young, Klosko & Weishaar, 2003). With regard to etiology, DBT attributes importance to transactional influences between the individual's biological disposition and the invalidating environment (Linehan, 2003). Contrastingly in SFT, BPD is considered to be a constellation of maladaptive schemas developed in one's early family environment, in combination with genetic influences (Young, 2005).

When examining the treatment structures of the two approaches, a difference can be found. DBT focuses on stability, stopping problematic behaviour, improving behavioural skills and increasing self-respect (Linehan, 2003). SFT however takes a psychotherapeutic approach, focusing on bonding and emotional regulation, schema mode change and development of autonomy in order to extend patients' knowledge and their understanding of themselves (Young 2005; Kellogg & Young, 2006)

1.5   Research on life-stories and mental health

Some researchers have suggested that examining life-stories may be helpful in assigning patients to the proper treatment modality, by asking patients to describe themselves and their lives (van Os, 2014). Van Os (2014) suggests that life-stories contain valuable information that may be useful for assigning treatment. In the following section we address some characteristics of life-stories related to psychological health.

Coherence in life-stories is hypothesized to relate to psychological well-being and psychological disorders (Habermas & Buck, 2000). Deficits in life-story coherence can predict a lower level of psychological well-being and can lead to a higher probability of the presence of a specific psychological disorder.

Agency & Communion are two themes in life-stories that have also been related to mental health (Westerhof & Bode, 2004). Agency is the motivation/willingness to influence

circumstances, and communion is the motive for attachment, love and friendship (Adler, Chin, Kolisetty & Oltmanns, 2012). According to Westerhof (2008), the concepts of agency and communion appear in almost every life-story, and the presence of high agency and communion is considered to relate to psychological well-being. Adler et al. (2012) found that adults with features of BPD score low on communion fulfilment and agency.

Overall, the life-stories of patients who suffer from a personality disorder can show distinctive characteristics that may provide opportunities for the process of treatment assignment. However, previous research does not provide a great deal of information for the present study.

1.6   Present study

Personality disorders and treatment of PDs are popular research topics in the field of psychology (Linehan et al., 1991; Giesen-Bloo et al., 2006; Kliem et al., 2010). Patients with personality disorders are prone to suffer from these and create high costs for society (van Asselt et al., 2007). Currently, different effective methods for treating PDs exist, such as DBT and SFT, however little is known about treatment assignment.

There is some evidence that differences in life-stories are related to different states of psychological well-being; for example, differences in life-story coherence and differences in agency and communion are found to relate to different states of well-being (Habermas & Buck, 2000; Adler et al., 2012; Westerhof, 2008). These concepts may be helpful in the process of treatment assignment.

In the field of practice at GGNet Scelta, life-stories are used in a non-systematic way as an addition in the process of treatment assignment. In order to make the use of life-stories in treatment assignment more systematic, it is important to identify the characteristics that distinguish between patients that apply for clinical treatment. In this study we will explore

distinctive characteristics of life-stories from patients involved in two different clinical treatments of personality disorders: a supportive-structuring treatment (based on DBT) and an insight-providing treatment (based on SFT). We suggest that these distinctive characteristics could help to develop an instrument for systematic evaluation of life-stories, facilitating the process of treatment assigning.

This study is divided in two parts. The first study uses clinician expertise to create an inventory of the different characteristics of life-stories from patients from both clinical treatments. The second study focuses on developing an instrument that enables treatment assignment to one of the two treatments. This instrument is tested on reliability and validity to provide an insight into the possibilities of implementing this tool in the field of mental health care, especially for inpatient mental health care. The study aims to contribute to the process of systematic life-story evaluation and treatment assignment. The main research questions are: 1) What life-story characteristics do clinicians use in the treatment assignment process for assignment between a supportive-structuring treatment and an insight-providing treatment? and, 2) Is the developed instrument reliable and valid?

2.   Method

This paper consists of two related studies. Study 1 focuses on the distinctive characteristics of patient life-stories that are used by experts in assigning patients to two clinical treatments offered by GGNet Scelta. This information was gathered using an e-mail survey, focus group, and member check. With the found discriminants, an instrument was developed to aid treatment assignment by evaluating the life-stories of patients of both treatments (see Appendix A). In study 2, this instrument was tested on reliability and validity.

2.1   Study 1: E-mail survey, focus group, and member check

2.1.1 Participants

All participants were clinicians responsible for intakes and involved in the assignment of patients to the right treatment; this occurs in a meeting with other clinicians. All twelve clinicians responsible for intakes were invited by email to give their opinion about distinctive characteristics between the life-stories of patients referred to two clinical treatments (e-mail survey). Eight responded to this request. The focus group consisted of seven clinicians, most of whom also participated in the e-mail survey (general health psychologists, psychotherapists, psychiatrists and clinical psychologists, and psychiatrists in education). The member check consisted of nice clinicians. Four of these had also participated in the focus group, others had not.

2.1.2 Material & procedure

Prior to the focus group, clinicians were contacted via e-mail (e-mail survey) and asked to create an inventory of their own beliefs regarding the discriminants between patients of the supportive-structuring treatment, and those of the insight-providing treatment. This information was gathered and used to form the basis of the organised focus group meeting of clinicians.

In order to gather the relevant data for constructing a tool for effective assignment, clinicians were contacted via e-mail and invited to attend a group meeting. The purpose of the meeting was to reach a mutual agreement regarding possible distinctive characteristics in patients' life-stories. During the focus group meeting, clinicians discussed and reached a mutual agreement regarding the discriminants identified in the e-mail survey.

The focus group was led by the researcher to ensure a structured approach. The researcher leading the focus group started each topic by asking the experts' general opinions. After clinicians gave their opinions, the researcher asked more specific questions. When

consensus between clinicians seemed to have been reached, the researcher ended each topic asking whether anyone had anything else to suggest on that specific topic. The focus group meeting was recorded and transcribed by the researcher. The results of the identified discriminants are discussed in the results section 3.1.

After carrying out and analysing the focus group, a member check was conducted. The question presented in the member check was: "These are the dimensions from the focus group, and the added definitions and narrative examples that we intend to use in the instrument. In your opinion, does it correspond correctly with the previous discussion?" The discussion was led until consensus was reached on the components that together formed the instrument. The member check lasted approximately one hour and all content was recorded.

2.1.3 Analysis

Results of the e-mail survey were examined by a previous researcher (Zuidhof, 2013). This was done by coding the discriminants mentioned in the emails and recording their frequency.

To enable analysis of the focus group data, the entire meeting was transcribed. The focus group data was analysed by citing the pros and cons of each possible discriminant. The pros and cons of each discriminant were coded according to agreement between clinicians (consensus or no consensus). The researchers then evaluated this information in order to determine which discriminants would be suitable for the assignment instrument.

After analysing the results of the focus group, a list of the emerging discriminants was formed along with their appropriate definitions. In order to construct a first version of the assignment instrument, adequate narrative examples were added to the discriminants and their appropriate definitions. This list of discriminants was used for the member check.

A member check was then carried out by organising a meeting with the same clinicians, and seeing whether or not they agreed with the list of discriminants. All discriminants were discussed separately and adjusted where necessary. The member check was recorded to ensure the researcher did not miss any valuable information.

2.2. Study 2: Instrument development and testing

2.2.1 Participants

For the instrument development and testing, 10 clinicians were invited to take part. In total, nine clinicians participated (Mean age = 38.78 years; *SD* =7.46, Mean working experience = 11.89 years; *SD* = 6.09). All clinicians were employed by the Dutch expertise centrum for personality disorders (SCELTA Apeldoorn) and were involved in treatment assignment of patients. In addition to the clinicians, nine students (Mean age = 23.56 years; *SD* = 2.40) participated. These students were recruited by e-mail based on their enrolment as undergraduate psychology students. Some of the students were required to participate in order to earn credits for their bachelor's study, while others participated on a voluntary basis. All students gave written informed consent. Instrument testing was divided into three rounds of three clinicians/experts and three students.

2.2.2 Material & procedure

Reliability and validity testing of the first version assignment instrument devised in study 1 was carried out using life-stories of patients from both clinical programs. In order to gather the life-stories to be used, a total of 45 patients were approached. The collection of life-

stories stopped once 20 patients had given their permission. For reliability testing, 10 life-stories were used. For validity testing, 20 life-stories were used. The life-stories used were written by patients diagnosed with a PD, including diagnoses other than BPD and ASPD. All life-stories were then rated on each dimension of the assignment instrument (researchers' standard). This researchers' standard was used for reliability and validity testing.

2.2.3   Reliability and validity testing

For reliability testing, participants were asked to score each five life-stories in a specific order on paper using the constructed instrument. The assignment instrument was tested by nine clinicians and nine students. These 18 participants were divided over three rounds (three clinicians and three students in each round). In each round, participants were asked to score all dimensions of the instrument for five life-stories. Some participants completed the scoring forms in their own time, due to high workload and scarcity of time. Participants first had to read the whole life-story, followed by scoring the same life-story in all categories. Participants had the possibility to give some additional feedback on 1) scoring of the categories for each life-story and 2) the overall experience of scoring the specific life-story. This procedure was repeated until all five life-stories were scored. At the end, participants were asked about their overall experience of the whole experiment.

These rounds of reliability testing were intended to serve several purposes. The first purpose was to see whether or not the clinicians and students reached agreement using the constructed standard for each of the five life-stories (using the instrument the way it was intended by the researchers). The second goal was to adjust and reconstruct the instrument where necessary, in order to increase the overall reliability of the instrument.

To examine the validity of the instrument, the researchers' standard was compared with scores on all dimensions, based on the actual assigned treatment for all of the 20 life-stories. This was done in order to examine the discriminative ability of each dimension of the instrument.

2.2.4   Analysis

Participants scored each dimension of the instrument. Each dimension had three categories: 1 (present), 2 (absent) or 9 (life-story provides insufficient information). For some dimensions the meaning of scores differed, but all dimensions included three possibilities to score. Later in reliability testing, category 9 (life-story provides insufficient information) was removed (see results). For reliability analysis, Cohens kappa was used to examine the strength of agreement between the participants' and the researchers' standard scoring across the dimensions of the same life-stories. According to Landis & Koch (1977), measures of Cohen's kappa can be interpreted as follows: coefficients ranging from .0 to .20, .21 to .40, .41 to .60, .61 to .80, and .81 to 1.00 indicate, respectively, a slight, fair, moderate, substantial and excellent agreement between raters.

For additional reliability analysis, an overview of the percentages of agreement was added (participants' scores compared to the researchers' standard), and specified for each dimension. This was done to facilitate the instrument adjustments, and was aided by the additional participant feedback on each category.

For validity testing, Chi-square tests were performed on the scoring of 20 life-stories by the researchers, against the expected scores based on actual assigned treatment. Reliability- and validity tests were performed using IBM Statistical Package for the Social Sciences, version 22 (IBM, 2013).

3   Results

3.1.1   Results study 1: E-mail survey

The results of the e-mail survey from a previous unpublished study by Zuidhof (2013) and the results from the focus group and consensus reached in the present study are summarized in table 1.

In general, the experts expected deficits in: upbringing, such as a lack of trustworthy, stable, protective, loving and actively engaged parents in his/her life; traumas; and lack of self-reliance to be present in the life-stories of patients admitted to both treatment modalities. In life-stories of patients assigned to the supportive-structuring program, experts expected: early onset of problems; lower formal education (recognisable in recurring grammatical faults); externalizing problems by impulsive behaviour; lack of practical self-reliance; a strong sense of vulnerability due to early traumas; low introspection; and a strong cry-for-help (as recognised in multiple suicide attempts). The life-stories of patients assigned to the SFT, insight-providing programme, were associated with: later onset of problems; lack of emotional self-reliance; internalizing problems; identity problems; missing partnerships; and some introspection. Experts shared the opinion that multiplicity of specific problems, as well as quality of introspection would differentiate between the two groups of patients.

3.1.2   Study 1: Focus group

By analysing the focus group data, we identified 12 possible discriminants (see table 1), which could help in assigning patients to one of the two treatments. All discriminants identified earlier via e-mail are discussed below. The results of the e-mail survey formed the structure of the focus group. In the analysis of the focus group data, the pros and cons of each

discriminant were carefully considered. An overview of these pros and cons is presented below. To facilitate reading of the quotes, P1 refers to the supportive-structuring treatment and P2 to the insight-providing treatment. For a short summary of the included discriminants after analysis of the focus group, see paragraph 3.11. Detailed results of the focus group are given in the following paragraphs.

Table 1. *Dimensions emerging from the email survey (x-times mentioned) and the consensus reached in the focus group (n=8.)*

Email survey	Program		Consensus Group
Dimensions	Supportive-structuring program (P1)	Insight-providing program (P2)	
Form			
Handwritten (3x)	Handwritten	Not handwritten	Included
Language proficiency (5x)	Few to no errors in the sentence structure, punctuation and choice of words.	Frequent errors in the sentence structure, punctuation and choice of words.	Included
Structure of life-story (1x)	Unstructured	Structured	Included
Development			
Upbringing (7x)	Pedagogical deficits	Emotional deficits	Included
Education (5x)	Primary and secondary levels of education	Higher education levels	Included
Parentification (2x)	Practical parentification	Emotional parentification	Not included
Emergence of problems (5x)	Early start of problems	Later start of problems	Not included
Relationships			
Intimate relationships	Unstable partner relationship(s)	Missing partnerships	Included*

Skills

Self-reliance (14x)	Little practical self-reliance	Little emotional self-reliance	Included
Self-control (8x)	Impulsive	Cautious	Included
Attribution (8x)	Externalising	Internalising	Included
Insight (20x)	Less introspection	More introspection	Included

Specific Problems

Eating Disorders	Bulimia	Anorexia	Not included*
Suicide attempts	More suicide attempts	Fewer suicide attempts	Not included*
Identity problems (1x)	-	Identity problems	Not included
Traumas (10x)	Early traumas	Later traumas	Not included

*Not mentioned in E-mail survey but emerged in focus group dialogue

3.1.2.1   Handwritten, language proficiency and structure

The clinicians reached consensus regarding the point that patients of the supportive-structuring treatment more often have a handwritten life-story, make more errors in language usage, and write a less organized life-story than patients of the insight-providing program. Life-stories of the supportive-structuring treatment tended to have a 'messier first appearance'.

- Researcher: "handschrift? Zie je dat meer op P1 dan op P2?"

- "Ja"

- "Ja, handschrift is ook vaak, ja ik weet niet of je bij P1 meer geschreven is dan.."

- "Enkele keer ja. Ik denk dat je bijna zou kunnen zeggen, als het handgeschreven is, is al meer aanwijzing voor P1"

(…)

- "Ik vind qua vorm ook de structuur bij P2 soms heel gestructureerd zeg maar eh.. en bij P1 wat minder gestructureerd"

- "Ja"

- Researcher: "Dat valt ook samen met impulsief geschreven misschien"

- "Ja"

- "Ja"

3.1.2.2   Upbringing (lack of emotional and pedagogical attachment)

Although more often than not patients who apply for clinical treatment have attachment difficulties, in the focus group clinicians suggested that the nature of attachment difficulties differs between the patients of the two treatments. A distinction was made between 1) the lack of emotional attachment and 2) the lack of pedagogical attachment. Consensus was reached about this possible discriminant, concluding that patients of the supportive-structuring treatment tend to have a lack of pedagogical and emotional attachment. Patients of the insight-providing treatment tend to only have a lack of emotional attachment.

From the outset, it was suggested that patients of the supportive-structuring treatment overall have a general lack of attachment. Patients of the insight-providing treatment were suggested to have a lack of emotional attachment. Later on, statements from the group were modified by other clinicians, as illustrated by the following quote*: "Volgens mij is het zo P1: emotioneel en pedagogisch. Want, Alleen pedagogisch kan eigenlijk helemaal niet. Als je er gewoon helemaal niet bent en je krijgt geen eten, ja laat staan dat je dan emotionele zorg krijgt. En P2 is het relatief vaker emotioneel tekort; iemand is geparentificeerd, heeft al te vroeg de verantwoordelijkheid moeten dragen, of heeft gewoon een beetje als behang gefunctioneerd, is bijna niet gezien, maar dan met name emotioneel".*

The researcher then raised the question of how to recognize a lack of pedagogical attachment and emotional attachment, and received the following (relevant) response:

"Nou heel rechtstreeks. Dat mensen schrijven dat ze niet met hun problemen terecht konden bij ouders. Dat ze in feite ouders ván hun ouders waren hoor je wel, van P2 dan he? Weinig aandacht van, weinig liefde" (lack of emotional attachment).

"P1: denk ik ook afwezigheid van ouders, dus moeder opgenomen in de psychiatrie, vader aan de alcohol of helemaal verdwenen uit het gezin".

"Ik moet letterlijk denken een patiënt die laatst een keer schreef: van ja de enige veilige plek was onder me bed, bijvoorbeeld, ja dat is heel schrijnend, typerend voorbeeld van dat je totaal geen veiligheid" (lack of pedagogical attachment).

However, it was mentioned that the distinction between a specific lack of pedagogical attachment, and a lack of both pedagogical emotional attachment, is hard to determine using only objective measures, and therefore depends on interpretative ability. No counterarguments were made by the clinicians, and consensus was reached.

3.1.2.3   Education

It was suggested, that patients of the insight-providing treatment tended to be more highly educated compared to patients of the supportive-structuring treatment. Consensus was reached. It was stated that intelligence was not thought to be a distinctive characteristic, and that therefore there would be no difference in education measures between patients of the two groups. Not everyone agreed with this statement. Instead, patients of the insight-providing treatment tended to complete higher education more often compared to patients of the supportive-structuring treatment. In summary, clinicians agreed that patients of the insight-providing treatment seemed to be more highly educated in general.

- *"En hier staat dat hoog opgeleid, ik weet niet of daar een onderscheid te maken is tussen dat wat ik me voor kan stellen het hoger opgeleid dat hier op P2 hoort, omdat het dan vaker lukt om opleidingen af te maken, maar dat intelligentieniveau misschien niet zo als onderscheid is. Ik kan me voorstellen dat mensen op P1 misschien net zo intelligent kunnen zijn, maar lukt het daar veel minder om opleidingen af te ronden".*

  (...)

- *"Nou vanuit mijn onderzoek blijkt dat wel zo te zijn"* (unpublished PhD research)

- *"Uhu"*

- *"Oke"*

- *"Dat je op P1 veel meer LWO tot aan MAVO ziet en dat je op P2 meer MAVO tot HBO eh"*

- *"Hoe meer instabiliteit, hoe meer verstoring van doelgericht gedrag he. Dus je verwacht ook een rommeliger opleiding, meer afbreken"*

- *"Ja"*

- *"Ja oke, maar je hebt ook wel uitzonderingen"*

- *"Het gaat een beetje om de grote lijnen he"*

Researcher: "Maar jullie zijn het er wel over eens dat het wel een indicatie kan zijn?"

- *"Globaal"*

- *"Globaal wel ja"*

- *"ja"*

3.1.2.4   Self-reliance

Data from the consensus meeting indicated that there were notable differences in self-reliance between the two patient groups. According to the clinicians, patients of the supportive-structuring program seemed to be less independent compared to patients of the insight-providing program. Independence was evidenced by things such as statements, personal details provided of an accomplished study, independence of parents and living independently from parents. No counterarguments were provided by the clinicians.

- *"Wat je op P1 wel ziet is dat mensen eigenlijk nog veel afhankelijker vaak zijn van de ouders he, veel meer onthand zijn voor zichzelf te kunnen zorgen.*

- *Researcher: "ja"*

- *"En bij P2 zie je vaker dat mensen nouja, toch wel zelfstandig wonen of zoiets of he"*

- *Researcher: "dat zijn er ook twee die er in staan de ene weinig zelfstandig en eh veel*

  afhankelijkheid, die zou je samen kunnen nemen en bij P2 kreeg ik ook redelijk zelfstandig

  terug"

- *"ja"*

(…)

- *Researcher: "Dus dan hebben we de zelfstandigheid die verschilt en de nadruk op prestatie;*

  goed leren en status en een hoge opleiding, is dat ook iets dat eh.."

- *"Uhu, zoals het hier staat is het voor mij heel herkenbaar"*

3.1.2.5 Self-control

In the focus group, consensus was reached on the point that patients of the supportive-structuring program tended to be more impulsive and lack control over their emotions more often (acting out) than patients of the insight-providing treatment. Patients of the supportive-structuring treatment seemed to have more impulsive behaviours, while patients of the insight-providing treatment tended to have severely high levels of self-control, and were therefore more inhibited in their behavioural expression in general compared to the supportive-structuring program.

Regarding suicide attempts, clinicians stated that patients of the supportive-structuring treatment were more likely to attempt suicide. However, no clear consensus was reached. Arguments were provided from both sides, which did not lead to consensus.

3.1.2.6 Personal insight into own difficulties and attribution

Discussion of this possible discriminant led to several suggestions, which in turn, resulted in consensus. First the clinicians agreed on the suggestion that patients of the

supportive-structuring program tended to have lower introspection. Thus, patients from the supportive-structuring treatment are less able to connect different life-events, including the ability to consider their own participation in those life-events, compared to patients of the insight-providing treatment.

The second suggestion was regarding causal attribution. It was suggested that patients of the supportive-structuring program use more external attribution in explaining life-events. However, according to clinicians, patients of the insight-providing treatment tend to use more internal attribution in explaining life-events. For example, if a patient from the supportive-structuring program describes having had troubles during puberty, they may attribute this to father temperament dominating the home (example not derived from the focus group due to the lack of a sufficient example). However, a patient of the insight-providing program is more likely to explain it in this way, "puberty was a hard time for me. Although my father dominated the house, I wasn't that easy to handle. I could not deal with the feelings I was experiencing during that time, which may have caused my father to act that way". It was suggested and mutually agreed that in general, more deeply stratified life-stories, and the ability and propensity for self-reflection (internal attribution), suited patients of the insight-providing program better.

- *"Dat is wel een verschil introspectie"*
- *"En naar zichzelf kijken"*
- *"En verbanden kunnen leggen"*
- *"Én verbanden kunnen leggen"*
- *"Ja"*
- *"En qua introspectie is P1 misschien wel iets meer externaliserend in het levensverhaal"*
- *"Ja "*
- *"Ja"*

- *"Ik dacht ook…"*

- *"en P2 wat meer internaliserend"*

(…)

- *"Trouwens deze, meer gelaagdheid in het verhaal. Dat is een héle belangrijke"*

- *Researcher: "en waar zie je dat in terug, gelaagdheid?"*

- *"Dat je eh.. dat het minder blijft bij wat minder oppervlakkige beschrijvingen van klachten en problemen, bijvoorbeeld als je vraagt om eh.. hun ouders te beschrijven, dan krijg je bij programma 1 meer antwoorden als ehm.. ja eh.. agressief of uh en programma 2 krijg je meer lagen in de beschrijving van de persoonlijkheid. Dus die persoon krijgt wat meer kleur, wat meer diepte"*

- *"Ja"*

- *"Introverte man, eh die hard werkt, maar"*

- *"Ja"*

- *"Ja"*

3.1.2.7 Parentification

Differences in the presence of parentification, a role reversal of the patient as a child relative to their parents, causing the patient to consciously or unconsciously adopt a parent role in the family, seemed to be a less precise indicator;

Firstly, if a patient mentions parentification explicity in his or her life-story, it is a good indicator towards the insight-providing program:

- *"Ik vind dat parentifcatie dat herken ik wel dat dat bij P2 veel meer voorkomt en ook die nadruk op prestatie die erin staat, daar ben ik wel mee eens*

- *Researcher: "Dus als dat in een levensverhaal zou staan zou dat een indicatie geven voor P2?"*

- *"Ja"*

- *"ja"*

- *"Ja als iemand dat al schrijft weet je , dan is er al zoveel reflectief vermogen dat je al wat
  minder snel denkt aan P1, ja zo extreem is het eigenlijk he? Daar heb je het natuurlijk ook
  over, wat kan iemand melden over de eigen geschiedenis "*

- *"Maar dat komt zo meteen nog bij de vorm denk ik he?"*

- *Researcher: "Ja"*

Secondly, clinicians argued that parentification was suitable as an indicator for both
programs, but that there is a qualitative difference in the nature of the parentification; patients
of the supportive-structuring program tended to be more practically parentificated, fulfilling
the necessities of life for themselves and/or other relatives. Patients of the insight-providing
program however, according to the clinicians, seemed to be more emotionally parentificated,
emotionally caring for their parents.

- "Ik kan me voorstellen dat ze dan op P1 het koken over moeten nemen of zoiets van vader of
  moeder en broertjes en zusjes naar school moeten brengen en op P2 dat ze…"

- "Meer de emotionele parentificatie"

- "Precies"

- "Ja, ja "Ian

- "Niet praktisch"

- "Emotionele zorg voor hun ouders, dus een andere vorm van parentificatie"

- "Ja"

- "Ja"

- "Het lastige is, je moet ook een zekere maat van rijpheid hebben om te kunnen leiden aan
  zaken zeg maar, want we bespreken nu veel dingen die voor P2 gelden, maar die gelden

natuurlijk ook voor P1 alleen daarin staan andere dingen vaak nog veel méér op de voorgrond"

This last statement from one of the clinicians makes it difficult to identify parentification as a discriminant that can improve assignment to one of the two clinical programs. She states that both patient groups are in fact parentificated, but that patients of the insight-providing program have greater maturity. This distinction is difficult to clearly identify, therefore the judgment may need to rely on the readers' interpretation of the life-story; the clinicians however did reach consensus.

- *Researcher: "Maar dat is wel heel belangrijk, want juist die nuance die hebben we nodig, of die heb ik nu nodig om te kijken of we daar verschillen in zien. Zijn jullie er allemaal over eens dat die praktische kant meer bij P1 gezien wordt en de emotionele kant meer bij P2, van parentificatie?"*
- *"Heel globaal?"*
- *"Heel globaal"*
- *"Heel globaal ja?"*
- *"Of dat kinderen net met ouders moesten springen?(typfout? Nakijken)"*
- *"Letterlijk het leven redden van je ouders, met je lijf er voor gaan staan"*
- *"Ja"*
- *"Ja, oke"*

3.1.2.8   Identity problems

The clinicians agreed that identity problems tended to be less dominantly present in patients of the supportive-structuring treatment compared to patients of the insight-providing

treatment. It was discussed that patients of the supportive-structuring treatment do indeed struggle with identity problems, but that these are less dominantly present in this group compared to the insight-providing treatment. However, no consensus was reached regarding whether, through clinician interpretation of a patient's life-story, a difference could be found in the way both groups describe identity struggles in their life-stories.

- "Hoe verwacht je dan dat identiteitsproblematiek, dat iemand opschrijft: ik heb identiteitsproblematiek?"

- "Nee, ik weet niet wie ik ben he"

(door elkaar gepraat)

- "(Niek) er zijn twee dingen: of letterlijk, of we interpreteren het zo

- "Jaja"

- "Dat zijn twee dingen"

- "Als het om interpreteren gaat, dan zie je dat ook wel bij P1"

3.1.2.9   Trauma

In the consensus meeting, clinicians argued 1) whether or not patients of the supportive-structuring treatment experienced more traumas in their lives and 2) whether or not this possible discriminant could be an indicator for one of the two clinical programs. Consensus was reached by the clinicians, stating that supportive-structuring borderline patients have often suffered multiple traumas (bullying, sexual and physical abuse), which affects more areas of their lives compared to insight-providing patients. Patients of the insight-providing program are often traumatized by previous bullying and emotional neglect, possibly concomitant with sexual abuse. A short summary of these arguments is presented below.

- *Researcher: "Bij P1 viel het op dat er meerdere traumata genoemd werden en bij P2 wat minder. Hoe kijken jullie daar tegenaan, is er bij P1 meer trauma dan bij P2?"*

- *"Denk ik wel"*

- *"Ja"*

- *"Meerdere gebieden"*

- *"Meervoudig"*

- *"Ja"*

- *"Meervoudig denk ik wel"*

(…)

- *Researcher: "Dus dan hebben we voor P2 dat pesten altijd voor komt"*

- *"Ja"*

- *"Researcher: In combinatie vaak met seksueel misbruik. En wat is dan nog voor P1?"*

- *"Vaak fysiek mishandeling"*

- *"Meer denk ik ja"*

(…)

- *Researcher: "Zou je dan kunnen zeggen dat je in een levensverhaal van iemand van P1 dus meer trauma's kunt vinden dan iemand van P2?"*

- *"Meer verschillende, op meer levensgebieden"*

- *"Dat het én op school én thuis in het gezin, bij de schoolleraar én misschien wel van school gestuurd worden"*

- *"Meer verschillende traumatiseringen en op meer levensgebieden"*

- *"Maar dat wil natuurlijk niet zeggen dat altijd, veel mensen schrijven daar niet over"*

The clinicians reached consensus about this possible discriminant, but raised the following questions which they could not answer in the focus group: "Would patients who have experienced trauma(s) in their lives write down their trauma(s) in a life-story, and do they

provide all the necessary information to make a reliable judgment to improve assignment to one of the two clinical programs?"

3.1.2.10 *Emergence of problems*

Discussion of whether the start of problems could be a possible discriminant did not result in consensus. Via e-mail, it was suggested that the emergence of problems was earlier in patients assigned to a supportive-structuring program; two clinicians agreed immediately. Later on, other clinicians stated that the emergence of problems might not be well suited to discriminate between the two clinical programs; they suggested that the main difference is that patients of the insight-providing program tend to apply for mental healthcare later in their lives compared to patients of the supportive-structuring treatment. Consensus was reached that the start of problems was ***not*** suited to operate as a possible discriminant:

- *"Ja qua start denk ik ook niet dat er veel verschil is"*
- *"Qua start niet, maar het moment dat ze in beeld komen wel, denk ik"*
- *"Dat heeft dus te maken met de aard van de problemen"*
- *"Ja "*

3.1.2.11 *Intimate Relationships*

Regarding intimate relationships, one clinician suggested that patients of the supportive-structuring program tend to have more intimate and turbulent relationships in their lives, which may be found in their written life-stories. It was suggested that patients of the insight-providing program were more likely to show an absence of intimate relationships. Consensus was reached.

- *"Bijvoorbeeld bij relaties dat bij de een meer relatieproblemen beschreven worden terwijl bij P2 misschien meer beschreven wordt dat er geen relaties zijn, mensen dus de relatie dan niet aangaan, zoiets"*

- *"Uhu"*

- *"Helemaal geen.. seksuele relaties aangaan"*

- *"En ook dat denk ik dat met werk"*

- *"Meer destructieve relaties"*

- *"Meer wisselende relaties, werk"*

- *Researcher: " hoe zou je dat kenmerk omschrijven?"*

- *"Meer heftige, intieme relaties op P1 en meer ontbreken van intieme relaties op P2, denk ik"*

- *"Ja"*

- *"Ja"*

3.1.2.12   Overview of discriminants found by consensus

The previous sections have identified possible discriminants that were suggested and discuss in detail the purpose of reaching consensus. In this paragraph an overview is provided for all the possible discriminants that may distinguish between the life-stories of patients from the supportive-structuring program and those of the insight-providing treatment group. Thus, only the discriminants where consensus was reached are reported here. For a brief overview, all found discriminants are presented in table 2. Explanation of the concepts mentioned can be found in previous sections.

Firstly, a hand written life-story may be an indicator for the supportive-structuring program. Secondly, patients of the supportive-structuring program tend to make more language errors

(syntax, punctuation and word usage) in their life-stories compared to patients of the insight-providing program. Thirdly, life-stories with an extremely structured appearance are assumed to provide an indication of the insight-providing program.

Fourthly, patients of the supportive-structuring program tend to lack pedagogical and emotional attachment, and the fulfilment of pedagogical and emotional needs by their parents. Patients of the insight-providing program however seem to only lack emotional attachment and fulfilment of emotional needs. Fifthly, patients of the supportive-structuring treatment appear to be less educated. It is not evident whether patients of the insight-providing treatment are in fact more intelligent, however they do tend to reach a higher level of education. Sixthly, patients of the supportive-structuring treatment seem to lack practical and emotional self-reliance, whereas patients of the insight-providing treatment tend to be practically self-reliant but lack emotional self-reliance. Seventhly, patients of the supportive-structuring program are more likely to act impulsively, while patients of the insight-providing program tend to be more inhibited (for example due to fear). Eighthly, patients of the supportive-structuring program use more external attribution to life-events compared to patients of the insight-providing program. Patients of the insight-providing program more often use internal attribution to life-events. Ninthly, patients of the supportive-structuring program seem to lack higher introspection abilities compared to patients of the supportive-structuring treatment. Tenthly, it was suggested that patients of the supportive-structuring program tended to have more intimate and turbulent relationships compared to the insight-providing program, where an absence of relationships is more likely to exist.

However, two discriminants for which clinicians reached consensus are missing from this paragraph: trauma and parentification. Patients of the supportive-structuring program tend to have experienced more different traumas in different areas of life; this indicator was

excluded by the researchers due to the expected difficulties in finding traumas mentioned in life-stories of patients.

In addition to excluding trauma, researchers also excluded parentification as a discriminant. During the focus group, clinicians suggested that when a patients describes parentification, i.e. the role reversal of parent and child, this tends be an indicator for the insight-providing program. However, it was also suggested that patients from both groups show evidence of parentification in different ways. Patients of the insight-providing program tend to be more emotionally parentificated, whereas patients of the supportive-structuring program tend to be more practically parentificated; there is a qualitative distinction in parentification between the patients of the two treatments. This discriminant was excluded because the researchers suggested that this discriminant has overlaps with other discriminants such as upbringing, self-reliance and insight. It was suggested that adding this discriminant could lead to confusion and therefore might not contribute to later instrument development.

3.2. Results study 1: member check

Based on the recorded member check meeting, the coding of dimensions remained unchanged, however some definitions were more broadly discussed and clarified. For example, self-control was initially defined as a difference between acting-in and acting-out behaviour. Discussion led to amending the description for self-control as, predominantly cautious or predominantly impulsive. For the dimension of intimate relationships, discussion focused on the importance of intimacy with different interpersonal contacts, encompassing both intimate sexual relationships and close friendships. This resulted in the dimension intimate relationship(s) being described as both partner relationships and friendships. Due to requests from participants, certain narrative examples were clarified or added to some dimensions. For instance, an example of a high score was added for the dimension self-

reliance: "People often do not notice when I am not doing too well. I take good care of myself and continue to meet my commitments." Consensus was reached over what adjustments were needed in definitions and narrative examples.

3.3.   Results study 2: Instrument testing- and development

3.3.1   *First round of instrument testing*

In order to analyse overall agreement, Cohen's kappa coefficient was calculated, comparing the researchers' standard to the participant data separately. Comparison of the researchers' standard and the student and clinician data are shown in table 2. Results of the overall agreement in percentages specified for each category are shown in table 3. This shows which category is performing better than others, and which category requires adjustment in order to increase agreement over all the dimensions of the instrument. Discussion of the inter-rater reliability analysis combined with feedback on the scoring forms is summarized below. The adjustment process will be discussed in order to provide a better understanding of the overall instrument and adjustment process.

As the results show, there is slight disagreement with the researchers' standard in the first round. Cohen's kappa coefficients (*K*) ranges from .11 to .20 for the student data, and for the clinicians, *K* ranges from .28 to .41, indicating a fair agreement with the researchers' standard. Although results of the first round of testing were not desirable, they did provide possibilities for adjustment.

3.3.2   *Instrument adjustments Round 1*

The instructions for how to use the instrument were carefully considered. Firstly, many of the discriminants participants had to score relied on the interpretative ability of the

coder. The results of the first round showed that participants chose option 9 (not deducible from life-story), too often and easily. For the second round of instrument testing, the importance and necessity of participants' clinical judgment was highlighted in the instructions provided. When participants were unable to make a choice between the given options (in such cases, information about the discriminant is necessary), participants had to score the absence of that given discriminant, and option 9 (not deducible from life-story) was removed.

In addition, results derived from participants' feedback on the scoring forms showed that participants did not have a clear understanding of the two treatments (insight-providing treatment vs. supportive-structuring treatment). Often, the reasoning participants used to make a choice between one of the two treatments did not match with the appropriate reasoning. Therefore, information about the treatments were rephrased and clarified in the instructions.

Another consideration is that patients' original documents written before application were drawn from the system database and re-anonymised. In the first round of instrument testing, transcribed versions of life-stories were used, which are not reliable for scoring the handwritten, language, and structure dimensions.

Furthermore, in order to make the coding process easier and more reliable for respondents, a different coding style was adopted. The dimensions 'Education', 'Intimate relationships' and 'Self-reliance' were diffused into more questions, increasing the usability of the instrument.

Lastly, not all of the participants motivated their choices consistently; such information is valuable to the adjustment process of the instrument. Often, a motivation was absent or (too) short. The necessity of providing clear motivation of their scoring choices was emphasized, increasing the likelihood that participants would indeed motivate their choices when scoring the discriminants. Besides this modification in the instructions, the researcher

also underscored the importance of the motivational aspect of the instrument at the beginning of the experiment for the students, and at the handover of the experiment for the clinicians.

3.3.3   Second round of instrument testing

After gathering the data from the second round of instrument testing, again, Cohen's kappa coefficients were calculated. Results show substantial increases in coefficients, ranging from .54 to .76 for the student data, indicating a moderate to substantial agreement. Again, clinician data performed slightly better than that of the students. Coefficients of the clinicians range from .59 to .84, indicating a moderate to excellent agreement (see table 2).

The dimensions that reached a high overall agreement were: Emotional Deficit and Language Proficiency (both 93.3%), Emotional Self-reliance (96.7%) and Intimate Relationships (96.7% and 90.0%). The dimensions that reached less overall agreement were: Self-control (60.0%), Attribution (66.7%), and Insight, Program and Structure (all 70.0%).

Although coefficient values did increase compared to round 1 of instrument testing, respondent feedback provided valuable information for re-adjusting the instrument to increase reliability. The adjustments to the instrument after the second round of instrument testing are discussed below.

3.3.4   Instrument adjustments Round 2

To increase the instrument's reliability, a few modifications were made after considering respondents' feedback. The dimension pedagogical deficit was too often and easily scored as present. To facilitate distinction, the definition was changed to pedagogical neglect. The definition 'no pedagogical neglect' was removed, as it is rare that upbringers do not make any pedagogical missteps at all. The definition of 'no emotional deficit' was also removed for the same reasons; no emotional deficit is assumed to be impossible. In addition

to these relatively major changes, instrument instructions and dimension definitions were sharpened. Lastly, some examples were removed from the definition list and others were added or adjusted.

3.3.5   Third round of instrument testing

After analysing Cohen's kappa coefficients, results showed similar coefficients for the student data compared to the second round of instrument testing, ranging from .71 to .82, indicating a substantial to excellent agreement. For the clinician data, there were similar coefficient values compared to the second round, ranging from .67 to .76, indicating a substantial agreement (see table 2). Overall agreement was high for the dimensions: Handwritten (100.0%), Structure (93.3%) and Relationships (90.0% agreement on all 4 scores). Overall agreement (see table 3) was lowest on the dimensions: Emotional Deficit, Insight and Program (all 73.3%).

Table 2. Inter-rater reliability analysis of the researchers' standard compared to each of the six participants (Cohen's Kappa)

Measure	Students			Clinical experts			Means		
	1 (n=3)	2 (n=3)	3 (n=3)	1 (n=3)	2 (n=3)	3 (n=3)	Students (n=9)	Experts (n=9)	Total sample (n=18)
Round 1	.20	.18	.11	.28	.41	.33	.16	.34	.25
Round 2	.54	.61	.76	.72	.84	.59	.64	.72	.68
Round 3	.71	.73	.82	.68	.76	.67	.76	.70	.73

Table 3. Percentage of agreement for each dimension, calculated for the participant data (students and experts) compared to the researchers' standard, over the 3 rounds of instrument testing

Measure	First round (n= 6)			Second round (n= 6)			Third Round (n=6)		
	Stories 1-5			Stories 6-10			Stories 10-15		
	Students	Experts	Total	Students	Experts	Total	Students	Experts	Total
Form									
Handwritten	100	93.3	96.7	100	100	100	100	100	100
Language Proficiency	53.3	60	56.7	86.7	100	93.3	86.7	66.7	77.6
Structure of life story	53.3	66.7	60	73.3	80	76.7	93.3	93.3	93.3
Development									
Upbringing	40	40	40	-	-	-	-	-	-
Pedagogical neglect	-	-	-	73.3	80	76.7	86.7	86.7	86.7
Emotional deficit	-	-	-	93.3	93.3	86.7	80	73.3	76.7
Education	40	73.3	56.7	86.7	93.3	90	73.3	86.7	80
Relationships									
Intimate relationships	40	40	40	-	-	-	-	-	-
Friendships	-	-	-	80	93.3	86.7	93.3	86.7	90
Friendships stability	-	-	-	60	86.7	73.3	93.3	87.7	90
Intimate relations	-	-	-	100	93.3	96.7	93.3	86.7	90
Intimate rel. stability	-	-	-	93.3	86.7	90	93.3	86.7	90

Skills

Self-reliance	60.0	*60.0*	*60.0*	-	-	-	-	-	-
Practical self-reliance	-	-	-	*53.3*	*86.7*	*66.7*	*93.3*	*86.7*	*90*
Emotional self-reliance	-	-	-	93.3	100	96.7	100	100	100
Self-control	46.7	53.3	50	60	60	60	80	73.3	76.7
Attribution	40	40	40	80	53.3	66.7	60	66.7	63.3
Insight	46.7	60	53.3	73.3	66.7	70	80	66.7	73.3

3.4   Validity testing

Results of validity testing are summarized in Table 4. In order to test the validity of the instrument, Chi-square tests were performed to compare the researchers' standard with the actual assigned treatment for patients of the two treatments (supportive-structuring treatment and insight-providing treatment), and to see if there was a relation between these two standards. Chi-square tests were performed for each dimension of the instrument. Significant results on these tests indicate that different scores in the variables of the instrument relate to assignment to one of the two treatments. Not all dimensions were expected to indicate an absolute distinction between the two treatments, as due to instrument adjustments, some dimensions were divided: Upbringing (pedagogical neglect, emotional deficit), Self-reliance (practical and emotional self-reliance) and Intimate relationships (friendships and intimate partner relations). To calculate the distinctive ability of the divided dimensions, these were merged again and new scores were assigned to the outcomes. Because the assumption of the Chi-square test, that the value of the cell expected should be 5 or more,

was violated in at least 80% of the cells, Fisher's Exact Test was used for interpreting the results.

Results show that researchers' scores and the actual patient treatment group were related to each other for 3 out of the 10 tested dimensions (Language proficiency, Self-reliance and Self-control).

In addition to the significant outcomes on 3 of the 10 tested dimensions, 5 of the 10 dimensions were not significant, but provided interesting results shown by p-values less than .20. The dimensions with p-values less than .20 were: Structure, Upbringing, Education, Attribution and Insight. The 2 dimensions out of 10 that did not seem to relate to the researchers standard at all were: Handwritten and Intimate relationships.

Lastly, it was found that researchers were able to assign patients to the right treatment in most of the life-stories ($p = .02$)

Table 4 *Fisher's Exact Tests analysis of the percentage agreement per dimension between the developers' score and the actual assigned treatment.*

Dimension	Code	% Supportive-structuring program N=10	% Insight-providing program N=10	% total agreement N=20	Fisher Exact N=20
Form					
Handwritten	Yes(P1)	*40*	*10*	*65*	*.30*
	No(P2)	*60*	*90*		
Language proficiency	Low(P1)	*100*	*40*	*80*	*.01**
	High(P2)	*0*	*60*		
Structure of life-story	Unstructured (P1)	*40*	*0*	*70*	*.09*
	Structured (P2)	*60*	*100*		
Development					
Upbringing	Pedagogical neglect and emotional deficit (P1)	70	30	65	.179
	Emotional neglect (P2)	30	60		
	No emotional/pedagogical deficit		10		
Education	Low (P1)	50	10	70	.14
	High (P2	50	90		

Relationships

Intimate relationships	Instable partnerships/absence of friendships (P1)	30	10	25	.678
	Absence of intimate relationships/ presence stable friendships (P2)	20	20		
	Other unlinked codes (5 cat.)	50	70		

Skills

Self-reliance	Lack of practical and emotional self-reliance (P1)	70	10	80	.01*
	Lack emotional self-reliance (P2)	30	90		
Self-control	Low (P1)	90	20	85	.005*
	High (P2)	10	80		
Attribution	Externalizing (P1)	40	0	70	.09
	Internalizing (P2)	60	100		
Insight	Low (P1)	90	50	70	.144
	High (P2)	10	50		

Note. * p < .05

Conclusion

This study was conducted to develop an assignment instrument that aids assignment of patients to either a 1) supportive-structuring psychotherapeutic treatment (basic structure dialectical behavioural therapy or 2) an insight-providing psychotherapeutic treatment (basic structure schema focused therapy), based on their life-stories. In order to design the instrument, expert opinion was solicited and used, as no relevant studies exist to date that identify distinguishing characteristics of patients' life-stories, who are suffering from a PD. Clinician expertise resulted in identifying discriminants that were expected to differentiate between patients of the two treatments. These discriminants formed the basis of the instrument.

In the focus group, consensus was reached for 12 possible discriminative dimensions. Two dimensions were excluded for different reasons. Instrument testing showed that clinicians and students were able to use the instrument as it was intended; high overall agreement between participants (students and clinicians) and the researchers' standard was reached. Out of the 10 discriminants tested, validity testing showed that only 3 actually showed a discriminative ability. The three discriminative dimensions that were found to relate to one of the two possible treatments were Language proficiency, Self-reliance and Self-control. It is worth noting that although only 3 of the 10 tested dimensions showed a discriminative ability, in most of life-stories, researchers were able to assign patients to the right treatment modality by using the developed instrument. It would have been interesting to investigate whether researchers, other clinicians or students could have succeeded in assigning patients to the right treatment modalities without using the instrument. This addition would benefit the present study in order to see whether the developed instrument is a useful asset for effective treatment assignment.

Discussion

This study confirms earlier suggestions that examining life-stories may be helpful in assigning patients to the proper treatment modality (van Os, 2014). Although BPD has widely researched, other PDs are less frequently studied (Bateman et al., 2015); our research sample included life-stories of individuals with these less-studied PDs.

It is suggested that the two clinical programs, based on 1) DBT and 2) SFT have several similarities, such as the same behavioural and cognitive principles (Montgomery-Graham, 2015; Paris, 2015) and techniques (Kellogs & Young, 2006). Furthermore, both approaches assume that BPD patients tend to have difficulties in mentalization (Paris, 2015). Our results both partly fit and give nuance to this assumption. It was found that emotional self-reliance (which we consider to be related to mentalization) did not differ between patients of the two clinical programs, and that therefore patients of both clinical programs are not emotionally self-reliant. However, self-control did differ between treatment groups. We suggest that emotional difficulties may be expressed in different ways for patients of the two clinical programs. We propose that patients of the supportive-structuring program tend to express their emotional difficulties through impulsive behaviours, whereas patients of the insight-providing program express emotional difficulties through severely inhibited behaviour. This is an interesting suggestion, however further research is necessary in order to underpin and confirm these ideas.

In addition to potential differences in emotional expression, another interesting point emerged from the life-story analysis, which is an interesting example for discussion. Adler et al.'s study (2012) suggests that BPD patients score low on communion fulfilment, which is the fulfilment of attachment, love and friendship. Our study does not confirm that BPD patients have a low fulfilment of attachment love and friendship, neither does it support our

expectation that BPD differ in the presence or absence of intimate love and friendship relations. Clinicians suggested that patients of the supportive-structuring program tended to have more, often unstable partner relationships. Clinicians also suggested that there is an absence of partner relationships, and a presence of stable friendships for patients of the insight-providing program. These suggestions were not confirmed in this study.

Topics such as emotional difficulties and mentalization, expressing difficulties related to emotion, communion and the presence or absence of partner and friendship relations, highlight the importance of clinician expertise. To date, the general research on BPD patients often lacks clarity, with abstract results for distinguishing characteristics emerging such as 'difficulties in mentalization'. In contrast to previous research, this study goes beyond this abstract level by using clinician expertise, allowing us to provide findings that would not normally be used and get lost in research. Clinicians appear to delve beyond the 'regular thinking and discourse' of researchers. This study shows that clinician expertise is extremely valuable for performing research on topics related to clinical practice.

As previously stated, clinicians tend to make more stratified distinctions than researchers. Using clinician expertise enabled reliable use of an instrument for treatment assignment. 3 of the 10 discriminants that were tested showed potential discriminative ability, (see results). In this study, a small sample was used for testing the discriminative ability of each dimension, thus a few deviations in scoring of the instrument may have caused a possible valid dimension to appear invalid. Because of the small sample size of the present study, some dimensions that showed a relatively big difference between treatment groups produced no significant results. Conducting the same research on a larger scale would produce more reliable results and may show that more than 3 dimensions are valid.

Regarding the valid dimensions revealed in this study, objective information found in patients life-stories, such as handwritten life-story, or the absence or presence of relationships,

do not seem to contribute very much to accurate treatment assignment. The way a life-story is written and what a patient wants to say in it appears to be more important than simple facts that can be found in life-stories. In conclusion, life-stories may be a valuable resource for use in treatment assignment.

Limitations & strengths

Although the present research contributes to the understanding and process of treatment assignment, there are some limitations worth mentioning. Firstly, little is known about treatment assignment especially in the case of patients suffering from a personality disorder. Additionally, this study aims to differentiate between patients with different characteristics in order to facilitate treatment assignment to the best suitable psychotherapeutic treatment. No relevant research regarding these differences and their relation to treatment assignment could be found. In some ways, the lack of relevant research can be seen as a limitation, as our study is not able to build on previous findings in research. Conversely, it can be seen as a strength for the present study, as research on treatment assignment is an important contribution to reaching a broader understanding of the concept. In addition, this study may inspire other researchers to join and cooperate in research regarding treatment assignment for patients suffering from PDs, or more generally, psychological problems.

Conducting the focus group in order to reach consensus about possible discriminants, may have been a limitation due to focus group dynamics. By analysing the recordings of the focus group, it was obvious that one of the participants was more dominant compared to other participants. Although the recordings suggest that the researcher limited the influence of this

dominant participant, it may nevertheless have inhibited other participants to actively take part in the focus group dialogue.

In this study, instrument testing was conducted using life-stories from patients of GGNet Scelta. Not all of the patients approached for giving consent to use their life-story did indeed give permission. 45 patients were approached for this study and only 20 patients (44.4%) gave permission to use their life-stories. The majority of the approached patients did not yet approve nor decline to participate in this study, which decreases the ability for generalising our findings to the population of those suffering from a personality disorder. It is however understandable and perhaps inevitable that patients do not want to share their life-story with others, as it contains a large amount of sensitive and personal information.

Lastly, in this study there were only two choices of treatment: a supportive-structuring treatment, and an insight-providing treatment. Although many patients suit one of these treatments, the instrument developed does not provide a solution for patients with different treatment needs, for example patients with a comorbid psychotic disorder. Nevertheless, the instrument developed may be useful for the majority of patients that apply for psychological care.

Recommendations for further research & practice

Our study highlights that patients suffering from a PD differ in life-story characteristics. These distinctive characteristics have not been examined as extensively as, for example, effectiveness of PD treatments. We have found clinician expertise to be useful in revealing distinctive patient characteristics that contemporary research tends to neglect. For example, BPD patients tend to experience emotional difficulties. Clinician expertise revealed a distinction in these emotional difficulties between groups, something that is not mentioned

in previous research. Our findings suggest that patients may differ in the way they express their emotional difficulties.

Objective information found in patient life-stories, such as a handwritten life-story, or the absence or presence of relationships, does not seem to contribute a great deal to treatment assignment. More importantly, the way a life-story is written and what a patient wants to say in the life-story are more valuable indicators. Based on this pioneering research, we suggest that life-stories can contribute to treatment assignment. We recommend that more research on distinctive characteristics is necessary and valuable to assure the best suitable treatment for each individual patient.

Combining clinician practice expertise with current knowledge regarding topics such as effective PD treatments, life-stories and mental health, can accelerate the process of effective treatment assignment and fulfil the therapy needs of patients suffering from a PD.

The use of this instrument in the field of psychology should done with caution. It can provide valuable information, but we suggest that more research is necessary before fully applying it. Nevertheless, the developed instrument could function as an addition to the current, regular process of treatment assignment. It provides valuable information and it can contribute to more considered assignment. By both conducting research on the instrument, and using the instrument in the field of psychology could create the opportunity to conduct the same study on a larger scale.

In summary, the assignment instrument developed may be a useful asset in treatment assignment for patients with severe personality problems. This study is a valuable contribution to further research and development. The results of the instrument testing provide possibilities for improvement and reconstruction. Conducting the same research on a larger scale and within a larger timeframe could lead to the emergence of other possible discriminative dimensions. Including clinician expertise in further research is recommended

and is expected to produce interesting and helpful contributions in the field of treatment

assignment.

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