Research Paper

A naturalistic pilot study exploring the differences between fragile and resistant patients in ISTDP

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A B S T R A C T

Introduction: Intensive Short-Term Dynamic Psychotherapy (ISTDP) defines two spectra of patients based on the patients' capacity to tolerate anxiety and complex emotions. Resistant patients have a better capacity to tolerate affective stimulus compared to fragile patients. There is, however, little empirical evidence that supports this categorization. This exploratory study seeks to identify reliable differences between 330 resistant and 88 fragile patients.
Methods: To assess which category patients belong to, therapists conducted a specific psychodiagnostic assessment of patients when entering psychotherapy. Patients selfreported on the Brief Symptom Inventory (BSI) and the Inventory of Interpersonal Problems (IIP). Independent samples t-tests estimated differences between psychodiagnostic categories on self-reported measurements.
Results: Fragile patients scored significantly higher on five IIP subscales and all BSI subscales, barring "Paranoid Ideation". As symptom distress might mask underlying pathological processes, we used a matching procedure to compare resistant and fragile patients with the same level of symptom distress, before repeating estimation of differences between the categories. Fragile patients scored significantly higher only on the BSI somatization subscale as well as on three items from the BSI somatization subscale, and one item from each of three other BSI subscales (i.e., "Phobic anxiety", "Anxiety", "Psychoticism").
Limitations: The study used generic psychometric instruments. A specific psychometric instrument developed according to ISTDP theory would likely be more suited to capture group differences.
Conclusions: The results provide support for the notion that fragile patients in general experience more psychological distress and specifically suffer from more somatization and additionally anxiety, phobic anxiety and psychoticism symptoms.

1. Introduction

There is a clinical tradition in the first session of Intensive Short-Term Dynamic Psychotherapy (ISTDP) (Davanloo, 2001b) to categorize patients as fragile or resistant depending on the patient's anxiety discharge pathways and defense patterns (Davanloo, 1990). This specific psychodiagnostic assessment further guides the treatment process and enables the therapist to use different therapeutic interventions, depending on the patient's psychodiagnostic category. Despite the clinical tradition in ISTDP of psychodiagnostics, there is little empirical evidence that supports the classification of patients into resistant or

fragile groups, and the purpose of this study is to identify reliable differences between resistant and fragile ISTDP patient groups.

Accumulating evidence indicates that ISTDP, is effective in alleviating suffering for patients with mental health problems (Abbass et al., 2012). A systematic review and meta-analysis on ISTDP found that pre- to post-treatment effect sizes (Cohen's d) ranged from 0.84 for interpersonal problems to 1.5 for depression, effects that were maintained at follow up (Abbass et al., 2012). Another review and later studies have found the treatment to be cost-effective with diverse populations (Abbass and Katzman, 2013; Abbass et al., 2015).

Early iterations of ISTDP included active interventions to mobilize

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unconscious, complex conflicted emotions. This early iteration of the treatment approach was found to be clinically effective with a variety of patient populations (Davanloo, 1980). However, patients with problems involving low anxiety tolerance, major depression, or somatization, were considered not suitable for this early version of the treatment approach (Davanloo, 1980). Accordingly, during the 1980s, Davanloo modified the method to allow treatment of more complex patients (Davanloo, 1990b). The refined and augmented treatment included an initial process to build the patient's tolerance of anxiety and distress. Successively building tolerance and then challenging maladaptive behavioral patterns was described as the graded format (Davanloo, 1990a). By 2000, the treatment was considered to be effective for a broader array of patients (Abbass et al., 2012; Davanloo, 2001a), including those with personality disorders, depression, and somatic symptom disorders (Abbass et al., 2012). In a study of an outpatient psychiatric practice, 86.3% of 342 consecutive referrals were considered candidates for ISTDP (Abbass, 2002).

According to ISTDP theory, unprocessed attachment trauma-based complex feelings are the central drivers of an array of psychopathologies. Complex feelings are activated by new attachments and attachment rupture threats, which trigger unconscious anxiety and unconscious defenses against that anxiety (Abbass, 2016). There are three patterns of unconscious anxiety. The first pattern is anxiety channeled through striated muscles, muscles with voluntary control in the body. Patients with striated anxiety can suffer from spasms and pain as seen in fibromyalgia, headache, backache and other muscular pain disorders. The second pattern of anxiety is channeled through smooth muscles. Smooth muscles are muscles not under voluntary control, and are located in the airways, bowel, and blood vessels. Patients who suffer from smooth muscle anxiety may experience many somatic symptoms that requires medical attention, including hypertension, asthma, irritable bowel syndrome, or migraine. The third anxiety pattern is cognitive-perceptual disruption. This occurs when anxiety interrupts a person's senses and ability to think. This anxiety can manifest in symptoms such as the mind going blank, visual blurring, or hearing impairment. Some patients may have dissociative seizures, or lose consciousness, and many of these patients end up consulting a neurologist (Abbass, 2015; Russell et al., 2016).

Davanloo (2001a) defined two spectra of patients in ISTDP based on patients' capacity to tolerate anxiety and complex emotions as they arise: (a) the spectrum of "psychoneurotic disorders" and (b) the spectrum of patients with "fragile character structure" (Davanloo, 2001a). For the psychoneurotic patients, often referred to as resistant patients, the unconscious anxiety is discharged mainly to the striated muscle. These patients can intellectualize about and describe the emotion, but cannot experience the emotion's physical presence in the body (i.e., the defense of isolation of affect) (Abbass, 2015). The resistant patients' capacity to isolate affect is illustrated in the following case vignette from Abbass' (2015), where a man with fibromyalgia is describing a conflict with his wife:

Therapist (Th): What kind of conflict was it? [Pressure to be specific.]
Patient (Pt): Um, well, problems with the neighbors. My wife's opinion was that I spent too much time arguing with this man, and she was probably right.
Th: So she brought this up again in the incident? [Pressure to be specific.]
Pt: Um-hmm.
Th: And how did you feel? [Pressure to identify feelings.]
Pt: Well, I'm getting tired of hearing about this.
Th: How do you feel toward her? [Pressure to identify feelings.]
Pt: [Sighs deeply.] Mad.
Th: Mad, like you mean angry? [Clarification.]
Pt: Angry, yeah.
Th: How do you experience the anger inside, physically inside your body? [Pressure to experience rage.]

Pt: I'm very, very tense.
Th: That's tension. That's anxiety. [Clarification.]

This patient has capacity to isolate affect as he is intellectually able to label his feelings (mad, angry) but cannot experience the emotion in his body. All he can experience is the tension of the striated muscle anxiety.

In contrast, fragile patients have little capacity for isolation of affect. Instead, they experience cognitive perceptual disruption (dissociation) and use primitive defenses such as projection, splitting or projective identification (Davanloo, 2001a). The phenomenon of cognitive perceptual disruption is illustrated in a case vignette from Abbass' (2015) where the patient has just arrived for a session with his therapist and starts to rub his eyes:

Pt: You'll have to excuse me a little today; I'm a little foggy.
Th: Foggy? [Clarification of the experience.]
Pt: Yeah.
Th: Is your thinking kind of foggy, cloudy? [Clarification of the experience.]
Pt: Foggy and cloudy.
Th: How's your vision? [Clarification of the experience.]
Pt: Cloudy.
Th: Is it tunnel vision, or is it like looking through a screen? [Clarification of the experience.]
Pt: More tunnel vision.
Th: More like it's hard to see the outside of your visual field, but you can see straight ahead in the room. [Clarification of the experience.]
Pt: Yeah.
Th: When did that start? [Pressure to be specific.]
Pt: Um, two, maybe two days ago relatively … like I just noticed it this morning.
Th: So this is what we looked at as anxiety, right? [Pressure to remember previously learned material.]
Pt: Yeah.
Th: And the last two days, all day? [Clarification of the experience.]
Pt: Actually, more or less just today when I woke up.
Th: Okay, so why are you anxious right now? [Pressure to identify causes.]
Pt: Is it anxiety?
Th: That's what we figured when we've met before. [Pressure to remember previously learned material.]

The patient does not have capacity for isolation of affect, and he reports foggy thinking and tunnel vision, unaware of his anxiety (cognitive perceptual disruption).

The resistant patient can reflect on his emotions towards his wife, whereas the fragile patient is only able to reflect on the relationship between stimulus (therapy session) and his foggy thinking. A successful identification of the patient category allows a therapist to accurately use different therapeutic interventions to promote the patient's symptom alleviation. Fragile patients will require the graded format of ISTDP. Through the graded format the patients build capacity to self-observe and isolate affect and are gradually able to tolerate anxiety and to overcome cognitive-perceptual disruption and primitive defenses. Consequently they gain capacity to tolerate and experience their unconscious emotions, similar to patients receiving the standard ISTDP format (Abbass et al., 2015). In order to diagnose whether the patients belong to the psychoneurotic spectrum or the fragile spectrum, ISTDP requires a psychodiagnostic assessment. This is a specific process to assess the patient's anxiety discharge pathways and defense patterns (Davanloo, 1990). See method section for a detailed description of this clinical evaluation.

Three studies have provided empirical data that have started to build an evidence base for the classification of patients into resistant or fragile groups. In a small study ($N = 31$), Axelson (2016), found that the therapist's psychodiagnostic assessment correlated with the patient's

self-rated mental health problems on the CORE-OM (Clinical Outcomes in Routine Evaluation – Outcome Measure) (Evans et al., 2002), a 34-item self report instrument with domains of subjective well-being, symptoms, function and risk. In general the fragile patients reported higher levels of pathology, and significant differences were found between resistant patients and the fragile patients on the CORE-OM total as well as the domain scores (Axelsson, 2016). Abbass (2002) found that the average treatment length for resistant patients was 12.2 sessions whereas as the average for fragile was 40.4. Furthermore, 79.2% of resistant patients recovered (symptoms at end of treatment were in the normal range), compared with 59% of fragile patients. For interpersonal problems; 80.4% of resistant patients ended therapy in the normal range, whereas 45.5% of fragile patients did the same. Johansson et al. (2014) evaluated the overall effectiveness of ISTDP in a tertiary psychotherapy service. They found that fragile patients had more symptom severity than resistant patients at the beginning of treatment. During therapy, fragile patients had steeper symptom alleviation than the resistant patients, but there was no difference on alleviation of interpersonal problems. Johansson et al. (2014) discussed whether the key to the steep improvement for the fragile patients is the capacity-building graded format. This discussion points to the potential for improving the delivery of care when treatments for different patient groups are tailored for their psychological functioning.

The study will use expert psychodiagnostic assessments and measures of symptoms and interpersonal problems to investigate whether there are any significant differences between the fragile and the resistant patients on these two dimensions.

2. Methods

2.1. Transparency and openness

The data utilized in this article was collected as part of a larger data collection and has been previously published. The findings from the data collection have been reported in separate articles (Abbass et al., 2015; Johansson et al., 2014). This study as well as the original study by Johansson et al. (2014) is reported in accordance with the CONSORT statement for clinical trials (Schulz et al., 2010). The original study was an evaluation of the effectiveness of a treatment given in a tertiary care clinic and used anonymized data collected as part of standard care and quality evaluation. This study utilizes the same data as (Johansson et al., 2014). The data was independently analyzed using SPSS v 28. The data for this study is not available. The original project was reviewed and approved by the Capital District Health Authority Research Ethics Board in Halifax, Nova Scotia (approval number 2007–050), and is registered in Clinicaltrials.gov as identifier number NCT01924715. This study's design and its analyses were not preregistered.

2.2. Participants

All participants in this study were originally part of a study at a tertiary psychotherapeutic service located in Halifax, Nova Scotia, Canada; the centre for Emotions and Health between March 30, 1999 and March 30, 2007 (Abbass et al., 2015; Johansson et al., 2014). Patients were referred by professionals from various specialties, including emergency department, family practice offices, medical-surgery and mental health. Many patients referred were seen for an assessment meeting only. All participants completed a baseline assessment were DSM-IV diagnoses were derived. To be included in the present study all participants had to complete one session, the trial therapy that included the psychodiagnostic assessment, and at least one of the self-reported psychometric measurements prior to treatment. The patients who received treatment provided verbal informed consent for the assessment process. During the psychodiagnostics assessment process, patients were videorecorded, for which they provided a written informed consent. All patients who were assessed as psychotic during the psychodiagnostic

assessment were excluded from this study. A total of 418 patients met the inclusion criteria. The procedures for this study is illustrated in the CONSORT flowchart in Fig. 1. See also (Johansson et al., 2014).

2.3. Materials

2.3.1. Psychometric instruments

In order to capture both symptomatic distress and interpersonal problems, areas typically involved in psychopathology, two instruments, developed specifically to assess these were used for assessment at baseline. Self-rated symptom distress on the Brief Symptom Inventory (Derogatis and Melisaratos, 1983) and interpersonal problems on the Inventory of Interpersonal Problems (Horowitz et al., 1988) were collected from all patients, either the full version or the short versions of the instruments, the BSI 18 (Derogatis, 2001) and the IIP-32 (Horowitz et al., 2000). These shortened versions have psychometric properties that are comparable to their longer versions (Franke et al., 2017; Lo Coco et al., 2018). Using these broad and validated psychometric instruments (Derogatis, 1993; Horowitz et al., 2000) was necessary in the quest to explore if there were any unique characteristics that differentiate the two diagnostic groups.

2.4. Procedures

2.4.1. Psychodiagnosis

During trial therapy, therapists conducted a psychodiagnostic assessment. Here the patient's anxiety discharge pathways and thus whether the patient belongs to the psychoneurotic spectrum, or the fragile spectrum were assessed. The specific psychodiagnostic process has been described by Davanloo (1990b) and involves using "pressure interventions". Pressure interventions are specific types of interventions that help the patient to be emotionally present, identify processes and emotions, and overcome defenses (Abbass, 2015). Examples of pressures interventions are: Pressure to feelings: "How do you feel", pressure to task: "Can we explore how exactly this is a problem for you?" and pressure to the person's will: "Is it your wish to understand this together?" These pressure interventions further mobilize complex transference feelings (CTF) of both appreciation and irritation towards the therapist's efforts to help the patient. This process mobilizes unresolved unconscious complex feelings from past relationships, which in turn activates unconscious anxiety and defenses against this anxiety (Abbass, 2007). All therapists adhered to a specific psychodiagnostic algorithm (see Fig. 2). When following this algorithm fragile patients will at some point "go flat" with no striated muscle anxiety and experience cognitive perceptual disruption or be in need of primitive defenses. Resistant patients generally will continue to have access to striated muscle anxiety, and can then be classified as low, moderate or high resistance, with increasingly greater intensities of complex feelings and defenses (Abbass, 2016) (see Fig. 2). However, a subgroup of the highly resistant patients will during this process not be able to use the defense of isolation of affect, but instead of experiencing cognitive perceptual disruption, will repress their unconscious emotions and "go flat" with anxiety weakening their muscles or causing smooth muscle symptoms. These patients, similar to fragile patients, require capacity building through the graded format of ISTDP (Abbass, 2015).

In the current study the final psychodiagnosis was decided by consensus with 2 raters: The therapist who self-reviewed the video and an expert reviewer who viewed it with the therapist. Formal adherence ratings were done on 34.0% of these cases. A small series of independent psychodiagnoses were also carried out while watching videos and an adequate interrater reliability (kappa = 0.66) was found. However, this process used convenience sampling.

As this study aims to determine if there are reliable differences between the two main ISTDP patient groups, fragile patients and resistant patients; all subgroups of resistant patients were categorized as resistant in the statistical analyses.
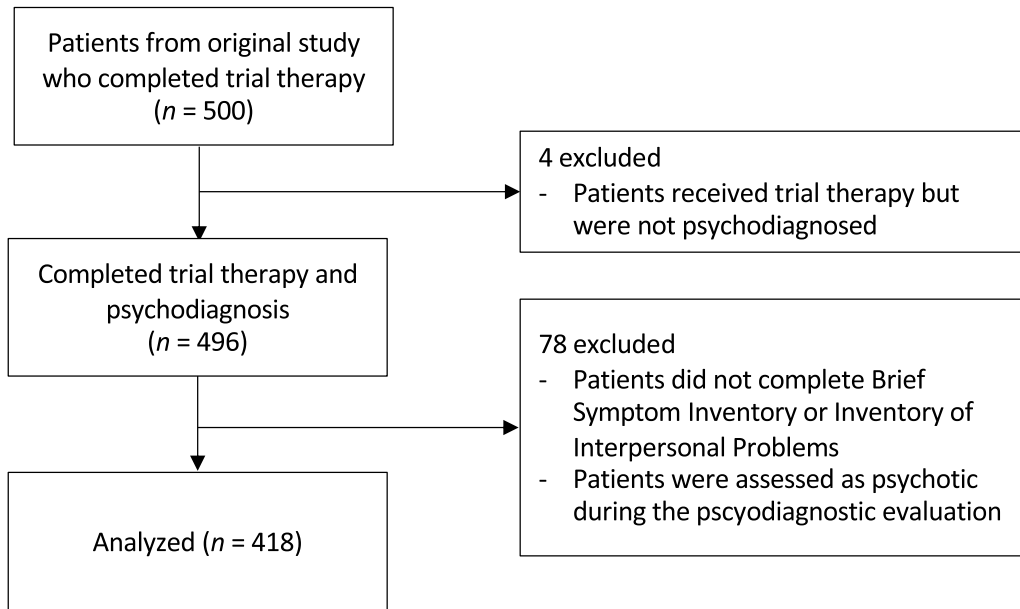
Fig. 1. CONSORT Flowchart.
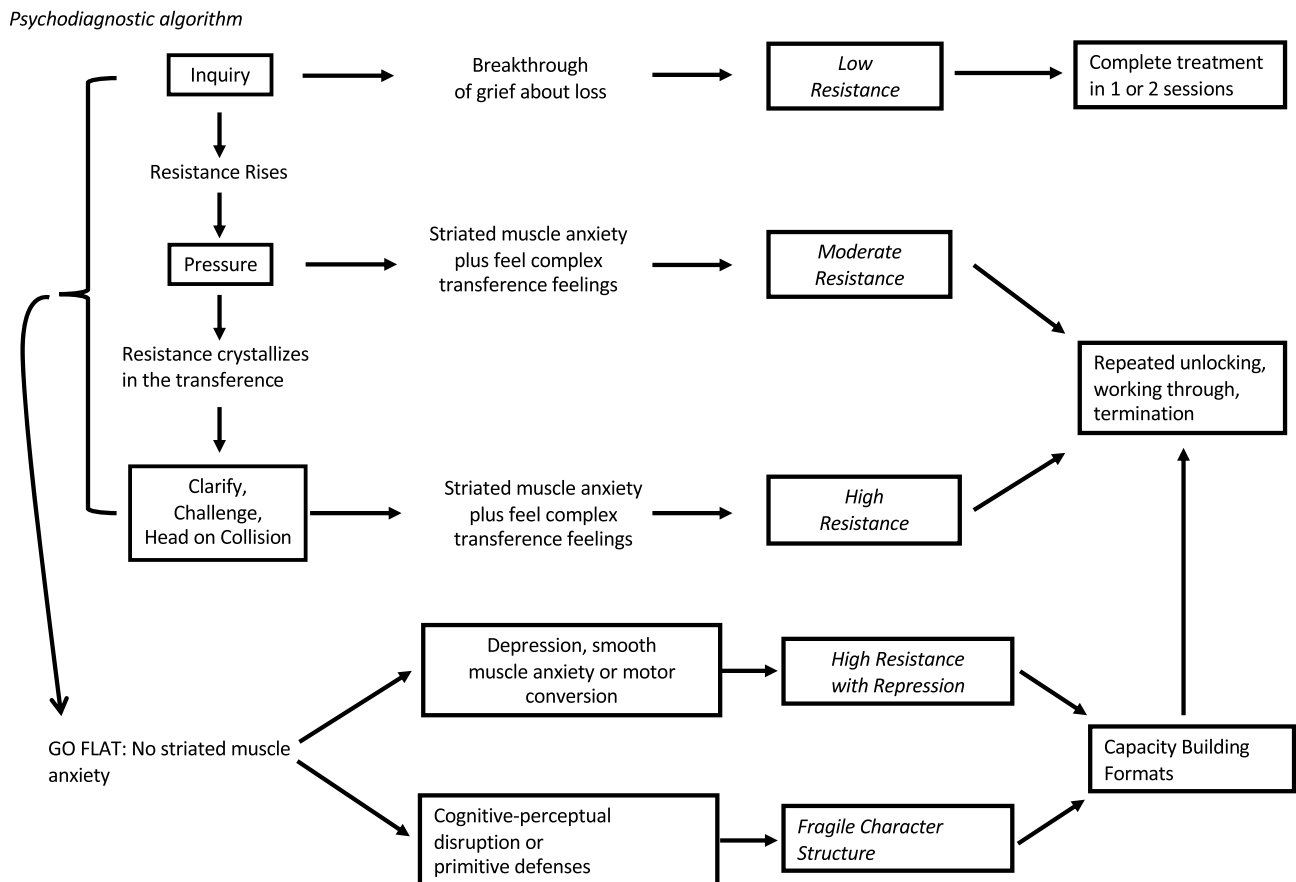
Psychodiagnostic algorithm

Fig. 2. Psychodiagnostic algorithm.

Note. From Abbass et al. (2015). Reaching through resistance: Advanced psychotherapy techniques. Seven leaves press. Copyright 2015 by Allan Abbass. Reprinted with permission.

2.5. Therapists and treatment integrity

All therapists were licensed health professionals and trainees learning ISTDP. 58,9% of the patients were psychodiagnostically assessed by four expert therapists with a mean of 1452.5 (SD 871.6) total training hours. Out of these, 107 patients were assessed by a psychiatrist with over 2000 h of total training. 41.1% of the patients were psycho-diagnostically assessed by 43 trainee therapists with a mean of 186.7

(SD 166.1) total training hours. To maintain treatment integrity, all therapists took part in a weekly small-group supervision led by an experienced ISTDP trainer. This supervision included review of video recordings of treatment sessions (Abbass, 2004). Also, the therapists attended weekly didactic courses and were provided with technical literature on ISTDP.

2.6. Statistics

We performed independent samples t-tests on the means of all BSI and IIP subscales to determine if there were any significant differences between the fragile and resistant group. For all analyses a significance level of ($p < .05$) was used. The independent samples t-tests generated several subscales where the fragile and resistant patients were significantly different from each other, and on each of these subscales the fragile group scored higher than the resistant group. Thus, the subscales did not provide any particular insights into the psychodiagnostics other than that the fragile patients had greater levels of distress. As symptom distress might mask underlying pathological processes, we used a matching procedure to compare resistant and fragile patients with the same level of symptom distress. In order to perform a matching procedure on a full dataset, we first conducted a predictive mean matching (PMM) procedure, to estimate and replace missing values (Morris et al., 2014). A few patients did not provide data for some specific items in the self-reports, and some patients where administered brief version of the instruments (thereby not providing all information available in the longer versions of the instruments). The number of missing data was small and accordingly all missing data was imputed to ensure as much information as possible was maintained for further analysis. With PMM the missing values are first estimated using linear regressions, before the estimate is replaced by the nearest observed value in the dataset. The specific matching procedure, propensity score matching (PSM) (Austin, 2014), is based on logistic regression and identifies similar patients from the groups being compared. We decided to use the BSI depression subscale as the matching variable as studies have shown that roughly two thirds of depression cases have at least one other concomitant mental disorder, and that nearly all mental disorders are at least twice as prevalent in depressed patients relative to controls, indicating a dose-response relationship with depression severity (Steffen et al., 2020). The psychodiagnostic group served as dependent variable, and BSI depression as independent variable. This provided a probability of psychodiagnostic category based on the BSI depression score, and each fragile patient was matched with a resistant patient according to the patient's probability of belonging to each of the groups. This means that patients with the most similar scores from the logistic regression were matched as long as their scores were within a predetermined range (caliber width < 0.1). We performed the matching with replacement, meaning that after a resistant patient had been used as a match, the patient was not eliminated from the pool of potential new matches. This allowed that each resistant patient could be used as a match multiple times in order to create the closest matching. This procedure allowed us to execute the propensity score matching on a full dataset.

Following the matching procedure, independent samples t-tests were used to determine if there were any significant differences between the fragile and resistant groups on both single items and subscales of all BSI (except for BSI depression as this was used as the matching variable) and IIP subscales. Given the exploratory nature of this study, no procedures to control for error rates were employed.

3. Results

3.1. DSM-IV diagnoses at baseline

See Table 1 for DSM-IV diagnoses at baseline.

Table 1
DSM-IV diagnoses at baseline.

	Total $N =$ 418		Resistant $N =$ 330		Fragile $N =$ 88	
	N	%	N	%	N	%
Somatoform disorder	259	62.0	207	62.7	52	59.1
Major depression	166	39.7	132	40.0	34	38.6
Anxiety disorders	242	57.9	182	55.2	60	68.2
Cluster B personality disorder	67	16.0	39	11.8	28	31.8
Cluster C personality disorder	157	37.6	131	39.7	26	29.5

3.2. Independent samples t-tests on the means of BSI and IIP subscales

The sample size was $N_{RESISTANT} = 330$ and $N_{FRAGILE} = 88$.

See Table 2 for the results of the independent samples *t*-test on the means of BSI and IIP subscales. There were significant differences between the groups on four of the IIP subscales: Domineering/Controlling, Cold/Distant, Socially Inhibited/Avoidant, Overly Accommodating/Exploitable, as well as on the Total Score. On all subscales the fragile patient group scored higher (more interpersonal problems) than the resistant group. On the BSI, there were significant differences between the groups on all subscales, except for BSI Paranoid Ideation. Fragile patients scored higher (more symptoms) than the resistant group.

3.3. Standardized mean differences before and after propensity score matching

The (standardized mean difference) SMD between the fragile group and the resistant group before propensity score matching showed an SMD of 0.560 which is outside the range of balance for SMD (-0.1 to 0.1) (Staffa and Zurakowski, 2018). After the propensity score matching the SMD was -0.004 (between the range of balance for SMD).

3.4. Independent samples t-tests on the means of BSI and IIP single items and subscales after the matching procedure

The sample size was $N_{RESISTANT} = 88$ (77 unique patients, propensity score matched with replacements) and $N_{FRAGILE} = 88$ (88 unique patients).

See Table 3 for the independent samples *t*-test on the means of BSI and IIP single items and subscales. There were no significant differences between the groups on neither single items nor subscales on the IIP. On the BSI, there were significant differences on one subscale; BSI Somatization, as well as on six single items. Of these six single items three items were items from the BSI Somatization subscale; "Faintness or dizziness", "Trouble getting your breath" and "Feeling weak in parts of your body". One item was from the BSI Phobic anxiety subscale; "Feeling afraid to travel on buses, subways, or trains". One item was from the BSI Anxiety subscale; "Spells of terror or panic". The last item was from the BSI Psychoticism subscale; "The idea that something is wrong with your mind". For all subscales/single items the fragile patients scored higher (more symptoms) than the resistant group.

4. Discussion

The main purpose of this study was to identify reliable differences between the two ISTDP patient groups on measures of symptoms and interpersonal problems, by comparing a group that was psychodiagnostically assessed as resistant with a patient group that was psychodiagnostically assessed as fragile. We found out that there were significant differences between the groups on four of the IIP subscales: Domineering/Controlling, Cold/Distant, Socially Inhibited/Avoidant, Overly Accommodating/Exploitable, as well as on the Total Score. On all BSI subscales, with the exception of BSI Paranoid Ideation – there were significant differences between the two groups. On all subscales

Table 2
Independent samples t-tests on the means of BSI and IIP subscales.

Subscale	Resistant		Fragile					
	M	SD	M	SD	df	t	p	Cohen's d
IIP								
IIP Domineering/Controlling	.897	.829	1.131	.988	389	2.174	.030	.271
IIP Vindictive/Self-centered	1.177	1.057	1.355	1.145	388	1.325	.186	.165
IIP Cold/Distant	1.352	.995	1.626	1.029	389	2.191	.029	.273
IIP Socially Inhibited/Avoidant	1.617	1.005	1.916	1.087	389	2.338	.020	.292
IIP Non-assertive	1.780	1.053	1.867	1.046	389	.662	.508	.083
IIP Overly Accommodating/Exploitable	1.958	.996	2.254	.993	389	2.380	.018	.297
IIP Self-sacrificing/Overly nurturant	1.843	1.023	2.024	1.075	389	1.406	.160	.175
IIP Intrusive/Needy	1.149	.879	1.300	1.012	389	1.335	.183	.167
IIP Total Raw Score	1.482	.664	1.686	.632	389	2.485	.013	.310
BSI								
BSI Somatization	1.474	.909	1.890	.932	413	3.794	<0.001	.456
BSI Obsession-Compulsion	2.051	.962	2.347	.902	389	2.553	.011	.312
BSI Interpersonal Sensitivity	1.807	1.097	2.203	1.074	389	2.972	.003	.363
BSI Depression	1.714	1.006	2.273	.993	414	4.640	<0.001	.557
BSI Anxiety	1.741	.927	2.172	.945	414	3.859	<0.001	.463
BSI Hostility	1.296	.932	1.516	.827	389	1.985	.048	.242
BSI Phobic Anxiety	.936	.922	1.398	1.120	119.389	3.511	<0.001	.478
BSI Paranoid Ideation	1.317	.906	1.528	.926	389	1.898	.058	.232
BSI Psychoticism	1.356	.933	1.799	.894	389	3.930	<0.001	.480
BSI Global Severity Index	1.518	.733	1.910	.753	414	4.441	<0.001	.533

Table 3
Independent samples t-tests on the means of BSI and IIP single items and subscales after the matching procedure.

Item	Resistant		Fragile					
	M	*SD*	*M*	*SD*	*df*	*t*	*p*	Cohen's *d*
BSI Somatization	1.570	.965	1.890	.932	173	2.229	.027	.337
BSI2 Faintness or dizziness	1.046	1.154	1.437	1.300	170.109	2.105	.037	.318
BSI28 Feeling afraid to travel on buses, subways, or trains	.598	1.076	1.024	1.480	153.468	2.133	.034	.328
BSI29 Trouble getting your breath	1.171	1.332	1.568	1.311	174	1.996	.048	.301
BSI37 Feeling weak in parts of your body	1.741	1.464	2.186	1.297	159.796	2.075	.040	.323
BSI45 Spells of terror or panic	1.409	1.411	1.864	1.448	174	2.109	.036	.318
BSI53 The idea that something is wrong with your mind	2.134	1.480	2.686	1.374	166	2.506	.013	.387

Note. All subscales and single items from the BSI and the IIP were tested. Only the significant subscales and single items are reported in the table. All unreported subscales and single items were non-significant.

the fragile patients scored higher (more interpersonal problems or more symptoms) than the resistant group. This suggests that there are psychometric differences between these patient groups. Comparable findings were noted in the original study by Johansson et al. (2014), where the authors found significant BSI differences at baseline and a similar trend on the IIP. The notion that fragile patients experience increased interpersonal and general psychiatric symptomatology is fitting with the theoretical rationale defining this patient group; these patients have been described with a history of severe trauma, absence of healthy attachments and increased access to primitive defenses, violent behavior and victimization (Abbass, 2007; Davanloo, 1995). Studies on adverse childhood experiences find that patients who have been exposed to adverse and/or persistent childhood experiences have a dose-response relation to increased risk for mental illnesses and increased scores on psychometric symptoms measures (Edwards et al., 2003; Zarse et al., 2019).

The BSI Paranoid Ideation subscale was not significantly different between the psychodiagnostic categories. This is at odds with ISTDP theory that describes fragile patients as more prone to projection. However, all patients who were assessed as psychotic, were excluded from the study, which eliminate a population with increased paranoid ideation. Further, with increased statistical power the significance level (viz, 0.058) might drop sufficiently for the difference to be significant.

While it is clearly of clinical relevance that fragile patients tend to have more psychological distress in general, this finding does not provide clinicians with an apparent psychometric instrument to assist in psychodiagnostics. To further investigate possibilities for such an

instrument, we used a matching procedure that matched the psychodiagnostic groups on the BSI depression subscale. When both groups had the same level of depressive distress, there were no significant differences on the IIP subscales. On the BSI, the somatization subscale was the only subscale with a significant difference, as well as six single items. Three items belonged to the BSI Somatization subscale, and one item from three other subscales (i.e., the BSI Phobic anxiety subscale, the BSI Anxiety subscale and the BSI Psychoticism subscale). On both the somatization subscale as well as on the 6 single items, the fragile patients scored higher (i.e., more problems or symptoms) than the resistant group. As is clear from the first comparison, the fragile patients have greater levels of pathology in general than the resistant group. But when the pathology-level was controlled for with a matching procedure, we found subtle differences that may be more characteristic for the fragile patient group. Especially it seems like fragile patients suffer more from somatization and they experience more spells of terror or panic, phobic anxiety on public transport and suffer from the idea that there may be something wrong with their mind. This finding has interesting overlaps with ISTDP theory concerning the fragile psychodiagnostic group. The somatization item "Faintness or dizziness" seem to match with cognitive perceptual disruption, during which the patients may experience mental confusion, dissociation and fainting, (Abbass, 2015). The item "The idea that something is wrong with your mind" could also be explained by the cognitive perceptual disruption that manifest in many ways. In addition to the mental confusion, dissociation and fainting, patients may also experience loss of consciousness and dissociative seizures (Abbass, 2015). When becoming anxious they also may hallucinate and

experience transient psychotic phenomena – thus they may be mis-diagnosed as having psychosis (Abbass, 2015). Keeping all this in mind it seems plausible that these fragile patients experience "The idea that something is wrong with your mind". Another somatization item; "Feeling weak in parts of your body" may be explained by the somatic pattern of motor conversion (Abbass, 2015). Instead of tensing up in striated muscle like the resistant group, these patients go weak, and experience loss of power in one or more muscle groups (Abbass, 2015). The last somatization item "Trouble getting your breath" best relates to severe levels of panic. The phobic anxiety item "Feeling afraid to travel on buses, subways, or trains" and the anxiety item "Spells of terror or panic" could be explained by the fragile patient group's use of primitive defenses such as projection. The Defense mechanism manual (Cramer, 1991) measures projection trough seven items. Among these are "Attribution of hostile feelings or intentions, or other normatively un-usual feeling or intentions, to a character" "Concern for protection from external threat" and "themes of pursuit, entrapment and escape". Facets of projection like these may explain the fragile patients' anxiety of travelling with public transport as well as the spells of terror or panic they suddenly experience.

Due to the exploratory nature of the study, a limitation is the absence of hypotheses' regarding what specific differences may exist between the two psychodiagnostic groups.

Consequently, the analysis entails multiple comparisons (i.e., 117 single items and 19 subscales). Correcting experiment-wise error rates would be extremely conservative (e.g., for comparison 2, the Bonferroni-corrected significance level would be $p < 0.0004$). Due to the fact that we are using general symptoms- and interpersonal measures, and not a psychometric instrument specifically developed to discriminate between fragile and resistant patients, with such a conservative p-value, it is less likely that this study would have been able to find any subscales or single items with significant differences between groups. It is important to emphasize that the results of the present study are derived from an exploratory design and the purpose is to suggest avenues for further research, with the aim of understanding and describing resistant and fragile patients. However, the results showed that on all the subscales where differences were found, the fragile patient group scored signifi-cantly higher than the resistant patient group. Thus, we find that despite the exploratory nature of the study, it appears that differences between fragile and resistant patients are detectable by generic psychometric instruments.

Still the use of the generic psychometric instruments IIP and BSI is also a limitation. Both instruments are validated and well-suited to capture interpersonal problems and symptoms in general, and they could identify significant differences between the psychodiagnostic groups. However, in order to more specifically describe and understand the psychodiagnostics groups, ISTDP specific measures would be pref-erable. A psychometric instrument less focused on broad-sweeping symptoms, but developed according to ISTDP theory, would likely bet-ter discriminate between the two psychodiagnostics groups. Such an instrument could potentially be able to assess the specific theorized intrapsychic mechanisms, such as markers of unconscious anxiety and primitive defenses, that separate fragile patients from resistant groups. This instrument would potentially also be able to capture the subgroups of the psychodiagnostic categories; such as low, moderate or high resistance.

It is a possible limitation of the study that propensity score matching has been conducted using replacement. The 11 patients that are used twice may lead to a slightly skewed sample. However, the SMD after the propensity score matching was −0.004 which is well between the range of balance for SMD, pointing towards a balance between the two groups with regard to confounding variables.

5. Conclusions

This study found that for two patient groups who were

psychodiagnosed as either fragile or resistant, the fragile patient group scored significantly higher on five of the IIP subscales, including the Total Score, and on all BSI subscales, with the exception of BSI Paranoid Ideation. After using a matching procedure to investigate whether there were more specific differences between the groups, the fragile patient group still scored higher on the somatization subscale as well as six single items (of which three where from subscales other than somati-zation). The study supports first the notion that fragile patients in gen-eral experience more psychological distress, and secondly that they suffer from more somatization as well as symptoms from the anxiety, phobic anxiety and psychoticism subscales. This fits well with ISTDP theory on psychodiagnostic differences between the two patient groups. A limitation of the study is the use of generic psychometric instruments. A natural next step is to investigate whether a psychometric instrument specifically developed according to ISTDP metapsychology is better able to distinguish between the two psychodiagnostic groups.

Author statement

Mikkel Eielsen was responsible for designing and initiating the study, planning and performing the analyses, interpreting the results and writing the report.

Pål Gunnar Ulvenes was responsible for designing the study, plan-ning and performing the analyses, and was involved in interpreting the results and in writing the report.

Bruce E. Wampold was responsible for designing the study, planning and performing the analyses, and was involved in interpreting the re-sults and writing the report.

Jan Ivar Røssberg participated in supervision of the study and writing of the report.

Allan Abbass was responsible for designing and initiating the study, collecting the data, and was involved in interpreting the results and writing the report.

All authors approved the final version of the manuscript.

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Declaration of Competing Interest

None.

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