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Knekt, Paul

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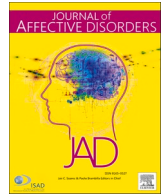
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Research paper

Poor suitability for psychotherapy – a risk factor for treatment non-attendance?

Paul Knekt^{a,*}, Leena Grandell^a, Laura Sares-Jäske^a, Olavi Lindfors^{a,b}^a Finnish Institute for Health and Welfare, Helsinki, Finland^b University of Helsinki, Department of Psychology and Logopedics, Helsinki, Finland

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ABSTRACT

Background: Patient suitability has been suggested to predict treatment non-attendance but information on its effect is limited.

Aim: To study the prediction of the Suitability for Psychotherapy Scale (SPS), on occurrence of treatment non-attendance.

Methods: Altogether 326 outpatients, with depressive or anxiety disorder, were randomized to short-term psychodynamic psychotherapy (SPP), long-term psychodynamic psychotherapy (LPP), and solution-focused therapy (SFT). SPS was based on seven components from three suitability domains: nature of problems, ego strength, and self-observing capacity. Treatment non-attendance was defined as refusal of engaging therapy and of premature termination. The Cox model and logistic regression were used.

Results: Treatment non-attendance was significantly more common in LPP patients with poor SPS (RR = 2.76, 95% CI = 1.45–5.26). This was mainly due to poor flexibility of interaction, poor self-concept, and poor reflective ability. Premature termination in SFT showed a similar trend but due to other SPS components: absence of a circumscribed problem, poor modulation of affects, and poor response to trial interpretation. On the contrary, individuals with good values of SPS were more prone to premature termination in SPP.

Limitations: The prediction of suitability on refusal could only be studied in the LPP group due to few refusals in the short-term therapy groups. The sample consisted of patients who participated in a trial. Thus the findings may not be directly generalized to unselected patients in the public mental health setting.

Conclusions: Poor suitability, apparently, predicts non-attendance in LPP and SFT, but not in SPP. More studies on large cohorts are needed.

1. Introduction

Treatment non-attendance, i.e., attrition due to patient's refusal to start a recommended psychotherapy or premature therapy termination once therapy has started (Oldham et al., 2012), is common; the average rate in psychotherapy trials is about 30% (Swift et al., 2017) and varies greatly (up to 75%) across various research designs and clinical service settings, covering different definitions of treatment refusal and premature termination (Swift and Greenberg, 2012). Typically, non-attendance occurs very early, as a refusal to engage treatment after initial assessment or dropout after the first therapy sessions (Hamp-ton-Robb et al., 2003; Olfson et al., 2009), whereas the timing of premature termination of therapy varies, the most typical definition being patient's unilateral decision to terminate the treatment against provider

recommendation (Swift et al., 2017). Non-attendance, covering all these aspects of the multifaceted construct, has been shown to be associated with poor prognosis (Delgado et al., 2014). The high rate of patients who refuse to engage in treatment or drop out prematurely is thus a significant hindrance to the delivery of effective mental health services.

The reasons for patient's failure to initially attend at recommended psychotherapy assessment, to reject treatment and for failure to complete the agreed treatment, cover different types of factors. These factors have been categorized as external barriers, environmental factors (e.g. effect of research or clinic setting), perceptions and experiences of the treatment and therapist, and patient characteristics – specifically the individual's treatment needs and psychological capacities influencing engagement in treatment (Barrett et al., 2008).

Although the evidence still is inconclusive, several patient-related

* Corresponding author: Finnish Institute for Health and Welfare, P.O. Box 30, 00271 Helsinki, Finland.

E-mail address: paul.knekt@thl.fi (P. Knekt).

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factors have been suggested to predict non-attendance, most of the studies focusing on premature termination. Both some demographic factors (e.g., male gender, younger age, low socio-economic and minority ethnic status, low income, being single) (Barrett et al., 2008; Inghoven et al., 2012) and psychiatric diagnosis or symptom variables (e.g., personality disorder, comorbidity and severity of depression) have frequently been revealed (Lopes et al., 2015; Rubin et al., 2018). Research also suggests that patients' outcome expectations, prognostic beliefs (Swift et al., 2012) and treatment preference (Windle et al., 2020) may be important predictors of both treatment refusal and dropout from therapy, depending on the type of treatment.

A poor overall suitability, comprised of various interpersonal and personality characteristics, was associated with lesser attendance in brief psychodynamic psychotherapy (Cromer and Hilsenroth, 2010). Absence of a circumscribed problem predicted premature termination of brief psychodynamic therapy (Vaslamatzis and Verveniotis, 1985) while its presence predicted greater benefits in the long run (Høglend, 1994). Subsequent drop-out was predicted by impaired ego strength (modulation of affects, frustration tolerance, and self-concept) in long-term psychodynamic psychotherapy (Frayn, 1992; Rubin et al., 2018) and by trauma history in short-term cognitive therapy but not by cognitive dysfunctionality in short-term psychodynamic and cognitive therapies (Connolly Gibbons et al., 2019). All the previous studies focused on premature termination only, except the latter where treatment refusal and patients with a single therapy session were combined. Additionally, self-observing capacity (reflective ability, motivation or response to trial interpretation) predicted premature termination in long-term therapy (Frayn, 1992; Rubin et al., 2018) and in short-term therapy (Charnas et al., 2010; Vaslamatzis and Verveniotis, 1985), with one known exception (Connolly Gibbons et al., 2019). Likewise, the level of interpersonal problems has inconsistently either predicted premature termination (Dinger et al., 2013) or not (Connolly Gibbons et al., 2019). The information on the overall effect of patient suitability factors in therapies of different length and mode is, however, so far limited. Therefore, the focus of this study is on a global measure of pretreatment patient suitability factors as a predictor of non-attendance, treatment refusal and premature termination.

We have previously shown that an interview measure Suitability for Psychotherapy Scale (SPS) (Laaksonen et al., 2012) is a useful and reliable predictor of whether patients with depressive or anxiety disorder will recover by different types of short-term therapy or long-term psychotherapy (Laaksonen et al., 2013). The SPS gives a global score of suitability combining the suitability indicators of a focal, circumscribed problem (i.e. the degree to which the patient's problems have an identifiable focus (nature of problems), ego strength (capacity for flexible interaction, capacity to modulate affects, stability of self-concept), and self-observing capacity (reflective ability, motivation for psychotherapeutic treatment, and reaction to trial interpretation), all aspects that are proposed to be relevant for predicting non-attendance.

In the present study, the Suitability for Psychotherapy Score (SPS), was investigated for its prediction on treatment non-attendance in out-patients, suffering from depressive and/or anxiety disorder and randomly allocated to short-term psychodynamic psychotherapy (SPP), long-term psychodynamic psychotherapy (LPP), and solution-focused therapy (SFT). We hypothesized that poor suitability global score predicts greater treatment non-attendance in all therapies. Due to lack of previous literature no differentiation between predictors of treatment refusal and premature termination could be made. Additionally, comparing the findings with previous research, we explored whether there were differences between the therapies regarding the sub-components of the global suitability as predictors of non-attendance.

2. Methods

2.1. Study sample and study design

A total of 326 out-patients from psychiatric services in the Helsinki region, all 20–46 years of age and suffering from long-standing (>1 year) depressive or anxiety disorder causing work dysfunction were randomly assigned to one of three treatment groups SFT (n = 97), SPP (n = 101) and LPP (n = 128) (Knekt et al., 2008). Patients with psychotic disorder, severe personality disorder, adjustment disorder, bipolar disorder or substance abuse were excluded from the study.

2.2. Therapies and therapists

SPP is a brief, focal, transference-based therapeutic approach that helps patients by exploring and working through specific intrapsychic and interpersonal conflicts, as described by Malan (1976) and Sifneos (1978). SPP was scheduled for 20 treatment sessions, with one session per week, for about 5-6 months. SFT is an altogether different, resource-oriented, goal-focused therapeutic approach that helps clients change by constructing solutions (Johnson and Miller, 1994), as developed and described by de Shazer et al. (1986). SFT was scheduled for up to a maximum of 12 sessions, over no more than 8 months, and its frequency was flexible, usually one session every 2-3 weeks. LPP is an open-ended, intensive, transference-based therapeutic approach that helps patients by exploring and working through a broad range of intrapsychic and interpersonal conflicts, following the clinical principles of LPP (Gabbard, 2004). The frequency of sessions in LPP was 2-3 times a week for approximately three years.

SFT was manualized and adherence was monitored. Psychodynamic psychotherapies were conducted as in standard clinical practice, where the therapists might modify their interventions according to the patient's needs within the respective framework. Therefore, no manuals were used and no adherence monitoring was organized. For all treatments, external criteria on the provision of therapy according to protocol (i.e., number and frequency of sessions, possible interruptions, premature termination, and duration of therapy) were monitored.

A total of 55 therapists provided the treatments (Heinonen et al., 2012). SFT was provided by 6, SPP by 12, and LPP by 41 clinicians. A local institute had trained and ensured the qualifications of all therapists providing SFT. All therapists qualified for providing SPP or LPP had been trained by one or several of the accredited Finnish psychodynamic or psychoanalytic training institutes. In addition, those giving SPP had received 1-2 years of specific, short-term focal psychodynamic therapy training. Therapists providing SFT had on average 9 years of work experience, therapists providing SPP had 16 years, and those providing LPP had 18 years. None of the therapists offering psychodynamic psychotherapy had any experience of SFT and vice versa.

2.3. Assessments

Patient statistics were assessed at baseline before initiating the treatment using interviews and questionnaires, covering measures of psychiatric diagnosis, psychiatric symptoms, previous psychiatric treatment, and suitability for psychotherapy.

The interview-based Suitability for Psychotherapy Scale (SPS) (Laaksonen et al., 2012) was used as the predictor of treatment refusal and premature termination in the present study. The SPS is intended to assess capacities for psychotherapeutic work. A minimum of 90 minutes and two interview sessions, based on a modification of Kernberg's Structural Interview (Kernberg, 1981) were needed for the SPS ratings, carried out by seven experienced clinicians. The scale comprises seven domains: motivation for treatment, reflective ability, flexibility in interaction, capacity for modulation of affects, reaction to a trial interpretation made by the clinician, stability and coherence of self-concept ('self-concept in relation to ego ideal') and the degree to which a

patient's problems may be conceptualized as having a circumscribed, clearly identifiable focus. The domains were rated on a 1-7 ordinal scale (with lower values indicating higher suitability), then grouped into three classes, of 'low', 'intermediate' or 'high' level, and further dichotomized into 'good' and 'poor' categories, based on a priori conceptual and clinical criteria (the low and intermediate categories were usually merged to represent good suitability) (Appendix). Additionally, an SPS total score was formed on the basis of the seven dichotomized domain scores (good suitability = 0, poor suitability = 1), varying thus from 0 to 7. The repeatability of the dichotomous SPS assessments made three years apart showed mostly fair to good agreement (Fleiss, 1981) beyond chance (median kappa over seven interviewers 0.41-0.84 for all measures except for focus, median kappa = .23) (Laaksonen et al., 2012). The SPS has been found valid for predicting outcome in psychotherapies that represent different theoretical orientations and treatment duration (Laaksonen et al., 2013).

Psychiatric diagnoses on Axes I and II were assessed by experienced clinicians with DSM-IV-criteria using a semi-structured interview (American Psychiatric Association (APA), 1994). Also, they rated the patients' depressive symptoms with the Hamilton Depression Rating Scale (HDRS) (Hamilton, 1960), and the patient's general level of functioning with the Global Assessment of Functioning scale (GAF) (APA, 1994). The assessment of psychiatric symptoms at baseline were based on a self-report questionnaire, the Symptom Check List (SCL-90) (Derogatis et al., 1973), giving scores for overall symptoms. Information on duration of primary psychiatric disorder and on previous use of psychiatric treatment (i.e., psychotropic medication, psychotherapy, and hospitalization for psychiatric reasons) was assessed with questionnaires developed in the trial and information from nationwide registers (Knekt et al., 2011).

Data on patients' sociodemographic factors (e.g., sex, age, education) were likewise assessed with questionnaires (Knekt and Lindfors, 2004).

2.4. Follow-up and outcome

Of the individuals who initially agreed to participate, four of those assigned to SFT, three of those to SPP and 26 of those to LPP refused to engage in treatment after finding out the treatment group to which they were assigned (Knekt et al., 2008). The patients refused mainly because of objections to the type of the allocated therapy. Of the patients starting the assigned therapy, 11 assigned to SFT, 10 to SPP and 21 to LPP terminated the treatment prematurely, i.e., we used the criterion of patient's unilateral decision to drop out of therapy, before having recovered or sufficiently benefited from the treatment (Swift et al., 2017).

Information of the reason and timing of premature termination was collected by an item in a self-reported follow-up questionnaire, and by additional inquiry of its reasons in a follow-up interview. The major patient-reported reasons for premature termination were disappointment with the treatment or problems in the therapeutic relationship (LPP 13, SFT 7, SPP 2), the patients' life situation (LPP 8, SFT 4, SPP 4), or abrupt interruption of therapy due to therapist's death (and the patient's choice of not continuing therapy with another therapist) (SPP 4).

Refusal and premature termination were also combined into one variable, treatment non-attendance (Connolly Gibbons et al., 2019; Oldham et al., 2012). The patients were followed for five years. The follow-up time was defined as the number of days from randomization to the date of treatment non-attendance or end of follow-up, whichever came first.

2.5. Statistical methods

Differences in the occurrence of treatment non-attendance (i.e., treatment refusal or premature termination) by therapy group was studied using the original trial design in a cross-sectional approach.

Logistic regression was used to estimate the relative odds (RO) and 95% confidence interval of treatment non-attendance between the therapy groups. The odds of event (i.e. the number of non-attendance/the number of attendance) of one of the therapy groups (i.e. the reference group) was settled to 1 and RO was estimated as the ratio of the odds of events of the other groups compared to it. A RO higher than 1 indicates that the risk of non-attendance is higher in the therapy group considered than in the control group. The test for differences between the therapy groups was based on the likelihood ratio test. The incidence of non-attendance was estimated using linear regression.

Differences in the occurrence of treatment non-attendance by suitability scores were studied in an observational longitudinal cohort study design. The Cox model was used to assess the relative risk (RR) and 95% confidence interval (95% CI) of treatment non-attendance between categories of the suitability scores (Cox, 1972). RR is the ratio of the probability of non-attendance in the poor SPS group to the probability of non-attendance in the good group. An RR higher than 1 means that the risk is higher in the poor group and an RR less than 1 that the risk is lower in the poor group. The test for trend (i.e., inclusion of the suitability score as continuous in the model) was based on the likelihood ratio test. Because of the small number of premature terminations in the SPP and SFT groups the significance of differences between the categories was also tested using the Fisher exact probability test. In case of multiple comparisons also the Bonferroni-corrected P-values were calculated.

The models included respective SPS score (total score or one of the 7 sub-scores), therapy group (SFT, SPP, LPP), and potential confounding factors. The confounding factors were selected because of the observational study design. Of the comprehensive set of variables available in this study we selected, among the variables associated with the independent variables and the outcome variable, those satisfying criteria for confounding (Rothman et al., 2008): sex, GAF (continuous), HDRS (continuous), and duration of the primary mental disorder (categorical). The differences of non-attendance in categories of respective suitability scores and therapy group were model adjusted (Lee, 1981).

The analyses were carried out using SAS software version 9.3 (SAS Institute Inc., Cary, North Carolina).

3. Results

3.1. Basic data

The mean age of the patients was 32 years at baseline (Table 1). The study sample mainly consisted of women (76%). A total of 84.7% of the patients suffered from mood disorder, 43.6% from anxiety disorder, and 28.2% had psychiatric co-morbidity. A total of 18.1% had a personality disorder. About 20% of the patients had received previous therapy or psychotropic medication. In the non-attendance group there were more men. There were also more patients with more serious disorders (i.e., more personality disorder and longer duration of the disorder), with more previous treatment (i.e., psychotherapy, psychotropic medication, and hospitalization), and with weaker suitability for psychotherapy.

3.2. Treatment non-attendance by therapy group

A total of 23% of the patients refused to engage in treatment or terminated treatment prematurely (10.1% and 12.9%, respectively). The relative odds (RO) of refusal or premature termination during follow-up was statistically significantly higher in the LPP group than in the short-term therapy groups (RO = 4.45, 95% CI = 2.19 – 9.06 for LPP vs. SPP) (Table 2). This difference was mainly due to the higher refusal rate in LPP (RO = 11.6, 95% CI = 3.16-42.5).

3.3. Refusal by SPS score

In the LPP group the total score and three sub-scores (i.e. flexibility

Table 1
Mean levels (SD) of baseline characteristics of the 326 patients intended to treat.

Variable	All	Attendance	Non-attendance
Socioeconomic variables	(N = 326)	(N = 251)	(N = 75)
Age	32.3 (6.9)	32.4 (6.8)	31.9 (7.3)
Academic education (%)	25.8	26.7	22.7
Males (%)	23.9	21.5	32.0
Psychiatric diagnosis			
Mood disorder (%)	84.7	84.4	85.3
Anxiety disorder (%)	43.6	43.8	42.7
Comorbid mood and anxiety disorder (%)	28.2	28.3	28.0
Personality disorder (%)	18.1	17.9	18.7
Psychiatric history			
Previous psychotherapy (%)	19.3	18.1	23.0
Psychotropic medication (%)	22.0	20.9	25.6
Hospitalization (%)	1.8	1.2	4.0
Suitability for psychotherapy			
Total SPS score (good values %)	78.5	81.7	68.0
Psychiatric symptoms			
GAF	55.2 (7.5)	55.4 (7.0)	54.7 (9.6)
HDRS	15.7 (4.8)	15.5 (4.8)	16.1 (4.8)
Duration of disorder > 5 years (%)	32.8	31.9	34.7

Note: GAF = Global Assessment of Functioning scale; HDRS = Hamilton Depression Rating Scale; SPS = Suitability for Psychotherapy Scale.

Table 2
Incidence and relative odds (RO) of treatment non-attendance during follow-up by therapy group.

Group	n	N	Incidence (%) ^a	RO ^a	95% CI
Refusal or premature termination in the whole study sample (N = 326)					
SPP	13	101	12.6	1	
LPP	47	128	37.7	4.45	2.19, 9.06
SFT	15	97	14.9	1.22	0.53, 2.78
P-value ^a	<0.001				
Refusal vs. those finishing their therapy (N = 284)					
SPP	3	91	3.2	1	
LPP	26	107	25.1	11.6	3.16, 42.5
SFT	4	86	4.6	1.48	0.31, 7.08
P-value ^a	<0.001				
Premature termination in those engaging treatment (N = 293)					
SPP	10	98	9.3	1	
LPP	21	102	21.7	2.85	1.20, 6.74
SFT	11	93	12.1	1.35	0.52, 3.50
P-value ^a	0.04				

Note: Model: Psychotherapy group, SPS, confounding factors; LPP = long-term psychodynamic psychotherapy; n = number of refusal and/or premature termination; N = number at risk; RO = relative odds; SFT = solution-focused therapy; SPP = short-term psychodynamic psychotherapy; 95% CI = 95% confidence interval of relative odds.

^a Incidence, P-value for difference, and relative odds based on the logistic model.

in interaction, self-concept in relation to ego ideal, and reflective ability) showed statistically significantly higher risk for refusal in the poor group with relative risks varying from 2.72-3.04 (Table 3). Because of the small numbers of refusal in the short-term psychotherapy groups (3 in SPP and 4 in SFT), the association with SPS could not be studied for these therapies.

3.4. Premature termination by treatment group and SPS score

The pattern of the significant associations between SPS score and premature termination differed between the therapies. In line with mainly non-significant findings for LPP, the SFT group showed elevated risk of premature termination for those with poor SPS values (Table 4).

Table 3
Relative risk of refusal at poor vs. good values of SPS-scores, LPP.

SPS	Refusal vs. those finishing their therapy (N = 107)				
	Level	n	N	RR	95% CI
Total Score	Good	16	88	1	
	Poor	10	19	3.04	1.32, 7.00
	p-value ^a	0.02			
Modulation of affects	Good	17	76	1	
	Poor	9	31	1.25	0.55, 2.85
	p-value ^a	0.64			
Reflective ability	Good	17	92	1	
	Poor	9	15	3.02	1.32, 6.90
	p-value ^a	0.04			
Flexibility of interaction	Good	21	99	1	
	Poor	5	8	2.72	0.94, 7.91
	p-value ^a	0.05			
Trial interpretation	Good	13	70	1	
	Poor	13	37	1.79	0.80, 3.97
	p-value ^a	0.80			
Self-concept	Good	19	93	1	
	Poor	7	14	2.74	1.11, 6.81
	p-value ^a	0.15			
Circumscribed focus	Good	9	37	1	
	Poor	17	70	1.09	0.47, 2.52
	p-value ^a	0.63			
Motivation	Good	8	43	1	
	Poor	18	64	1.61	0.68, 3.83
	p-value ^a	0.13			

^a Test for trend using Cox model. Significant results are bold.

A non-significant suggestive elevated risk for poor values was seen for the total score (RR = 3.41, 95% CI = 0.84, 13.9, P = 0.05). Those with a poor focus, i.e. lack of a circumscribed problem, more frequently terminated SFT prematurely (RR = 14.2, 95% CI = 1.21-118, P = 0.005). Also, those with poor modulation of affects (RR = 4.12, 95% CI = 1.04-16.2) or poor response to trial interpretation (RR = 3.80, 95% CI = 1.03-14.0 P = 0.005) had a statistically significantly elevated risk of premature termination. In variance with the LPP and SFT findings, the SPP group showed a non-significant suggestive inverse association between the SPS total score and occurrence of premature termination (RR = 0.35, CI = 0.05-2.55, P = 0.02).

4. Discussion

4.1. Basic findings

A total of 23% of the patients in the present study refused to engage in the treatment or to complete it as agreed. This prevalence can be considered modest in comparison with that from previous studies (Swift and Greenberg, 2012; Swift et al., 2017). In the present study treatment non-attendance was more common in LPP than in the short-term therapies. Failure to attend treatment was associated with SPS and some of its sub-score measures in all therapy groups. The pattern of measures and the direction of the association differed, however, according to therapy length and mode.

4.2. SPS total score

The risk of non-attendance (refusal or premature termination) in individuals randomized to LPP or SFT was higher in those with poor SPS total score values. Contrary, in those receiving SPP the risk was lower in that group. As far as these authors know, this is the first study on the prediction of psychotherapy non-attendance by a score covering measures of the nature of problems, ego strength, and self-observing capacity. To interpret these findings, a more detailed study of the measures included in the score domains was performed within each of the therapy groups.

Table 4

Relative risk of premature termination at poor vs. good values of SPS-scores in those engaging therapy, by therapy group.

SPS	SPP (N=98)					SFT (N=93)				LPP (N=102)			
	Level	n	N	RR	95% CI	n	N	RR	95% CI	n	N	RR	95% CI
Total Score	Good	10	76	1		5	72	1		14	86	1	
	Poor	0	22	<0.35 ^b	0.05, 2.55	6	21	3.41	0.84, 13.9	7	16	2.39	0.82, 6.93
	<i>P</i> -value ^a				0.02				0.05				0.25
Modulation of affects	Good	8	65	1		3	61	1		16	75	1	
	Poor	2	33	0.36	0.07, 1.85	8	32	4.12	1.04, 16.2	5	27	0.98	0.35, 2.73
	<i>P</i> -value ^a				0.28				0.03				0.52
Reflective ability	Good	10	78	1		8	75	1		14	89	1	
	Poor	0	20	<0.39 ^b	0.05, 2.87	3	18	0.88	0.20, 3.93	7	13	3.02	1.05, 8.64
	<i>P</i> -value ^a				0.28				0.32				0.02
Flexibility of interaction	Good	9	85	1		8	82	1		17	95	1	
	Poor	1	13	0.81	0.09, 7.32	3	11	2.08	0.51, 8.48	4	7	2.69	0.81, 8.85
	<i>P</i> -value ^a				0.56				0.09				0.16
Trial interpretation	Good	9	63	1		5	69	1		13	70	1	
	Poor	1	35	0.17	0.02, 1.39	6	24	3.80	1.03, 14.0	8	32	1.40	0.54, 3.63
	<i>P</i> -value ^a				0.07				0.005				0.83
Self-concept	Good	10	79	1		9	76	1		16	90	1	
	Poor	0	19	<0.42 ^b	0.06, 3.05	2	17	0.79	0.14, 4.49	5	12	1.70	0.55, 5.23
	<i>P</i> -value ^a				0.01				0.76				0.24
Circumscribed focus	Good	4	33	1		2	37	1		10	38	1	
	Poor	6	64	0.55	0.13, 2.21	9	56	14.2	1.21, 118	11	64	0.61	0.24, 1.57
	<i>P</i> -value ^a				0.65				0.005				0.42
Motivation	Good	4	38	1		3	35	1		7	42	1	
	Poor	6	60	0.81	0.21, 3.09	8	58	1.35	0.33, 5.53	14	60	1.43	0.52, 3.92
	<i>P</i> -value ^a				0.94				0.09				0.37

^a Test for trend tested by Cox’s model including the SPS scores as continuous variables in the model. The Bonferroni corrected *P*-value at the 0.05 level is 0.006 for each therapy group. The Bonferroni corrected *P*-values and the relative risks differing from unity are bold.

^b Estimated relative risk for proportions.

4.3. Nature of problems

We found no association between the focality of the problems, i.e., ability to present a circumscribed problem, and non-attendance in the psychodynamic psychotherapies but an elevated risk of poor focus, in patients with premature termination for SFT. Our finding concerning psychodynamic therapies is in contrast with one small study on the prediction of focal, circumscribed problems in patients suffering from mood or anxiety disorder and receiving brief dynamic psychotherapy which showed that non-completers were less able to present a circumscribed problem than completers (Vaslamatzis and Verveniotis, 1985). Likewise, another small study showed that the presence of a circumscribed problem may indicate greater potential benefit in an open-ended, short-term to moderate length psychodynamic therapy (Høglend et al., 1994), suggesting that it may also increase greater commitment to treatment. Our finding concerning SFT is in line with a previous study showing that anxiety disorder patients with no comorbidity attained outcomes comparable to LPP, suggesting that their more circumscribed problems can be effectively addressed in a resource-oriented therapy, whereas patients who have more unspecific or complex problems may consider the approach as unsuitable for them (Knekt et al., 2020). The finding of no such association in LPP is understandable as LPP helps the patient explore a broad area of dynamic conflicts and is claimed to be especially suitable for treating persons with complex pathology (Leichsenring and Rabung, 2011). However, the lack of association in SPP was unexpected, as the approach highlights the prognostic importance of focality (Malan, 1979; Sifneos, 1982). One explanation may be that the SPP therapists, initially also trained to treat more complex cases by LPP techniques, had responded to the lack of focus by responsive actions, modifying their approach to meet the patient’s needs (Norcross and Wampold, 2018). Further study is needed to clarify the fact that all of the premature terminations in SPP occurred in patients with a circumscribed focus.

4.4. Ego strength

4.4.1. Modulation of affects

We found no association between modulation of affects and non-attendance in the LPP group but an elevated risk of premature termination in those with poor modulation of affects in the SFT group. In variance, two studies on long-term psychodynamic psychotherapy showed a significant inverse association between modulation of affects (i.e., ‘affect availability’ and ‘intrapsychic functionality’, respectively) and premature termination (Frayn, 1992; Rubin et al., 2018). In line with our study on SPP, one study with patients randomized to short-term psychodynamic psychotherapy or to cognitive therapy did not find any association between modulation of “depressogenic” affects and of premature termination (Connolly Gibbons et al., 2019). It is an open question why persons with poor ability to regulate and express their affects might have considered the approach of SFT unsuitable and decided to drop out of treatment. One potential explanation is that they may have needed more help to open up, process and contain their problematic feelings than what was available in SFT where the sessions were infrequent (Philips et al., 2007).

4.4.2. Flexibility of interaction

We found poor flexibility of interaction to be associated with an elevated risk for refusal in LPP. Patient’s problems in forming a flexible working dialogue and interaction within the pre-treatment interview may reflect characteristic or current interpersonal problems, which have been shown to predict poorer early working alliance in LPP (Hersoug et al., 2009). Accordingly, it proposes a collaborative challenge to both the patient and the therapist to avoid ending up with a poor working alliance, which is known to increase the risk of premature termination, especially in lengthier treatments (Sharf et al., 2010).

4.4.3. Self-concept in relation to ego ideal

One study showed a statistically significant association between lower intrapsychic functionality, covering coherent self-concept, and premature termination among patients suffering from mood or anxiety disorder and receiving long-term psychodynamic psychotherapy (Rubin

et al., 2018). Another study, however, found no association between dysfunctional attitudes about oneself and treatment attendance in patients with major depression and randomized to short-term psychodynamic psychotherapy or to cognitive therapy (Connolly Gibbons et al., 2019). In accordance with the study by Rubin et al. (2018), we found significantly higher risk of non-attendance in those with poor self-concept receiving LPP and a new finding of a suggestively inverse association for SPP. The fact that two thirds of the patients with at least moderate problems in maintaining stability and coherence of self-concept, decided to refuse LPP after being assigned to it, seems to imply that their expectations for themselves and the long-term treatment ahead seemed incompatible (Laaksonen et al., 2012). In SPP all the cases with premature termination occurred in patients with good self-concept, which was contrary to expectations. It is not known whether the lack of premature termination in those with poor self-concept was due to therapists' successfully providing adequate responsiveness and preparation for therapy (Oldham et al., 2012; Piper et al., 1999), or other factors. Thus, the increased risk of those with good self-concept may not be related to suitability per se.

4.5. Self-observing capacity

4.5.1. Response to trial interpretation

We found a significantly elevated risk for premature termination in SFT among those with poor response to trial interpretation. As far as we know, there are no previous studies on SFT that focused on a patient's capacity to utilize (elaborate) the interviewer's formulation of the potential key problems as a predictor of premature termination. In SFT, the therapy technique is not based on that kind of patient capacity; however, it may signify potential to take an active role in working collaboratively with the therapist, even when the orientation is not psychodynamic, and thus increase adherence (de Shazer et al., 1986). The lack of a comparable finding in SPP is in contrast with one small study (Vaslamatzis and Verveniotis, 1985) and the original criteria of patient suitability in SPP, in which a good response to trial interpretation is considered to be one of the major characteristics expected from the patient (Malan, 1976). Because of the small numbers of individuals prematurely terminating the therapy a more detailed analysis could not be performed. The fact that 4 out of 10 individuals in SPP terminated due to reasons not related to suitability suggests that the finding may be artifact.

4.5.2. Reflective ability

In the present study we found in the LPP group an elevated risk of both refusal and premature termination in persons with poor reflective ability. In accordance several studies on moderate length and long-term psychodynamic psychotherapy showed a similar association between poor reflective ability and premature termination (Frayn, 1992; Høglend et al., 1994; Rubin et al., 2018). The consistent finding is understandable in view of the therapeutic technique and procedures in LPP which emphasize thorough exploration of intrapsychic and interpersonal issues, and suggests that the patients who have a lesser capacity or interest in self-reflection, are more prone to refuse or drop out from treatment (Høglend et al., 1994).

4.5.3. Motivation

In accordance with one study on SPP (Connolly Gibbons et al., 2019), the present study found no association between motivation and non-attendance in any of the treatment groups. Other previous studies on brief and moderate-length therapy (Charnas et al., 2010; Høglend, 1994; Vaslamatzis and Verveniotis, 1985) and one study on intensive long-term psychotherapy or psychoanalysis (Frayn, 1992) showed, however, an inverse association between motivation and premature termination. The contradictory finding, in comparison to most previous studies, may be attributable to the fact that the majority (>90%) of the patients in this study were moderately or highly motivated for psychotherapy (Laaksonen et al., 2012).

4.6. Clinical implications

The study shows that pre-treatment assessment of patients' psychological suitability for psychotherapy is valuable in addressing treatment non-attendance, which is a common aspect of failure in psychotherapy. The findings highlight the importance of tailoring treatment for the individual patient and of paying greater attention to early detection of risks for treatment failure, from the perspective of non-attendance (Barber and Solomov, 2019). Accordingly, comprehensive pre-treatment assessment of a patient's psychological functioning, capacities and nature of problems, may help to find an optimal match between patient characteristics and the modality and length of treatment, in order to reduce treatment non-attendance. It may also be beneficial to re-assess suitability by monitoring potential changes in the suitability characteristics during the early phases of the treatment. Due to the multifaceted nature of non-attendance, the relative importance of a patient's suitability and of other patient, therapist and therapy-related factors, known to predict non-attendance – albeit not necessarily treatment outcome – such as treatment preference (Windle et al., 2020), also require clinical attention.

4.7. Methodological issues

This study has several strengths. First, the randomization of the patients was successful, apparently because of the relatively large number of patients in the three therapy groups. Second, the relatively large sample and long follow-up ensures that relevant effects could be detected not only in the total study sample but also for different suitability categories. It was possible to study the prediction of suitability factors separately on refusal and on premature termination. Third, the availability of reliable data related to suitability enabled control for potential confounding factors. Finally, the data provided the possibility to study the prediction of suitability both for therapies of different length and different mode.

This study also had its limitations. Despite careful control for confounding in the cohort design, residual confounding cannot be excluded. Furthermore, because of the small number of individuals not starting therapy in the short-term therapy groups, the prediction of suitability on refusal could only be studied in the LPP. The patients in the study had agreed to participate in a trial with a lengthy follow-up and were in general highly motivated for psychotherapy, and thus the findings may not be directly generalized to unselected patients in the public mental health setting. Because of the large number of tests performed for the single suitability indicators, the significant results should be interpreted with caution.

5. Conclusions

Treatment non-attendance (i.e., refusal or premature termination) was significantly more incident in LPP patients with poor SPS score values, mainly due to poor flexibility of interaction, poor self-concept in relation to ego ideal, and poor reflective ability. Apparently, patients with greater ego dysfunction and poor capacity for self-observation anticipated poor 'fit' with the psychodynamic approach, problems in committing to LPP or experienced the aims as unattainable after engaging in treatment. Premature termination in SFT patients showed a similar association but due to other SPS measures: poor focality of problems, poor modulation of affects, or poor response to trial interpretation. Accordingly, those who prematurely dropped out of SFT may have experienced more complex problems and greater challenges in collaboration and in modulating affects, as not being addressed successfully in the treatment. Due to the initial randomized controlled trial design these aspects were not acknowledged in therapy group allocation. However, on the contrary, individuals with good values of SPS seemed to be more prone to premature termination in SPP, which, however, is likely attributable to factors other than suitability, as none of

those with poor suitability prematurely terminated treatment. Thus, poor values in patient suitability factors, apparently predict treatment non-attendance in LPP and SFT but not in SPP. More studies on large cohorts are still needed.

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The funding instances had no further role in study design; in the collection, analysis and interpretation of data; in the writing of the report; and in the decision to submit the paper for publication.

CRedit authorship contribution statement

Paul Knekt: Conceptualization, Methodology, Formal analysis, Investigation, Data curation, Writing – original draft, Visualization, Supervision, Funding acquisition. **Leena Grandell:** Conceptualization, Investigation, Writing – review & editing. **Laura Sares-Jäske:** Formal analysis, Investigation. **Olavi Lindfors:** Conceptualization, Investigation, Writing – review & editing, Supervision, Funding acquisition, Project administration.

Declaration of Competing Interest

None of the authors has any conflicts of interest.

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Supplementary materials

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