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Johansson, Håkan; Eklund, Mona

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# Helping alliance and early dropout in psychiatric outpatient care

The influence of patient factors

Håkan Johansson, Psychologist, MSc. 1,2

Mona Eklund, Professor, Ph.D. <sup>3</sup>

<sup>1</sup> Lund University Hospital, Division of Psychiatry. Storgatan 1-3, SE-241 30 Eslöv, Sweden Tel +46413 556532 Fax +46413 556500 E-mail: hakan.johansson@psychology.lu.se (Corresponding author and address)

<sup>&</sup>lt;sup>2</sup> Lund University, Department of Psychology, Lund, Sweden.

<sup>&</sup>lt;sup>3</sup> Lund University, Department of Health Sciences, Division of Occupational Therapy, Lund, Sweden.

# Abstract:

**Background:** The study examined client factors of relevance for the establishment of the helping alliance and for dropout in a routine psychiatric setting, admitting a variety of diagnoses and staffed with a multi-professional team.

**Method:** Newly-admitted patients (n= 122) and staff completed questionnaires regarding the helping alliance, and the patients also regarding motivation, symptoms and interpersonal problems. The patients were also diagnosed according to the ICD-10 and followed up concerning early dropout.

**Results:** Several variables correlated with the helping alliance and multivariate analyses showed that the cold/distant factor, motivation and the interpersonal sensitivity factor were the most important factors in establishing the helping alliance. Moreover, it was the alliance as perceived by the patients and not the staff that proved to be the most essential variable. A logistic regression analysis showed that early dropout was predicted by low helping alliance, low age and cold/distant.

**Conclusion:** The most important client factors for establishing the helping alliance and for predicting early dropout seem to be those relevant to interpersonal processes. Further, the therapists'/staff's responsiveness to these client factors seems to be of decisive importance.

**Key words:** helping alliance, working alliance, therapeutic alliance, therapeutic relationship, psychiatry, psychotherapy, psychiatric care, patient factors, dropout.

# Introduction

During the last few decades, a vast amount of research concerning the therapeutic or helping alliance has been produced. The reason for this is the consistent finding that the quality of the helping alliance is related to outcome and that the impact of the alliance is similar across various forms of treatments (1, 2). Most of the research on the importance of the alliance has been performed within the area of psychotherapy research, but seems relatively neglected in general psychiatric research (3). However, there are findings from different psychiatric settings, showing that the therapeutic alliance correlates with outcome (4-8). The therapeutic alliance is also associated with a better outcome in pharmacotherapy (9, 10), with adherence to medication and treatment recommendations (11-13) and with patients' perceptions of quality of life (14). The therapeutic relationship also seems significant for the outcome in other than traditional psychiatric settings, such as in general practitioners' treatment of psychological problems (15) and in counselling (16).

#### Helping alliance and client factors in psychotherapeutic and psychiatric research

Most studies concerning the relation between the alliance and outcome have had their focus on the alliance in a broad sense and less on factors that mediate or moderate the alliance. In an overview article concerning psychotherapy research and alliance, Horvath and Bedi (2) divided the mediating and moderating factors into client factors, therapist factors and relational/interactive factors. Reviewing the research on the influence of client variables in psychotherapy, Clarkin and Levy (17) argued that there is an almost unlimited number of client variables with potential influence on the outcome. They divided the client variables into different groups: (1) problems related to diagnosis and severity; (2) sociodemographic variables; (3) personality variables; (4) interpersonal variables; and (5) in-therapy variables (17). The authors stated that previous research has often examined client variables in isolation and has been focused on stable demographic factors, whereas only lately has the focus shifted to a broader range of client variables and to an interaction between client variables and therapist and treatment variables.

Regarding the severity of impairment, studies from psychotherapy research show mixed results in that some studies indicate that patients with more severe disturbances have greater difficulties in establishing a therapeutic alliance while other researchers find little influence from severity (2). Most studies have found no or few differences between various types of disorders or diagnostic variables and the helping alliance (18-20), even if there are indications that patients with borderline and other personality disorders tend to have greater difficulties in establishing a good therapeutic alliance (18, 21). Concerning personality and interpersonal variables, studies have shown that the patient's past object relations influenced the establishment of the therapeutic alliance, as did current interpersonal relations (18, 20, 22, 23). There are also studies showing that experiences of earlier social support as well as current social support have a positive impact on the establishment of the helping alliance (24, 25).

As mentioned above, few studies have been concerned with factors that mediate or moderate the alliance in psychotherapy research. This is even more evident in research concerning the therapeutic alliance in psychiatric settings. Apart from its association with outcome, little is known about how the alliance varies between different psychiatric settings and diagnostic groups and how it is influenced by different mediating and moderating factors (26). Studies have indicated that a positive alliance is associated with less severe problems (5, 7, 26-28), and age (28, 29). As in psychotherapy research, there is a weak tendency that patients with borderline and other personality disorders have greater difficulties in establishing a good

therapeutic alliance (21, 28). To our knowledge, only one study (26) has compared the therapeutic relationship for different diagnostic groups in a variety of routine psychiatric settings for in- and outpatients. They found that the therapeutic relationship was only partly explained by psychopathology, leaving the greater part of the variance to be explained by other than sociodemographic and clinical factors.

# The helping alliance and dropout

The helping alliance is also interesting in relation to dropout. A helping alliance established early in the therapy process, even after the first session, seems to be a good predictor of low dropout (30, 31). Early dropout deserves specific attention because it is often more associated with poor outcome than late dropout (32). Psychotherapy research indicates that between 30% and 60% of psychotherapy outpatients drop out prematurely (32-34), and research on psychiatric services shows that the dropout frequency varies between 20% and 70% (35-38). These varying numbers depend on methodological problems such as various settings being studied, but mostly on the fact that dropout is not a precise concept. Because of these methodological problems, the overall results from psychotherapy research are somewhat contradictory, with only socio-economic status and ethnicity as consistent predictors of dropout (32). Psychiatric research concerning dropout has mostly been focused on potentially predictive factors that concern, e.g. demographics, attitude, motivation, type of disorder, and administrative routines. Again, findings are contradictory, but common findings are addiction, low socio-economic status, low age, and negative attitude (35-40). Reis and Brown (32) argued in a review article that research looking at interactive and multidimensional factors, such as working alliance, satisfaction, patient likeability, and expectations, has proved to be more useful for predicting dropout than research on client, therapist and administrative variables.

Dropout and poor compliance is a huge problem for delivering good and effective mental health care. The dropouts are expensive in terms of time and money, and they display poor treatment outcomes (32). Therefore, knowledge about the determinants of dropout and the role of the helping alliance in this respect seems important for increasing the rate of patients that complete adequate psychiatric treatments. From the clinician's point of view, it is important if an early dropout can be predicted, which would make it possible to modify the course of treatment in an attempt to reduce premature termination. In psychiatric and psychotherapy research, most studies about client factors predicting dropout are concerned with demographic factors, diagnosis, or severity of problems. There are few studies on factors trying to detect reasons for dropout in depth, exploring the importance of intrapsychic, interpersonal and interactive factors, and, to the best of our knowledge, there are no such studies targeting general psychiatric research.

The aim of this study was to explore client factors of relevance for the establishment of the helping alliance and for dropout in a natural, routine, psychiatric setting with a variety of diagnoses and staffed with a multi-professional team. Client variables were selected on the basis of previous research on factors that may influence dropout and the establishment of the helping alliance, and these were motivation, demographic factors, diagnosis, symptom severity, different symptom clusters, and interpersonal problem variables. The study proceeded from the following research questions:

- 1. How were these specified patient factors related to the initial helping alliance?
- 2. Could these patient factors, or the initial helping alliance, predict patient dropout?

#### Material and methods

#### Participants and setting

The sample of patients was selected from a psychiatric outpatient unit in the main town of a medical-care district in southern Sweden, typical of how the psychiatric services are organised in Sweden. The unit had the responsibility for people with all kinds of psychiatric diagnoses in a geographic area of about 55,000 inhabitants, comprising both rural areas and the town. No acute admission was at hand at the unit, because acute admission in Sweden is centralised to units responsible for a greater geographic area. Also, most of the new-onset psychoses were admitted to a treatment unit specially designed for psychoses, whereas later in their treatment they were transferred to the unit targeted in this study. The patients could be referred to the unit from other caregivers or they were admitted by self-referral. The unit was staffed with a multi-professional team consisting of psychiatrists, psychologists, nurses, social workers, an occupational therapist, and physical therapists. The treatment provided by the unit was typical of this kind of setting in Sweden. It had a comprehensive view of health care, based on pharmacological treatment, different psychotherapeutic approaches, supportive therapy, social-support and social-skills training. The treatment was mostly focused on the individual, but the patients' families and other parts of their social network were at times included in the treatment. Some of the patients had contacts with more than one member of the team, but one professional was always the main caregiver. At times, they could change the main caregiver if different specialist functions were needed. Further, the unit practised close collaboration with other caregivers, such as the social insurance office or the communitybased psychiatry.

All new patients admitted during a period of approximately five months were asked to participate in the study. A new patient was defined as a patient who had not been in contact with the psychiatric unit during the past 18 months. This definition is in agreement with administrative conditions in the medical-care district. Patients admitted for just one planned consultation were excluded, as were patients who could not understand oral and written instructions, i.e. patients who were too sick to participate or who could not understand the Swedish language. A total of 181 patients were newly admitted to the psychiatric unit during the research period, but 32 of them met the exclusion criteria. Two were too sick to participate (acute, severe psychosis), 3 could not understand Swedish, 12 could not participate due to severe dementia/dyslexia/mental retardation/organic brain damages, and 15 were admitted for just one consultation.

#### **Instruments**

The Revised Helping Alliance Questionnaire (HAq-II)

HAq-II (41) is a 19-item self-report rating scale measuring the strength of the patient—therapist alliance. Each item is rated on a 6-point Likert scale (1= I strongly feel it is not true, 6= I strongly feel it is true). A patient version as well as a therapist version has been developed. It measures the helping alliance at an individual, subjective level. The scale has good internal consistency and test-retest reliability and a good convergent validity with other alliance measures (41). In the version used in the present study, the term personnel or staff replaced the term therapist.

#### Brief Symptom Inventory (BSI)

The BSI (42) is a 53-item self-report symptom inventory intended to describe psychological symptom patterns of psychiatric patients, as well as of community non-patient persons. It is the brief version of the SCL-90-R. The symptoms are rated on a five-point scale (0–4) from 0 (not at all) to 4 (extremely). The instrument consists of nine primary subscales: Somatisation,

Obsessive-Compulsive, Interpersonal Sensitivity, Depression, Anxiety, Hostility, Phobic Anxiety, Paranoid Ideation and Psychoticism. There are also three global indices, which are designed to reflect different aspects of psychological disorder: Global Severity Index (GSI), Positive Symptom Total (PST) and Positive Symptom Distress Index (PSDI). Good levels of reliability and validity have been shown concerning the BSI (42). In this study, standard T-scores were used.

# *Inventory of Interpersonal Problems (IIP)*

The Inventory of Interpersonal Problems (IIP) (43) is a 64-item self-report instrument designed to identify a person's most salient interpersonal problems. Each item is rated on a five-point scale ranging from 0 (not at all) to 4 (very much). The IIP has been found to have a circumplex organisation around two main dimensions: domineering/non-assertive and cold/self-sacrificing. Around these dimensions, eight domains of interpersonal functioning have been developed to measure a person's level of difficulties. The eight domains are Domineering/Controlling, Vindictive/Self-Centred, Cold/Distant, Socially Inhibited, Non-assertive, Overly Accommodating, Self-sacrificing and Intrusive/Needy. Satisfactory levels of reliability and validity have been found (43, 44). Standard T scores were used in this study.

#### Motivation questionnaire

To get an idea of the patients' attitude and motivation for visiting the psychiatric outpatient unit, a short questionnaire with two statements aimed at estimating the motivation was created. The two statements were (1) 'I wanted very much to come to the psychiatric unit' and (2) 'I came to the psychiatric unit on my own initiative'. Each item was rated on a four-point scale ranging from 1 (don't agree at all) to 4 (agree very much). The mean of the two items was used as a measure assessing the motivation of the patient. No studies concerning reliability and validity have been carried out but the items were regarded as showing face validity.

#### **Procedure**

After the first appointment at the psychiatric unit, the patients were asked if they wanted to participate in the study, and all who agreed gave their written consent. They could choose to complete the questionnaires directly after the session in a separate room, or they could bring them home and send them later by mail. After the first session, the staff member that had met the patient also filled out the HAq-II questionnaire. The patients were diagnosed according to the ICD-10, either by the staff member that met the patient or by that staff member in cooperation with the head psychiatrist. The Lund University Research Ethics Committee approved the study.

#### **Definition of early dropout**

Patients who did not attend the first appointment were not considered dropouts. The cut-off point for early dropout was set at three scheduled sessions, so if the patient did not attend the second or third scheduled session, he or she was regarded as an early dropout, but not if he or she dropped out after session three.

#### Data analysis

With the intention to identify relations between the helping alliance and all other investigated factors, a bivariate correlation was made between the helping alliance, as assessed by the patient and by the staff, and variables such as age, motivation, and the different subscales of BSI and IIP. The independent-samples t test and one-way ANOVA were used to analyse the helping alliance as a dependent variable with factors such as gender, dropout and the different diagnostic groups. A linear multiple regression analysis was made with the helping alliance

assessed by the patients as a dependent factor and with the different subscales of BSI and IIP, age, gender and motivation as dependent factors. In an attempt to investigate how problems exclusively related to psychological symptoms and interpersonal factors influenced the helping alliance, a second multiple regression analysis was performed with variables only from the IIP and BSI. For a number of reasons, including multicollinearity, specification errors, type I and type II errors, and power, there is a problem with many predictors in multivariate analyses (45). If irrelevant variables are included it will be more difficult to achieve statistical significance or acceptable cross-validation, thus trying to minimise the number of predictors is likely to result in more meaningful and comprehensible results (45). Hosmer and Lemeshow (46) recommend that variables with a p-value < 0.25 in the bivariate analyses should be included in the multivariate analyses. Following these directions we chose to reduce the large amount of data and, accordingly, included only those variables of BSI and IIP that in the bivariate analyses correlated with the dependent variable at a level of p< 0.25 (2-tailed).

When doing the statistical analyses concerning dropout, the independent-samples t test was used to examine differences between dropouts and non-dropouts according to age, the helping alliance, motivation, and the different subscales of BSI and IIP. Also, as an extension, a logistic regression analysis was made, with early dropout as a dependent factor with variables from the BSI and IIP, motivation, age, gender and patient and staff-assessed helping alliance as independent factors. Since there were few factors that correlated to a high extent with the dependent variable, the level was raised to p< 0.5 for factors that were included in the analysis. A chi-square test was used to examine differences between dropouts and non-dropouts according to gender and the different diagnostic groups.

When performing the analyses with the different diagnostic groups, the groups F50 (eating disorders) and F60–F69 (disorders of adult personality and behaviour) were grouped together in an attempt to achieve larger groups.

The statistical analyses were performed by SPSS 11.0 for Windows.

# **Results**

A total of 149 patients were asked to participate in the study and 122 (82%) agreed. Because of internal loss of data on some of the instruments, the analyses were based on 116 - 122 patients. Some characteristics of the sample are shown in Table 1.

Table 1. Characteristics of the sample (n = 122)

Characteristics	
Age in years (mean, SD min-max)	36.9, 14.5, 18–76
Gender (female/male)	84/38
ICD-10 diagnoses	
<ul> <li>Mental and behavioural disorders due to</li> </ul>	4 (3%)
psychoactive substance use, F10–F19	
<ul> <li>Schizophrenia, schizotypal and delusional disorders,</li> </ul>	3 (3%)
F20-F29	
<ul> <li>Mood (affective) disorders, F30–F39</li> </ul>	39 (32%)
<ul> <li>Neurotic, stress-related and somatoform</li> </ul>	63 (52%)
disorders, F40–F48	
<ul> <li>Eating disorders, F50</li> </ul>	9 (7%)
<ul> <li>Disorders of adult personality and</li> </ul>	4 (3%)
behaviour, F60-F69	

#### Helping alliance and client factors

The correlation between the helping alliance assessed by the patients and by the staff was r = 0.25 (p = 0.007). The mean was 4.87 on the patient-assessed helping alliance and 4.35 on the staff-assessed. This was a statistically significant difference (p = .000).

We found a significant difference between dropouts and non-dropouts with respect to the patients' assessment of the initial helping alliance. Dropouts had a significantly lower level of helping alliance (p = 0.034). No statistically significant difference was found between male and female patients, neither on the patients' nor on the staffs' assessment of the helping alliance. Similarly, we did not find any difference in the helping alliance, as assessed by patients or by the staff, between the different diagnostic groups according to ICD-10.

Significant correlations were found between the helping alliance and age, motivation, and a number of BSI and IIP factors (Table 2).

Table 2. Correlations between the helping alliance and age, motivation, BSI factors and IIP factors.

		Helping alliance	Helping alliance	
		assessed by patients	assessed by the staff	
Age		.243**	.178	
Motiv	ration	.260**	.154	
BSI	allon	.200	.101	
50.	Global Severity Index	185*	070	
	Somatisation	160	022	
	Obsessive-Compulsive	130	039	
	Interpersonal Sensitivity	324**	092	
	Depression	24 <b>7</b> **	020	
	Anxiety	.004	026	
	Hostility	139	184*	
	Phobic Anxiety	077	030	
	Paranoid Ideation	264**	203*	
	Psychoticism	300**	236*	
IIP				
	Total score	301**	16 <b>7</b>	
	Domineering/controlling	132	100	
	Vindictive/Self-Centred	283**	183*	
	Cold/Distant	411**	202*	
	Socially Inhibited	256 <b>**</b>	159	
	Non-assertive	163	073	
	Overly Accommodating	198*	094	
	Self-Sacrificing	098	026	
	Intrusive/Needy	176	102	

Note: BSI = Brief Symptom Inventory, IIP = Inventory of Interpersonal Problems

The patient-assessed helping alliance showed a statistically significant positive association with older age (p < 0.01) and with motivation (p < 0.01), while the staff-assessed helping alliance did not. Concerning the BSI, there was a negative association between the patients' assessments of the helping alliance and the global severity index (p < 0.05), as well as the symptoms 'interpersonal sensitivity', 'depression', 'paranoid ideation', and 'psychoticism' (p < 0.01). The staffs' assessments of the helping alliance showed a negative correlation with 'hostility', 'paranoid ideation', and with 'psychoticism' (p < 0.05). With respect to the IIP the patients' assessments of the helping alliance correlated negatively with the total score, 'vindictive/self-centred', 'cold/distant', 'socially inhibited' (p < 0.01) and with 'overly

<sup>\*\*</sup> P<0.01 \*P<0.05 2-tailed test.

accommodating' (p < 0.05). The staffs' assessments of the alliance were negatively associated only with 'vindictive/self-centred' and 'cold/distant' (p < 0.05).

A linear multiple regression analysis was performed with the patient-assessed helping alliance as the dependent variable. Those BSI and IIP variables, age, gender and, motivation that correlated with the patients' assessments of the helping alliance on a p-level of p < 0.25 were set as independent variables. The model resulted in two significant factors: 'cold/distant' from the IIP and motivation (F = 6.5, p = 0.000) (Table 3). These factors together explained about 23% of the variance of the helping alliance.

Table 3. Linear multiple regression analysis (forward) with the helping alliance as the dependent factor and subscales from BSI and IIP and age, gender and motivation, as independent factors.

Factor	R	R²	R² change
Cold/distant	.414	.174	.174
Motivation	.451	.236	.062

A second linear multiple regression analysis with the background variables excluded, and with only the previous variables from the BSI and IIP, resulted in a model with two significant variables: 'cold/distant' from the IIP and 'interpersonal sensitivity' from the BSI (F = 14.2, p = 0.000) (Table 4). These factors together explained about 20% of the variance of the helping alliance.

Table 4. Linear multiple regression analysis (forward) with the helping alliance as the dependent factor and subscales from BSI and IIP as independent factors.

Factor	R	R²	R² change	
Cold/Distant	.417	.174	.174	
Interpersonal Sensitivity	.451	.203	.029	

#### Early dropout and client factors

Out of the whole sample (n = 122), 19 (15.6%) patients were early dropouts. When using the independent-samples t test we found a significant difference between early dropouts and non-dropouts with respect to the patients' assessment of the initial helping alliance. Early dropouts had a significantly lower level of helping alliance (p = 0.034). No difference appeared between early dropouts and non-dropouts on staff-assessed helping alliance (p = 0.079). The results also showed that the early dropouts had a significantly lower age (p = 0.011) than the non-dropouts. No statistically significant difference was found between early dropouts and non-dropouts concerning motivation (p = 0.882) or gender (p = 0.097). Furthermore, there were no significant differences between early dropouts and non-dropouts concerning the different factors in BSI and IIP or the different diagnostic groups according to ICD-10. A logistic regression analysis was also performed with early dropout as the dependent factor and with variables from the BSI and IIP, motivation, age, gender, and patient- and staff-assessed helping alliance as independent factors. The model resulted in three significant variables: age, the cold/distant domain from the IIP, and patient-assessed helping alliance (Table 5). In total, the logistic regression model correctly predicted 90% of the patients.

Table 5. Logistic regression analysis (forward) with early dropout as the dependent factor with gender, age, motivation, patient and staff assessed helping alliance and subscales from IIP and BSI as dependent factors.

	β	S.E.	Wald	р
Age	153	.053	8.380	.004
Cold/Distant	120	.043	7.631	.006
Helping alliance	-1.547	.702	4.849	.028

#### **Discussion**

There was a significant difference in how patients and staff perceived the helping alliance in that the patients rated the helping alliance as better than the staff did. This is in line with findings from psychotherapy research and confirms that patients and staff have different perceptions of the helping alliance (18). Horvath and Symonds (47) found that it was the patients' assessment of the helping alliance, as opposed to therapist ratings or observer ratings, that was most predictive of the therapeutic outcome. However, more recent meta-analyses and overviews have found little variation between different sources of data, especially in later stages of the psychotherapy process (1, 2). Our results, however, were in agreement with the Horvath and Symonds overview (47) and showed that the patients' assessments of the helping alliance correlated most strongly and frequently with the different subscales of BSI and IIP, and only the patients' assessments predicted early dropout.

The results from the bivariate analyses showed that several factors correlated with the patients' assessments of the helping alliance. In accordance with earlier research from both psychotherapy and psychiatry, our result showed that a positive alliance was correlated with older age. Regarding type of disorder, there have been some findings indicating that people with personality disorders tend to have greater difficulties in establishing a good helping alliance (21, 28), but in this outpatient sample we found no significant differences between the diagnostic groups. This finding is consistent with other results from psychiatric and psychotherapeutic research, showing that the diagnosis is of relatively limited importance for establishing the therapeutic alliance (2, 26).

The present study showed a moderate correlation between the severity of problems, as measured with the total sums of BSI and IIP, and a poor helping alliance. This is in line with findings from psychiatric research (5, 7, 26), while studies from psychotherapeutic settings show inconsistent results (2). However, in our study, particular subgroups of symptoms and interpersonal problems showed greater correlation with the helping alliance than the total sums. This indicates that it might not be the general severity of problems that has the most impact on the establishment of the helping alliance, but instead more specific aspects of the problems.

McCabe and Priebe (26) suggested that hostility may be an important and obstructing factor for the formation of a good therapeutic relationship. In our study, it is noteworthy that hostility was not related to the alliance as assessed by the patients, but to the staff ratings of the alliance, which shows that the staff was very sensitive to perceived hostility from the patients. This may influence the preparedness and receptiveness of the staff in the establishment of the helping alliance.

The multiple regression analysis, including the background variables, showed that motivation was an important factor in establishing the helping alliance. It is interesting, though, as shown in the bivariate analyses, that it was only the patients' assessment of the helping alliance and

not the staff's assessment that correlated with their motivation. Thus, in establishing the helping alliance, it seems that the staff had sensitivity for hostility among the patients and, at the same time, a lack of sensitivity for the patients' motivation. This indicates that staff factors and how the staff perceives and relates to the patient, and not just patient factors, are of great significance in the establishment of the helping alliance. Since the staff had difficulties in perceiving or understanding the patients' motivation, they might have been less disposed to meet and respond to the patients' expectations, which in turn might have contributed to a lower alliance.

The multiple regression analysis with variables only from the BSI and IIP resulted in two significant factors for predicting the helping alliance, the cold/distant factor from the IIP and the interpersonal sensitivity factor from BSI, although this latter factor only contributed to about 3% of the variance. The cold/distant factor has been found important in other studies as well (48). Interestingly, both factors are client variables that cannot be viewed in isolation. This shows that the most important client factors for establishing the helping alliance seem to be client factors that are relevant for interpersonal processes. These findings correspond with a recent review concerning client factors and psychotherapy (17). The findings also supplement research concerning the helping alliance in psychiatric settings, arguing that the psychopathology of the patients only explains a minor proportion of the variance in the helping alliance, thus indicating the need for research regarding other important process factors (26).

The early dropout frequency in this study was in the lower segments as compared with other studies from psychiatric research, probably partly due to our conservative and rigorous definition of the concept. The results concerning dropout from the statistical analyses using t tests showed that only two factors predicted early dropout, namely low helping alliance and low age. The results from the logistic regression analysis discerned three variables, namely: age, cold/distant from the IIP, and patient-assessed helping alliance. No other diagnostic variables, type of problems, severity of problems, interpersonal problem variables, demographic factors, or motivation predicted early dropout. Low age being a predictor of early dropout is in line with results from some other studies concerning dropout from psychiatric research (35, 37, 38) and from psychotherapy (49). However, most studies concerning psychotherapy show that age is unimportant for early termination (17). Considering another aspect of our results, that age was positively associated with patientassessed helping alliance, the finding that low age was a predictor of early dropout might partly be explained by the fact that younger patients had more difficulties in establishing a helping alliance. The cold/distant factor was significant for early dropout, as well as for the establishment of the helping alliance, so it seems that the cold/distant factor is a client variable that had a great importance in the therapeutic relationship.

An interesting discussion concerning the helping alliance is whether or not it functions as a mediator to variables like therapeutic outcome and/or dropout. A mediator is a variable through which the independent variable affects the dependent variable (50). An ideal approach to this question should have been the use of statistical analyses like structural equation modelling, but in our case this would not have been appropriate due to our small sample of dropouts (51). However, our results gave some indication. Motivation was a significant factor in relation to the helping alliance, but interestingly, not to early dropout. At the same time the helping alliance was a factor that predicted the early dropout. These findings suggest that the helping alliance may serve as a mediator for how motivation, and most likely other factors, relate to early dropout. The validity of this chain of relationships could be tested in future research. Also, that relational factors, such as the helping alliance

and the interpersonal problems factor cold/distant, were predictors of early dropout, confirms other findings (32), showing that dropout is probably more due to interactive and multidimensional factors than to administrative.

There are methodological limitations to this study that call for some caution in interpreting the results. The sample was quite small, particularly when diagnostic subgroups were analysed. Further, the small numbers of early dropouts lowered the statistical power, and according to Altman (52) the proportion of 103 early non-dropouts and 19 early dropouts corresponds, in terms of statistical power, to a total sample size of about 65 subjects. However, this means that medium effect sizes could still be detected. There were also few patients with the most severe psychiatric conditions. However, the sample should be representative of patients in Swedish general psychiatric outpatient care, where most patients with psychoses are admitted to special outpatient units. Moreover, the reliability and validity in the assessment of diagnosis are doubtful. Depending on administrative routines and policies in the setting, the diagnoses were assessed very early in the treatment process and by different persons. Another flaw is that the motivation measure was not tested for validity and reliability. There was also a risk of multicollinearity between the different subscales in BSI and IIP, which may have affected the results in the multivariate analyses. That is why we also discussed the bivariate analyses above. However, the natural setting with its heterogeneity of patients and staff and the high participation rate may have strengthened the generalisability to similar settings, especially since the sampling method, selecting all patients within a certain period, should not have inferred a systematic bias. The majority of previous studies in this area have been conducted with selected groups of patients and in specialised settings, implying limited external validity.

#### Conclusion

The results from the present study showed no, or only minor, direct correlation between the helping alliance and different sociodemographic and client variables, such as diagnosis or problem severity. Instead, the result showed that client factors, relevant for the relation and interaction with others, were of decisive importance. This was true both for the establishment of the helping alliance and for predicting early dropout. Since it is the therapists/staff that have the professional responsibility for offering a good therapeutic relationship, and by extension an effective treatment, it is important that the therapists/staff become aware of the significance of these variables and of their own importance as active participants in the therapeutic relationship. Staff training programmes and supervision should address these issues in order to promote the quality of the helping alliance.

# References

- 1. Martin DJ, Garske JP, Davis MK. Relation of the therapeutic alliance with outcome and other variables: a meta-analytic review. J Consult Clin Psychol 2000;68(3):438-50.
- 2. Horvath AO, Bedi RP. The alliance. In: Norcross JC, editor. Psychotherapy relationships that work: Therapist contributions and responsiveness to patients. New York: Oxford University press; 2002. p. 37-69.
- 3. McGuire R, McCabe R, Priebe S. Theoretical frameworks for understanding and investigating the therapeutic relationship in psychiatry. Soc Psychiatry Psychiatr Epidemiol 2001;36(11):557-64.
- 4. Eklund M, Hansson L. The ward atmosphere of a psychiatric day care unit on the basis of occupational therapy: Characteristics and development during a 5-year period. Nordic Journal of Psychiatry 1996;50(2):117-125.
- 5. Frank AF, Gunderson JG. The role of the therapeutic alliance in the treatment of schizophrenia. Relationship to course and outcome. Arch Gen Psychiatry 1990;47(3):228-36.
- 6. Howgego IM, Yellowlees P, Owen C, Meldrum L, Dark F. The therapeutic alliance: the key to effective patient outcome? A descriptive review of the evidence in community mental health case management. Aust N Z J Psychiatry 2003;37(2):169-83.
- 7. Neale MS, Rosenheck RA. Therapeutic alliance and outcome in a VA intensive case management program. Psychiatr Serv 1995;46(7):719-21.
- 8. Svensson B, Hansson L. Therapeutic alliance in cognitive therapy for schizophrenic and other long-term mentally ill patients: development and relationship to outcome in an in-patient treatment programme. Acta Psychiatr Scand 1999;99(4):281-7.
- 9. Krupnick JL, Sotsky SM, Simmens S, Moyer J, Elkin I, Watkins J, et al. The role of the therapeutic alliance in psychotherapy and pharmacotherapy outcome: findings in the National Institute of Mental Health Treatment of Depression Collaborative Research Program. J Consult Clin Psychol 1996;64(3):532-9.
- 10. Weiss M, Gaston L, Propst A, Wisebord S, Zicherman V. The role of the alliance in the pharmacologic treatment of depression. J Clin Psychiatry 1997;58(5):196-204.
- 11. Cruz M, Pincus HA. Research on the influence that communication in psychiatric encounters has on treatment. Psychiatr Serv 2002;53(10):1253-65.
- 12. Lacro JP, Dunn LB, Dolder CR, Leckband SG, Jeste DV. Prevalence of and risk factors for medication nonadherence in patients with schizophrenia: a comprehensive review of recent literature. J Clin Psychiatry 2002;63(10):892-909.
- 13. Weiss KA, Smith TE, Hull JW, Piper AC, Huppert JD. Predictors of risk of nonadherence in outpatients with schizophrenia and other psychotic disorders. Schizophr Bull 2002;28(2):341-9.
- 14. McCabe R, Roder-Wanner UU, Hoffmann K, Priebe S. Therapeutic relationships and quality of life: association of two subjective constructs in schizophrenia patients. Int J Soc Psychiatry 1999;45(4):276-83.
- 15. Cape J. Patient-rated therapeutic relationship and outcome in general practitioner treatment of psychological problems. Br J Clin Psychol 2000;39 (Pt 4):383-95.
- 16. Mallinckrodt B. Session impact, working alliance, and treatment outcome in brief counseling. Journal of Counseling Psychology 1993;40(1):25-32.
- 17. Clarkin JF, Levy KN. The influence of client variables on psychotherapy. In: Lambert MJ, editor. Bergin and Garfield's Handbook of Psychotherapy and Behaviour Change. 5 ed. New York: John Wiley & Sons; 2004. p. 194-226.

- 18. Hersoug AG, Monsen JT, Havik OE, Hoglend P. Quality of early working alliance in psychotherapy: diagnoses, relationship and intrapsychic variables as predictors. Psychother Psychosom 2002;71(1):18-27.
- 19. Klein DN, Schwartz JE, Santiago NJ, Vivian D, Vocisano C, Castonguay LG, et al. Therapeutic alliance in depression treatment: controlling for prior change and patient characteristics. J Consult Clin Psychol 2003;71(6):997-1006.
- 20. Horvath AO, Greenberg LS. The working alliance. Theory, research and practice. New York: John Wiley & Sons; 1994.
- 21. Andreoli A, Frances A, Gex-Fabry M, Aapro N, Gerin P, Dazord A. Crisis intervention in depressed patients with and without DSM-III-R personality disorders. J Nerv Ment Dis 1993;181(12):732-7.
- 22. Kokotovic AM, Tracey TJ. Working alliance in the early phase of counseling. Journal of Counseling Psychology 1990;37(1):16-21.
- 23. Piper WE, Azim HF, Joyce AS, McCallum M, et al. Quality of object relations versus interpersonal functioning as predictors of therapeutic alliance and psychotherapy outcome. Journal of Nervous & Mental Disease 1991;179(7):432-438.
- 24. Mallinckrodt B. Change in working alliance, social support, and psychological symptoms in brief therapy. Journal of Counseling Psychology 1996;43(4):448-455.
- 25. Mallinckrodt B. Clients' representations of childhood emotional bonds with parents, social support, and formation of the working alliance. Journal of Counseling Psychology 1991;38(4):401-409.
- 26. McCabe R, Priebe S. Are therapeutic relationships in psychiatry explained by patients' symptoms? Factors influencing patient ratings. Eur Psychiatry 2003;18(5):220-5.
- 27. Clarkin JF, Hurt SW, Crilly JL. Therapeutic alliance and hospital treatment outcome. Hosp Community Psychiatry 1987;38(8):871-5.
- 28. Johansson H, Eklund M. Helping alliance and ward atmosphere in psychiatric inpatient care. Psychol Psychother 2004;77(Pt 4):511-23.
- 29. Draine J, Solomon P. Case manager alliance with clients in an older cohort. Community Mental Health Journal 1996;32(2):125-134.
- 30. Tryon GS, Kane AS. Relationship of working alliance to mutual and unilateral termination. Journal of Counseling Psychology 1993;40(1):33-36.
- 31. Mohl PC, Martinez D, Ticknor C, Huang M, et al. Early dropouts from psychotherapy. Journal of Nervous & Mental Disease 1991;179(8):478-481.
- 32. Reis BF, Brown LG. Reducing psychotherapy dropouts: Maximizing perspective convergence in the psychotherapy dyad. Psychotherapy: Theory, Research, Practice, Training 1999;36(2):123-136.
- 33. Garfield SL. Research on client variables in psychotherapy. In: Bergin AE, Garfield SL, editors. Handbook of psychotherapy and behavior change (4th ed.). Oxford, England: John Wiley & Sons; 1994. p. 190-228.
- 34. Wierzbicki M, Pekarik G. A meta-analysis of psychotherapy dropout. Professional Psychology: Research & Practice 1993;24(2):190-195.
- 35. Edlund MJ, Wang PS, Berglund PA, Katz SJ, Lin E, Kessler RC. Dropping out of mental health treatment: patterns and predictors among epidemiological survey respondents in the United States and Ontario. Am J Psychiatry 2002;159(5):845-51.
- 36. Glyngdal P, Sorensen P, Kistrup K. Non-compliance in community psychiatry: failed appointments in the referral system to psychiatric outpatient treatment. Nord J Psychiatry 2002;56(2):151-6.
- 37. Rossi A, Amaddeo F, Bisoffi G, Ruggeri M, Thornicroft G, Tansella M. Dropping out of care: inappropriate terminations of contact with community-based psychiatric services. Br J Psychiatry 2002;181:331-8.

- 38. Tehrani E, Krussel J, Borg L, Munk-Jorgensen P. Dropping out of psychiatric treatment: a prospective study of a first-admission cohort. Acta Psychiatr Scand 1996;94(4):266-71.
- 39. Grunebaum M, Luber P, Callahan M, Leon AC, et al. Predictors of missed appointments for psychiatric consultations in a primary care clinic. Psychiatric Services 1996;47(8):848-852.
- 40. Pelkonen M, Marttunen M, Laippala P, Lonnqvist J. Factors associated with early dropout from adolescent psychiatric outpatient treatment. J Am Acad Child Adolesc Psychiatry 2000;39(3):329-36.
- 41. Luborsky L, Barber JP, Siqueland L, Johnson S, et al. The revised Helping Alliance questionnaire (HAq-II): Psychometric properties. Journal of Psychotherapy Practice & Research 1996;5(3):260-271.
- 42. Derogatis LR. BSI: Brief Symptom Inventory. Administration, scoring, and procedures manual. 4 ed. Minneapolis: National Computer Systems, Inc.; 1993.
- 43. Horowitz LM, Alden LE, Wiggins JS, Pincus AL. IIP: Inventory of Interpersonal Problems. Manual. San Antonio: The Psychological Corporation; 2000.
- 44. Weinryb RM, Gustavsson JP, Hellstroem C, Anderson E, et al. Interpersonal problems and personality characteristics: Psychometric studies of the Swedish version of the IIP. Personality & Individual Differences 1996;20(1):13-23.
- 45. Licht M. Multiple Regression and Correlation. In: Grimm L, Yarnold P, editors. Reading and Understanding Multivariate Statistics. Washington, DC: American Psychological Association; 1995. p. 19-64.
- 46. Hosmer DW, Lemeshow S. Applied Logistic Regression. New York: John Wiley & Sons; 2000.
- 47. Horvath AO, Symonds BD. Relation between working alliance and outcome in psychotherapy: A meta-analysis. Journal of Counseling Psychology 1991;38(2):139-149.
- 48. Hersoug AG, Hoglend P, Monsen JT, Havik OE. Quality of working alliance in psychotherapy: therapist variables and patient/therapist similarity as predictors. J Psychother Pract Res 2001;10(4):205-16.
- 49. Thormahlen B, Weinryb RM, Noren K, Vinnars B, Bagedahl-Strindlund M, Barber JP. Patient Factors Predicting Dropout from Supportive-Expressive Psychotherapy for Patients with Personality Disorders. Psychotherapy Research 2003;13(4):493-509.
- 50. Holmbeck GN. Toward Terminological, Conceptual, and Statistical Clarity in the Study of Mediators and Moderators: Examples From the Child-Clinical and Pediatric Psychology Literatures. In: Kazdin AE, editor. Methodological Issues & Strategies in Clinical Research. 2 ed. Washington, D C: American Psychological Association; 1998. p. 83-111.
- 51. Loehlin JC. Latent Variable Models. An Introduction to Factor, Path, and Structural Equation Analysis. 4 ed. New Jersey: Lawrence Erlbaum Associates; 2004.
- 52. Altman DG. Practical statistics for medical research. London: Chapman & Hall; 1991.