

New, but improved? Comparison between first and revised version of the Helping Alliance questionnaire¹

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Summary

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There is a consensus in the psychotherapy research field to consider the therapeutic alliance, broadly defined as the mutual collaboration between the therapist and the patient, as a robust and consistent predictor of therapy outcome. There is little agreement, however, on the best way to operationalise and measure it. Several instruments are available, each of them displaying some unique features so that investigators have problems to choose among them on the basis of considerations other than ease of administration, continuity with previous research or availability.

One of the early self-report measures and widely used instruments was the Helping Alliance questionnaire (HAq-I) (Alexander and Luborsky, 1986). In recent years, we have become aware that it was limited by the presence of items that were explicitly assessing early symptomatic improvement and by the fact that all the items were worded positively. A revised version (HAq-II) was developed (Luborsky et al., 1996), guided by two main goals: (1) to reduce the inclination of the scale toward measuring early symptomatic improvement and thus confusing these two dimensions, and (2) to better incorporate the various aspects of the alliance related to the collaborative effort of patient and therapist. The new instrument includes 5 from the 11 items of the HAq-I and 14 new items – 5 of them worded negatively.

The aim of the study is twofold: to validate the French version of the new HAq-II and to investigate empirically to what extent the HAq-II has improved over the HAq-I. The sample included 60 self-referred outpatients assigned to a Brief Psychodynamic Investigation (BPI), a manual-based investigation procedure in four sessions guided by psychodynamic principles. We looked at the correlation between the two HAq (I and II) and the Working Alliance Inventory (WAI), patient pretreatment characteristics (SCL-90, HDRS, HAMA, IIP) and outcome (SCL-90, SAS and patient satisfaction).

Results showed that the French version of the HAq-II has good psychometric properties. Estimates of internal consistency and test-retest reliability were fairly similar to the original English version. Indication of its validity included high correlation with other alliance measures and independence from patient pretreatment characteristics. Surprisingly, HAq-II score predicted patient's satisfaction with the treatment but not symptomatic improvement. Taken together, these first results are promising and indicate that the translated version of the HAq-II is a valid instrument for measuring the helping alliance.

Concerning the comparison between the two versions of the HAq, HAq-II has proved to be an improvement compared to the original HAq-I scale: it better relates to the alliance construct and it is less influenced by the symptoms of the patient. Considering also its better construct validity (Luborsky et al., 1996), we definitely recommend the use of the revised HAq-II instead of the initial version of the scale.

Keywords: therapeutic alliance; scale; French validation; outcome

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Scientific interest in the concept of alliance has been maintained and stimulated by repeated findings that a strong alliance is associated with better final outcome. Two meta-analyses found an overall relation of alliance-outcome correlation of $r = 0.26$ (Horvath and Symonds, 1991) and $r = 0.22$ (Martin, Garske and Davis, 2000).

However, there is little agreement on the best way to measure the therapeutic alliance. Among the instruments available, the (1) Helping Alliance questionnaire (HAQ-I) developed by Lester Luborsky (see Alexander and Luborsky, 1986) is one of the most widely used, together with (2) the Working Alliance Inventory (WAI) (Horvath and Greenberg, 1986), (3) the California Psychotherapy Alliance Scale (CALPAS) (Marmar, Weiss and Gaston, 1989), and (4) the Vanderbilt Therapeutic Alliance Scale (VTAS) (Hartley and Strupp, 1983). Even if these instruments were based on different theoretical grounds, a comparison between them showed that they all had good psychometric properties (Tichenor and Hill, 1989), they tap into the same core general aspects of the construct, that is, the confident collaboration and bond between patient and therapist (Hatcher and Barends, 1996), and they are minimally different with respect to predictive validity (Fenton et al., 2001).

Each scale also has unique features. For example Barber et al. (1999) showed that despite relatively high correlation between HAQ-II and CALPAS, the HAQ-II was more sensitive in predicting outcome, whereas the CALPAS was more sensitive in predicting retention in treatment. According to the circumstances, the overlap between the different instruments varied from 12 to 76% ($M = 35\%$). It is then problematic for investigators to choose among the existing instruments on the basis of considerations other than ease of administration, continuity with previous research or availability.

Revising the Helping Alliance questionnaire

The original HAQ appeared to be the most predictive of outcomes, with a mean correlation of $r = 0.29$ in 24 studies (Martin, Garske and Davis, 2000). However, this result is problematic, given that 5 of the 11 items were explicitly related to symptom improvement (i.e. "I have been feeling better recently" or "I believe that the treatment is helping me"). This multidimensionality of the scale was confirmed by Bassler (2002) who found two factors on a sample of 231 inpatients: (1) the patient's satisfaction with therapeutic success, which includes the 5 items related to symptom improve-

ment, and (2) the patient's satisfaction with the therapeutic relationship, which includes the other 6 items more closely related to Bordin's concept of mutual agreement on tasks (i.e. "I feel I am working together with the therapist in a joint effort") and goals (i.e. "I feel the therapist wants to achieve my goals"). For Hatcher and Barends (1996) the HAQ's questions were too general to discriminate aspects of alliance effectively and the emphasis of the scale on help received made it actually a measure of outcome.

In order to address these issues and to better measure the core construct of mutual collaboration, a revised version (HAQ-II) was developed (Luborsky et al., 1996). Six items were deleted and 14 new items expected to better reflect the various aspects of the collaborative effort between patient and therapist were added ("the therapist and I have meaningful exchanges" or "a good relationship has formed with my therapist" for example).

As a result, HAQ-II was viewed as an improvement over HAQ-I. A first validation study on a sample of 246 cocaine-dependent outpatients (Luborsky et al., 1996) showed – as expected – a good convergent validity between the new scale and the CALPAS and no association with pretreatment psychiatric severity. However, the two versions of the scale have not yet been administered concurrently. This prevents us from concluding that HAQ-II is more valid than HAQ-I and it questions whether the instrument is an improvement of the first version or an other instrument with its own unique features.

This article is dedicated to a comparison between the original and the revised version of HAQ. We will look at (1) the relation between the two instruments and with other alliance measures, (2) the relation with pretreatment symptoms, and (3) the relation with outcome. As an improved instrument, HAQ-II should show more correlation with other alliance instruments, less correlation with pretreatment symptoms and at least as much correlation with outcome as HAQ-I.

Method

Sample

The sample included self-referred outpatients ($N = 60$) from the Adult Psychiatry outpatient unit of the University of Lausanne. All were assigned to a Brief Psychodynamic Investigation (BPI) carried out over four sessions. The general criteria for participation in the study included an age category of 17 to 60 years and a minimum of one diagnosis

related to anxiety, depression or personality disorders. Exclusion criteria included organic or delirium disorders, substantial alcohol or drug dependence, psychotic or bipolar disorders, mental retardation and antisocial personality disorder.

The patients were comprised of 23 men (38.4%) and 37 women (61.6%) with a mean age of 29.43 (SD = 8.9). Most of them were seeking therapeutic help for mood (63.3%) or anxiety disorders (36.7%), and occasionally for eating (5.0%) or sexual (5.0%) disorders. Some comorbidity was detected as the mean number of DSM-IV Axis I diagnoses were two disorders. Finally, 38% presented a Cluster C personality disorder on Axis II.

The treatments were conducted by ten therapists (3 of them women) affiliated with the Adult Psychiatric Department of the University of Lausanne. All therapists had much experience in the practice of psychodynamic therapy with a mean of 19 years of experience (ranging from 8 to 38 years) and were shown to be highly competent in BPI (Tadic et al., 2003).

Measures

Helping Alliance questionnaire-I (HAq-I). It is a widely used 11-item questionnaire that measures the strength of the patient-therapist therapeutic alliance (Alexander and Luborsky, 1986; Gérin, Dazord and Sali, 1991, for the French version). Each item is rated on a six-point Likert scale (from -3 = I strongly feel it is not true to +3 = I strongly feel it is true). In a meta-analytic review, Martin, Garske and Davis (2000) showed that HAq-I has adequate psychometric properties (overall reliability of 0.74) and was particularly good in predicting outcomes (average $r = 0.29$). Validated on a sample of 34 patients during long-term dynamic psychotherapy, the French version of the scale showed good internal consistency ($\alpha = 0.88$), and high correlations with the WAI at session 5 and 10 ($r = 0.79$ and 0.80 respectively) and with the CALPAS ($r = 0.79$ and 0.82 respectively) (Bachelor, 1991).

Helping Alliance questionnaire-II (HAq-II). It is a new 19-item questionnaire where 6 out of the 11 items from the original HAq-I were removed and 14 items added. Each item is rated on a six-point Likert scale (1 = I strongly feel it is not true; 6 = I strongly feel it is true).

In a study of the psychometric properties of the scale on a sample of 246 patients diagnosed with cocaine dependence, Luborsky et al. (1996) reported an excellent internal consistency coefficient (Cronbach's alphas ranged from 0.90 to

0.93) and test-retest reliability ($r = 0.78$ for patient version). The scale demonstrated good convergent validity with the CALPAS (correlations ranged between 0.59 and 0.71, depending on the session assessed) and was not associated with pretreatment psychiatric severity or level of depression.

The French translation was done by two researchers working independently. A consensual third version was then made which was translated back and compared with the original English version. Internal consistency (Cronbach's alphas ranged from 0.85 to 0.91) was fairly comparable to the original English version.

Outcome. Measures include symptom distress (Symptom Check-List), depression (Hamilton Depression Rating Scale) and anxiety (Hamilton Anxiety), Social adjustment (Social Adjustment Scale), interpersonal Problems (Inventory of Interpersonal Problems), and patient satisfaction (Patient satisfaction Questionnaire developed by de Roten, 1999). This last instrument assesses the patient's level of satisfaction with the treatment. It includes the following 5 questions: (1) Do you consider these sessions to have been helpful?; (2) Do you consider that you have reached the goals you had set?; (3) Do you feel satisfied with the sessions?; (4) Do you feel that you have changed thanks to these sessions?; and (5) Do you feel that these sessions have improved your symptoms? Each question is to be answered using a seven-point Likert-type scale.

Treatment

The majority of patients who come to our outpatients clinic for consultation begin treatment with a Brief Psychodynamic Investigation (BPI) over four sessions (Gilliéron, 1997). The BPI is a formalised, manual-based investigation procedure guided by psychodynamic principles.

Furthering the development of the therapeutic alliance is one of the major aims of the BPI. As such BPI is a particularly pertinent context for studying early alliance. We showed (de Roten et al., 2004) that alliance changed significantly during BPI for about 80% of our patients.

Data analysis

Alliance in all 4 sessions of the BPI was examined. First, the normal distribution of the data (HAq-I and HAq-II) was tested using Kolmogoroff-Smirnoff test. Pearson's product-moment correlation was used to examine the relation between

Table 1 Descriptives of HAq-II score at each session (N = 60).

HAq-II	M	SD	min	max
session 1	84.12	11.4	61	114
session 2	87.47	12.3	59	111
session 3	89.73	13.2	52	111
session 4	90.54	14.4	52	113

HAq-II = revised Helping Alliance questionnaire II, patient version.

HAq-II and the other measures (alliance scales and symptomatic distress). Partial correlations controlling for pretreatment level were used to examine the relation between HAq-II and the outcome measures.

Results

HAq-II scores changed during the treatment, with $F(3,57) = 5.53, p < 0.01$ (see table 1). Compared to other studies, (i.e., Barber et al., 1999), alliance scores were not very high at the end of the first session (114 for HAq-II) and increased only moderately over the course of the four sessions.

Relation between alliance measures

Table 2 shows the correlations between the patient version of HAq-II and the patient version of HAq-I for each of the four sessions and the observer version of the WAI for session 2 and 4. Two independent coders rated the WAI (median Intra-Class Coefficient of 0.76).

The two versions of the HAq were highly correlated (overall $r = 0.75, p < 0.001$). The WAI scales were also correlated with the HAq-II, indicating a fair amount of the variance shared by the two instruments, whereas the correlations with HAq-I were lower (ranging from $r = 0.17$ to $r = 0.34$).

Influence of pretreatment patient characteristics

There was no correlation found between pretreatment measures of patient problems (SCL-90, HDRS, HAMA, IIP) and either version of the HAq. The only exception concerns the Social Adjustment Scale (SAS) which was correlated with the HAq-I at each session (ranging from $r = -0.22$ to $r = -0.35$).

Confirming results from the validation study of the original English version (Luborsky et al., 1996), no correlation was found between HAq (I and II) and socio-demographic variables such as age, sex, marital status and employment.

Prediction of outcome

Table 3 shows the correlations between HAq (I and II) and outcomes. There is a change between intake and end of the treatment for Global Symptom Index (GSI) ($t[59] = 4.46, p < 0.001$), and for SAS ($t[59] = 2.95, p < 0.05$). We see in table 3 that HAq-I is related to GSI and SAS, but only for those sessions where outcomes are measured. As expected, it is the "satisfaction with the treatment" factor that is correlated with GSI (partial $r = 0.34, p > 0.01$) and with SAS (partial $r = 0.36, p > 0.01$), and not the "satisfaction with the relationship" fac-

Table 2 Correlations between HAq-II and other alliances' scales (N = 60).

scale	HAq-II, patient version			
	S 1	S 2	S 3	S 4
HAq-I, patient				
total	0.75	0.81	0.76	0.81
F1. relationship	0.82	0.87	0.85	0.88
F2. success	0.48	0.56	0.57	0.58
WAI, observer				
bond	-	0.42	-	0.39
tasks	-	0.51	-	0.43
goals	-	0.35 ^a	-	0.41
total	-	0.45	-	0.41

HAq-I = Helping Alliance questionnaire I; HAq-II = revised Helping Alliance questionnaire II; WAI = Working Alliance Inventory; S 1, S 2, S 3, S 4 = Session 1, 2, 3, 4; F1. = Factor 1 "satisfaction with the relationship"; F2. = Factor 2 "satisfaction with the therapeutic success"; all correlations $p < 0.001$, except ^a $p < 0.01$.

Table 3 Correlations between alliance and outcome (N = 60).

	HAq-I				HAq-II			
	S 1	S 2	S 3	S 4	S 1	S 2	S 3	S 4
Symptom Check List (SCL-90r)								
GSI ^a	0.15	0.14	-0.10	-0.28*	0.24	0.10	0.06	-0.04
Social Adjustment Scale (SAS-SR)								
SAS ^a	0.04	0.03	-0.13	-0.38***	0.13	0.08	0.10	-0.16
Patient Satisfaction Questionnaire (PSQ)								
PSQ	0.33**	0.52***	0.62***	0.80***	0.17	0.47***	0.59***	0.64***

^a Partial correlation controlling for pretreatment level.

* p <0.05; ** p <0.01; *** p <0.001.

tor. No correlations with GSI or SAS were found with HAq-II, even when considering these two factors.

Discussion

In this report we present some psychometric data on the French version of the HAq-II, a revised version of the Helping Alliance questionnaire which is one of the mostly used instruments for measuring therapeutic alliance. Estimates of internal consistency and test-retest reliability were fairly similar to the original English version. Indication of its validity included high correlation with other alliance measures and independence from patient pretreatment characteristics. Surprisingly, HAq-II score predicted patient's satisfaction with the treatment but not symptomatic improvement. Taken together, these first results are promising and indicate that the translated version of the HAq-II is a valid instrument for measuring the helping alliance.

A further question – not documented yet – was investigated: To what extent was the HAq-II improved over the HAq-I? HAq-I has the advantage of being very short and Luborsky (2000) has shown that its validity is at least as good as the other instruments used in the field. The construction of the second version was guided by two main goals: (1) to better incorporate the various aspects of the alliance as described, for example, by Bordin (1979) and which are related to the collaborative effort of patient and therapist, and (2) to reduce the inclination of the scale toward measuring early symptomatic improvement and thus confusing these two dimensions.

Measuring the alliance construct

Regarding Bordin's components of the alliance, HAq-II offers a better convergence with the WAI

scale and subscales. Correlations ranging from 0.35 to 0.51 were twice as high when compared with HAq-I; they were significant as compared with all dimensions of the WAI and for the two coded sessions. Compared to the correlations usually reported between patient and observer-rated instruments (Fenton et al., 2001), these are relatively high, indicating a fair amount of shared common variance.

Influence of symptomatic distress and early improvement

Both instruments showed to be independent from pretreatment symptomatology except social adjustment. As expected, HAq-I was correlated with SAS at each of the four sessions, whereas there were no correlations with HAq-II. This result may be explained when considering our sample. It was comprised of patients who did not show the same symptoms (mean GSI = 0.89, SD = 0.50) and who sought help mostly when facing a crisis with their environment (SAS at intake, M = 2.07, SD = 0.37). It was also observed that correlation rises with each session. Given that the alliance also tends to increase with each session and that problems of social adjustment are reduced during treatment (SAS after the four sessions, M = 1.93, SD = 0.48), we may conclude that the improvements following the crises also have an influence on the alliance measure concerning the HAq-I but not the HAq-II.

This type of improvement, inherent in the HAq-I, is found in the outcome measures. The HAq-I conducted during the fourth session is correlated with the GSI and the SAS after the fourth session. Yet, only the items concerning symptoms (the "satisfaction with the treatment" factor) predicted the symptomatic improvement, which is rather tautological. That is why these items were removed in the revised version. There is, however, no correlation between HAq-II and the outcome measures.

Finally, when the patient's satisfaction is considered, both versions of the HAQ showed significant correlations. As suggested by Hatcher and Barends (1996), helpfulness is an important aspect of patients' perception of the alliance. However, the comparison between the two versions of the HAQ showed that patients are to some degree able to distinguish between helpfulness as a process which they expect will lead to a favourable good outcome (alliance) and helpfulness as related to actual changes in their problems (improvement).

Conclusion

HAQ-II has proved to be an improvement compared to the original HAQ-I scale: (1) it better relates to the alliance construct and (2) it is less influenced by the symptoms of the patient. Considering also its better construct validity (Luborsky et al., 1996), we definitely recommend the use of the revised HAQ-II instead of the initial version of the scale.

Further research is needed to study common and specific factors in HAQ-II when compared to other alliance instruments. For example, Barber et al. (1996) showed that CALPAS and HAQ-II, despite a relatively high correlation between the two, have different abilities in predicting retention and outcome for patients being treated for cocaine dependence.

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