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# Identifying the determinants of perceived quality in outpatient child and adolescent mental health services from the perspectives of parents and patients

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Conflict of interest: None.

#### Abstract

*Objectives:* This cross-sectional survey adopting a multiple-informant perspective explores the factors that influence perceived quality (i.e., therapeutic alliance and satisfaction) in an outpatient setting within child and adolescent mental health services (CAMHS).

*Method:* A total of 1,433 participants (parents, n = 770, and patients, n = 663) attending or having attended (drop-out) outpatient units participated in the study. The outcome measures were satisfaction (Client Satisfaction Questionnaire) and the therapeutic alliance (Helping Alliance Questionnaire). The determinants of these quality indicators were socio-demographic variables (e.g., age, gender, and mother's socio-economic status), factors related to the severity of the problem (number of reasons for the consultation, number of people who referred the child to the CAMHS), the mental state at the first appointment (agreeing to the consultation, feeling reassured at the first appointment), the organization of the service (secretary, waiting room, waiting time for the first appointment) and of the therapy (frequency of sessions, time for questions, change of therapist).

**Results:** The mental state at the first appointment, accessibility by phone, satisfaction with the frequency of the sessions and having enough time for questions were the factors that consistently explain the quality indicators from both perspectives (patients and parents). In contrast, the socio-demographic variables as well as the severity of the problem and factors related to the organization of the therapy and service (frequency of sessions, change of therapist) were not related to the quality indicators. *Conclusion:* This study identifies key determinants of the quality indicators from the perspective of patients and parents that should be considered to improve CAMHS care quality. First appointments should be carefully prepared, and clinicians should centre care on the needs and expectations of patients and parents.

Keywords: Therapeutic Alliance; Patient Satisfaction; Outpatient Care; Patient-centred care

#### Introduction

Between 12% and 20% of children and adolescents from 4 to 16 years of age suffer from psychiatric disorders [1]. Among them, 40% will still need care during adulthood [2]. In the same line, 75% of the psychiatric illnesses observed in adults begin before 18 years of age [3]. Psychiatric disorders are often related to difficulties in relationships (with either peers or family), school disruptions, increased suicide risk and premature mortality [4]. Access to mental health care is not associated with the severity of the disorder and is only available for a minority of children and adolescents with psychiatric disorders [5]. Moreover, a large proportion (from 25% to 75%) of the treatments in youth mental care results in premature termination (drop-out) [6]. To prevent drop-out and to guarantee access to appropriate mental health care in child and mental health services (CAMHS), quality of care should be carefully assessed [7].

Although there is no consensus among researchers concerning the key quality indicators in CAMHS [8], two important concepts are highlighted. First, patients' satisfaction is recognized as a key indicator for quality of care by the World Health Organization [9] and by further medical experts in CAMHS [10]. Second, a good therapeutic alliance is associated with positive outcomes after psychotherapy [11-14] as well as improved parenting [15], reductions in the child's symptomatology [16-18] and improved family functioning [19].

Only a few studies have investigated the determinants that influence the quality indicators (i.e., satisfaction and alliance) in CAMHS, yielding inconsistent results. Although no influence of either ethnicity or socio-economic factors on satisfaction has been observed in a study [20], two other studies find a correlation between children's age and their satisfaction [20,21]. Both studies indicate that satisfaction decreases with age, which can be explained by the fact that children become more critical when they enter care at adolescence. Gender differences in child and adolescent satisfaction are found in one single study [21], in which boys show higher satisfaction than girls, though no gender differences in the therapeutic alliance are observed. Concerning the severity of the disorder, although some studies [20,21] do not find any relationship with the quality indicators, others [22] find that emotional and behavioural problems are strongly and negatively correlated with adolescents' satisfaction with CAMHS. Specifically, more severe emotional and behavioural problems are associated with lower overall satisfaction. Similarly, another study [23] reveals that young people who report conduct problems are less satisfied with CAMHS, as do those who rate their problems as having a significant impact on their lives. Additionally, in his review of the literature on

satisfaction [24], Biering highlights that the "environment and organization of services" factor, which includes access to services and healthcare providers, comfort and cleanliness, and the flexibility of the services, is very relevant to adolescents' experience with CAMHS [25]. Therefore, this dimension must be considered, bearing in mind that an unpleasant environment may lead young people to avoid seeking help in the future because satisfaction is related to future service use [26,20].

Considering the existing evidence, it becomes clear that only a few studies have attempted to explore the key determinants of the quality indicators (and these studies only focus on satisfaction). Furthermore, to the best of our knowledge, no studies have considered patients who drop out of the treatment and patients who remain in treatment. Including drop-out patients makes it possible to reduce the bias of satisfaction due to the focus on one specific population and thus enhances the generalization of the results.

Notably, the majority of the previous studies that assess satisfaction in CAMHS have emphasized significant differences between patients and parents [27-29], revealing a higher satisfaction for parents [29,30,23]. Because of these known child-parent differences, it is essential to include the opinions of both parents and patients when assessing quality of care in CAMHS. Furthermore, because questionnaires are subjective and require good introspective capacities, the gold standard for maximizing objectivity is to use a multiple-informant procedure [31,32], thus leading to a better understanding of perceived quality.

#### *The current study*

Using the perspectives of multiple informants (i.e., patients and parents), the present study aims to explore the determinants that influence the perceived quality of care (i.e., satisfaction and the therapeutic alliance) in CAMHS outpatients. Because very little is known about the determinants of the therapeutic alliance, we infer that the same factors that influence the dimensions of satisfaction may be useful for understanding the therapeutic alliance dimension. Within this context, we conduct this exploratory study to assess the link between various determinants from five domains and the quality of mental health care (i.e., satisfaction and the therapeutic alliance) from both the perspectives of patients and parents. The choice of the following domains is based on previous studies [e.g., 24] and our clinical expertise: (1) socio-demographic factors (gender, age, socio-economic status), (2) the severity of the disorder (number of people who made a referral, number of reasons for the first appointment), (3) the mental state at the first appointment (level of agreement and reassurance at the first appointment), (4) the organization of the service (waiting time for the first appointment, accessibility by phone, change of therapist, the kindness of the secretary, the comfort of the

waiting room) and (5) the organization of the therapy (frequency of sessions, satisfaction with the frequency of sessions, time for questions).

#### Methods

#### Data collection - context

Data were collected from 10 CAMHS outpatient units from both urban and rural areas of the French part of Switzerland. In these units, mental care consisted of clinical evaluation and global care. The therapists were either psychiatrists or psychologists. Those who were not already fully certified benefitted from supervision by an internal or external senior clinician. All psychiatrists and psychologists were trained in psychotherapy (psychodynamic, systemic or cognitive behaviour). Treatment mostly consisted of individual or family sessions and sometimes group sessions. Most patients participated in family sessions. If needed, treatment also included collaboration with other professionals (for example, social workers of the department for child protection, teachers, physicians, etc.) and medication. When necessary, the therapist was assisted by a second therapist or by a social worker of the outpatient unit. The Ethics Committee for Human Research of the State of Vaud approved the study protocol. The participants were recruited through posters displayed in the hospital.

#### Data collection - procedures

Young people who were willing to participate received a set of questionnaires from the secretary or by picking up a copy displayed in the waiting room. Participation in the study was voluntary and anonymous, without any intervention by the therapist in charge of the patient. Once completed, the participants (either patients and/or parents) dropped off the questionnaires in a locked box. The boxes were collected after 7 weeks. The participation rate was 50% of the patients consulting services during the study. No information on the patients or parents who refused to participate in the survey was available.

With respect to the drop-out group, patients who stopped their treatment without the therapist's agreement were identified (from the year before the data collection) through their personal file and contacted by mail, informing them that they would receive a phone call from a collaborator. This collaborator, a psychologist, was trained to complete questionnaires by phone and contacted families over a 3-month period. The exclusion criteria were: having an invalid address or phone number or receiving no phone response after three calls over three different days and weeks. Among the contacted families, the response rate was 85%, with at least one person (patient or parent) participating in the study. The voluntary character of the study was reiterated at the beginning of the phone call.

#### **Participants**

Table 1 describes the socio-demographic variable of the patient and parent samples. A total of 1,433 participants (parents, n = 770, and patients older than 10 years of age, n = 663, paired-sample, n = 203) attending or having attended (drop-out) outpatient units participated in the study.

In the patient sample, the gender ratio is almost equivalent. The patients are 14 years of age. The majority of patients come from a middle-class socio-economic background. The large majority of patients were still in treatment when they participated in the survey. The majority of patients perform consultations either once a week or every two weeks. They receive many types of treatment, with the majority being individual therapy along with family therapy. Approximately one-third of the patients receive medication.

Regarding the parent sample, the vast majority of the respondents are mothers, which is consistent with the fact that mothers are the main guardians who accompany children to CAMHS. More girls than boys were included in this sample (60%). The patients are younger than in the sample of children (less than 10 years). Similar to the patient sample, a middle-class socio-economic background is also observed. Similar to the patient sample, the large majority of patients were still in treatment when they participated in the survey. The frequency of sessions is variable in approximately two-thirds of the cases. Similar to the patient sample, the patient sample, the patient sample, the patient seceive many types of treatment, with the majority being individual therapy along with family therapy. Approximately 20% of patients receive medication.

#### Measures

The two quality indicators used, satisfaction and the therapeutic alliance, were scored according to the following scales. Their detailed psychometric properties have been described in a previous publication [33].

#### Therapeutic alliance

To measure the therapeutic alliance, we used a French translation of the initial version of the Helping Alliance Questionnaire (HAQ) [34] that was slightly modified to enhance the "relational dimension" of the score [33]. This version of the HAQ is an 8-item questionnaire concerning the patient-therapist relationship, and each item is rated on a six-point scale ranging from 1 (*not agree at all*) to 6 (*completely agree*). The reliability of the mean score computed with Cronbach's alpha is good in the patient ( $\alpha = .900$ ) and the parent ( $\alpha = .897$ ) samples.

#### **Satisfaction**

To measure satisfaction, we used the French translation [35] of the 8-item version of the Consumer Satisfaction Questionnaire (CSQ-8) [36]. It is a widely used instrument for measuring satisfaction related to health care [36]. The CSQ-8 is a self-report questionnaire that consists of 8 items, with each rated on a 4-point Likert-type scale. A higher score represents greater satisfaction. The reliabilities of the score, computed with Cronbach's alpha, are excellent in the patient ( $\alpha = .925$ ) and the parent ( $\alpha = .951$ ) samples.

#### Determinants

#### Socio-demographic factors

In addition to the patients' age and gender, we measured the socio-economic status of the patient's parents using the Socio-Economic Status index (SES); the response options range from 1 (*low socio-economic status*) to 4 (*high socio-economic status*) based on education level and occupation [37].

#### Severity of the problem

Two proximal measures were used to approximate the severity of the problems for which the young people received consultations: the number of people addressing the patient and the number of reasons for the consultation. Because we did not have any information from the clinicians (due to the anonymized procedure; see above), we did not have access to the diagnoses or severity of the disorders. Therefore, we used this proxy to estimate the degree of difficulty of the patients. More precisely, the participants were invited to indicate the number of people who asked for a referral to CAMHS (e.g., parents, paediatrician, teacher, or social worker). The underlying assumption is the fact that the more people who referred the young people, the more life domains are impacted by the mental problems. The second score refers to the number of reasons for asking for a consultation in CAMHS (e.g., behaviour problems, difficulties at school, difficulties in the family, suicidal crisis, eating disorder, depression, stress and anxiety). Similarly, the assumption underlying this proxy is the more reasons there are, the more life domains are impacted by the mental problem.

#### Mental state at the first appointment

The patient and parents' agreement for the first appointment was assessed by the question "Did you agree to come to the outpatient unit for the first appointment?", and their reassurance at the first appointment was assessed by the question "Were you reassured at the first appointment?". Both items were assessed on a 4-point scale ranging from 1 (*no, not at all*) to 4 (*yes, completely*). The Bravais-Pearson point biserial correlation coefficients are r

(560) = .452 (p < .001) in the patient sample and r (592) = .260 (p < .001) in the parent sample.

#### Organization of the service

Satisfaction with accessibility by phone, the secretary and the waiting room was assessed on a 4-point scale ranging from 1 = not at all satisfied to 4 = entirely satisfied. The participants also answered the question "Was the waiting time for the first appointment reasonable to you?" either yes (=1) or no (=0).

#### Organization of the therapy

The frequency of sessions was assessed on a scale ranging from 1 to 9 (1= 2 to 3 times per week; 9 = once every 3 months). Satisfaction with frequency was assessed by 0 = not satisfied (either too much or not enough) and 1 = okay, satisfied. The participants reported if there was a change of therapist during psychiatric care (0 = no; 1 = yes). Satisfaction with the time to formulate questions was assessed on a four-point scale ranging from 1 (not at all) to 4 (entirely satisfied).

#### Data analyses

Exploratory analyses show that the data suit Gaussian distribution, and no outliers are identified, which is also the case for the residuals of the regression analyses. No collinearity problems are found.

First, we performed paired-samples Student's t-tests to compare the outcome variables according to the perceptions of parents and patients to evaluate the perspectives of multiple informants. Second, we calculated the Bravais-Pearson correlation coefficients between the quality indicators from patients' perspectives and the parents' perspectives. Third, we conducted hierarchical linear regression analyses to predict the variance in the therapeutic alliance and the global satisfaction from the perspectives of patients and parents. In all regression analyses, we included drop-out in the first step and the following predictors in the second step: (1) socio-demographic factors (patient gender, patient age, parents' SES), (2) the severity of the problem (number of people who made a referral, number of reasons for the first consultation), (3) the mental state at the first appointment (the levels of user agreement and of reassurance due to the first appointment), (4) the organization of the service (waiting time for the first appointment, accessibility by phone, the kindness of the secretary, the comfort of the waiting room, change of therapist) and (5) the organization of the therapy (frequency of consultations, satisfaction with frequency, time to formulate questions). The significance of the *p*-value was set, by convention, at p < .05.

#### Results

#### Paired-samples t-tests

The paired-samples t-tests revealed significant multiple-informant differences for the therapeutic alliance (t(202) = 21.61, p < .001, Patients: Mean = 4.82, SD = 1.07; Parents: Mean = 6.52 SD = 1.38) and satisfaction (t(191) = 2.72, p < .01, Patients: Mean = 3.15, SD = 0.70; Parents: Mean = 3.28, SD = 0.69), with parents reporting higher scores. Furthermore, the independent-samples t-tests revealed no differences between the mothers' and fathers' ratings of satisfaction and the therapeutic alliance. Additionally, the paired-samples t-tests indicated no differences between scores from patients who participated alone in the survey and patients whose parents also participated in the survey.

#### Correlational analyses

The correlations between the therapeutic alliance and satisfaction scores according to the perspective of parents and patients revealed significant correlations ( $r = .590 \ p < .001$ , r = .554, p < .001, respectively).

#### Hierarchical regression analyses

Table 2 reports the hierarchical regression analyses conducted on the patients' therapeutic alliance score. The other regression analyses conducted on the satisfaction score are analogous.

As noted above, the drop-out variable was included in the model in the first step to control for this variable. It shows a significant influence on the patient alliance ( $\beta = -.242$ ,  $R^2 = .059$ , p < .001), on the parents' perspective on the patient alliance ( $\beta = -.406$ ,  $R^2 = .165$ , p < .001), on the patient satisfaction ( $\beta = -.181$ ,  $R^2 = .033$ , p = .002), and on the parent satisfaction ( $\beta = -.443$ ,  $R^2 = .196$ , p < .001). Lower scores are reported in the case of drop-out. Only the second step of the analyses is further described.

#### Alliance

The patient alliance was significantly explained by our model ( $F(16, 292) = 20.62, p < .001, R^2 = .544; R^2 change = .486$ ). More specifically, patients who were satisfied with the frequency of consultations and who found that they had enough time to formulate questions reported a better alliance. Finally, the patients who found that they had easy accessibility to CAMHS by phone reported higher alliance scores (see Table 3 for details).

The parents' assessment of the patient alliance was significantly explained by our model  $(F(16, 415) = 10.53, p < .001, R^2 = .297, R^2$  change = .132). In particular, reassurance at the first appointment ( $\beta = .098, p = .034$ ), satisfaction with the frequency ( $\beta = .143, p = .001$ ),

the time to formulate questions ( $\beta = .217$ , p < .001), and accessibility by phone ( $\beta = .098$ , p = .041) were related to higher alliance scores.

#### Satisfaction

The patient satisfaction score was significantly explained by our model ( $F(16, 292) = 24.47, p < .001, R^2 = .587, R^2 change = .554$ ). In particular, the significant predictors were the patient's gender ( $\beta = -.116, p = .005$ ), with girls reporting higher satisfaction. Furthermore, the more the patients agreed to the consultation ( $\beta = -.261, p < .001$ ) and were reassured by the first appointment ( $\beta = -.138, p = .003$ ), the more the patients reported satisfaction. The patients reported more satisfaction when: the frequency of appointments ( $\beta = .365, p < .001$ ) was adapted, the patients had time to formulate questions ( $\beta = .131, p = .003$ ), and they had easy accessibility by phone ( $\beta = .153, p < .001$ ).

The parents' assessment of satisfaction was significantly explained by our model (F(16, 416) = 15.46, p < .001,  $R^2 = .382$ ,  $R^2$  change = .186). In particular, regarding the patient's gender ( $\beta$  = -.085, p =.036), the parents of girls reported higher satisfaction. Higher satisfaction was also related by parents who were more reassured by the first appointment ( $\beta$  = -.143, p = .001), more satisfied with the frequency of appointments ( $\beta$  = .154, p < .001) and who had enough time to formulate questions ( $\beta$  = .242, p < .001).

#### Discussion

The present study focused on identifying the main determinants that influence the perceived quality of therapeutic work in CAMHS. The design of our study offered several original and interesting methodological strengths: (1) it included drop-out patients and patients in treatment, (2) it considered the perspectives of both parents and patients (multiple informants), (3) it included large and representative samples (663 patients and 770 parents), (4) it explored a large number of possible determinants of the quality indicators, and (5) it included two quality indicators (i.e., satisfaction and the therapeutic alliance).

First, our model, which included determinants such as socio-demographic data, the severity of the problem, the mental state at the first appointment, the organization of the service and the organization of the therapy, explained a large portion of the variance in the quality indicators (i.e., satisfaction and the therapeutic alliance), reaching 55.4% for the patients' satisfaction. This result is equal to or higher than the models found in the literature [38,28,39].

Consistent results between both indicators and multiple informants were observed, even if the parents reported systematically higher scores for satisfaction and the therapeutic alliance than did the patients, which is congruent with the literature [29,30,23]. Considering that satisfaction decreases with age [21,20], we can explain these results by the difference of the

mean age of the patients between the sample of young people assessed by the parents (9.9 years of age) and the sample of the patients assessing their own satisfaction (14.4 years of age). However, it could also be possible to understand this difference by the fact that parents, not patients, generally initiate care.

More specifically, our results indicated that socio-demographic and socio-economic variables as well as the severity of the problem have a weak influence on the quality indicators. For the first two, the results are consistent with most previous studies [20,22,23]. With respect to the severity of the problem, our study did not find any influence on the perceived quality of this dimension, which contradicts the studies that show that satisfaction decreases with the severity of disorders [22,23]. Methodological differences in measuring the severity of disorders may explain these discrepancies. Indeed, those studies used self-reported questionnaires that asked about behavioural and emotional difficulties, whereas the present study operationalized the severity of disorders by the number of people addressing the patient and the number of reasons for the consultation. It is possible that these two factors are not related to the level of difficulties reported by the patient in the questionnaires. Globally, these results are important because they suggest that the characteristics of patients that cannot be changed, such as gender, age or severity at admission, are not related to the quality indicators. In our study, only a few determinants consistently influenced the quality indicators. Indeed, three of them (mental state at the first appointment; time to formulate questions, satisfaction with frequency) showed an important impact on the parents' and patients' perceived quality of care. The mental state at the first appointment, particularly reassurance at the first appointment, was an important determinant of perceived quality of the treatment from the perspectives of the children and the parents. Similarly, agreement for the first appointment was a predictor of the patients' quality indicators but not for the parents' quality indicators, which is consistent with previous studies that show that adolescents involved in the decision to enter treatment are more satisfied [40,22]. These results highlight the importance of carefully working on the expectations and demands of patients at the beginning of the treatment as well as the need to create a reassuring atmosphere when first meeting patients and their parents [41]. Considering that adolescents often do not themselves decide to enter treatment and have a strong desire to have a voice in treatment decisions, such as the frequency of appointments [40,42], emphasis on user involvement is crucially important in CAMHS.

Furthermore, our results show that having enough time to ask questions is decisive for both parents' and patients' perceptions of satisfaction and the therapeutic alliance. Satisfaction

with the frequency of sessions is also associated with patients' and parents' global satisfaction and perceived therapeutic alliance. Even if no association between the frequency of sessions and perceived quality of care was found, satisfaction with the frequency of sessions is highlighted as having an important influence on perceived quality of care [41]. These results suggest that the organization of the therapy is an important predictor of perceived quality of care; thus, a special focus should be placed on giving patients and parents enough time to ask questions and on their perspective concerning the frequency of treatment. This is in line with the literature review by Biering [24], who identifies the relationship with the caregivers, the environment and the organization of CAMHS as principal components of satisfaction with psychiatric care.

Altogether, our results emphasize the importance of patient-centred psychiatric care. Indeed, person-focused aspects [43] such as according enough time to the patients and parents to ask questions and actively involving them in the therapy are the key components of patient-centred care with the shared decision-making concept [44]. More specifically, our results suggest that satisfaction and the therapeutic alliance are influenced by the propensity of clinics to consider the desires and expectations of parents and patients. Being attuned to patients' needs seems to be a much more important determinant of quality than fixed variables such as socio-demographic characteristics and the severity of disorders [38]. The need for involving children and adolescents in medical decisions has been recognized for a long period of time [45]. Previous studies have shown that patient satisfaction is a predictor of future use of psychiatric services [26]. Therefore, knowing the determinants of the quality indicators is useful to guide efforts to improve quality of care [20], to help caregivers deliver patient-centred care and to prevent a premature termination of therapy [23]. Further research is needed to analyse the different aspects of this complex field.

#### Limitations

We are limited by the cross-sectional data design; a longitudinal data design is required to more precisely investigate the causal link. Although we adopted a multiple-informant perspective, the perspectives of therapists could not be considered in this study. Considering the therapist perspective would make it possible to analyse model-specific intervention techniques and other therapist-driven aspects of the treatment process (e.g., therapist competences). These elements are potentially equally responsible or more responsible for good outcomes [46] and may interact with relationship factors in complex ways [47,48]. Regarding, the procedure of the survey, we did not have access to clinician information and thus to the diagnoses or the precise type of disorder of the patients. Therefore, we had to use a

proxy, which could be questionable. This may perhaps explain the lack of relationships between the severity of the problem and satisfaction, which contradicts the results of previous studies. Thus, further studies should more specifically assess this question.

#### Conclusion

This study identified the key factors that influence the quality indicators within CAMHS, which is an important step to enhance the quality of care. More specifically, this study highlighted the importance of focusing on the needs and expectations of patients and parents, indicating the necessity of providing the most individualized care to patients and their family. Further studies including longitudinal observation from the perspectives of patients, parents and therapists supplemented by outcome measures are necessary to confirm the long-term beneficial effects of considering these patient-centred aspects in child and adolescent psychiatric care.

#### Reference

1. Fombonne E (2005) Epidemiology of psychiatric disorders paediatric psychiatry. EMC-Psychiatrie 2:169-194

2. Hofstra MB, van der Ende J, Verhulst FC (2002) Child and adolescent problems predict DSM-IV disorders in adulthood: a 14-year follow-up of a Dutch epidemiological sample. J Am Acad Child Adolesc Psychiatry 41:182-189

3. Kim-Cohen J, Caspi A, Moffitt TE, Harrington H, Milne BJ, Poulton R (2003) Prior juvenile diagnoses in adults with mental disorder: developmental follow-back of a prospective-longitudinal cohort. Arch Gen Psychiatry 60:709-717

4. Jones AL, Cochran SD, Leibowitz A, Wells KB, Kominski G, Mays VM (2015) Usual Primary Care Provider Characteristics of a Patient-Centered Medical Home and Mental Health Service Use. Journal of General Internal Medicine 30 (12):1826-1836

5. Bonsack C, Holzer L, Stancu I, Baier V, Samitca M, Charbon Y, Koch N (2008) Psychiatric mobile teams for the three ages of live: the Lausanne experience. Revue medicale suisse 4 (171):1960-1962, 1964-1966, 1968-1969

6. de Haan AM, Boon AE, de Jong JTVM, Hoeve M, Vermeiren RRJM (2013) A metaanalytic review on treatment dropout in child and adolescent outpatient mental health care. Clinical Psychology Review 33:698-711

7. McNicholas F (2012) To adhere or not, and what we can do to help. European child & adolescent psychiatry 21 (12):657-663

8. Accurso EC, Garland AF (2015) Child, Caregiver, and Therapist Perspectives on Therapeutic Alliance in Usual Care Child Psychotherapy. Psychological Assessment 27 (1):347-352

9. OMS (2000) Rapport sur la santé dans le monde 2000: pour un système de santé plus performant. Organisation mondiale de la santé, Genève

10. Athay MM, Bickman L (2012) Development and psychometric evaluation of the youth and caregiver service satisfaction scale. Administration and Policy in Mental Health 39 (1-2):71-77

11. Norcross JC (2002) Psychotherapy relationships that work. Therapist contributions and responsiveness to patients. Oxford University Press, New York

12. Despland J-N, Zimmermann G, De Roten Y (2006) L'évaluation empirique des psychothérapies. Psychothérapies 26 (2):91-95

13. Shirk SR, Karver M (2003) Prediction of treatment outcome from relationship variables in child and adolescent therapy: a meta-analytic review. J Consult Clin Psychol 71 (3):452-464

14. Horvath AO, Del Re AC, Flückiger C, Symonds D (2011) Alliance in individual psychotherapy. Psychotherapy 48 (1):9-16

15. Kazdin AE, Whitley M, Marciano PL (2006) Child-therapist and parent-therapist alliance and therapeutic change in the treatment of children referred for oppositional, aggressive, and antisocial behavior. Journal of Child Psychology and Psychiatry 47 (5):436-445

16. Kazdin AE, Durbin KA (2012) Predictors of child-therapist alliance in cognitivebehavioral treatment of children referred for oppositional and antisocial behavior. Psychotherapy 49 (2):202-217

17. Marker CD, Comer JS, Abramova V, Kendall PC (2013) The Reciprocal Relationship Between Alliance and Symptom Improvement Accross the Treatment of Childhood Anxiety. Journal of Clinical Child & Adolescent Psychology 42 (1):22-33

18. Shirk SR, Gudmundsen G, Kaplinski HC, McMakin DL (2008) Alliance and Outcome in Cognitive-Behavioral Therapy for Adolescent Depression. Journal of Clinical Child & Adolescent Psychology 37 (3):631-639

19. Hawley KM, Garland AF (2008) Working Alliance in Adolescent Outpatient Therapy: Youth, Parent and Therapist Reports and Associations with Therapy Outcomes. Child Youth Care Forum 37:59-74

20. Stüntzner-Gibson D, Koren PE, DeChillo N (1995) The Youth Satisfaction Questionnaire: What kids think of services. Families in Society: The Journal of Contemporary Human Services 71:616-625

21. Shapiro JP, Welker CJ, Jacobson BJ (1997) The Youth Client Satisfaction Questionnaire: development, construct validation, and factor structure. Journal of Clinical Child Psychology 26 (1):87-98

22. Garland AF, Aarons GA, Saltzman MD, Kruse MI (2000) Correlates od Adolescents' Satisfaction with Mental Health Services. Mental health services research 2 (3):127-139

23. Barber AJ, Tischler VA, Healy E (2006) Consumer satisfaction and child behaviour problems in child and adolescent mental health services. Journal of Child Health Care 10 (1):9-21

24. Biering P (2010) Child and adolescent experience of and satisfaction with psychiatric care: A critical review of the research literature. Journal of Psychiatric and Mental Health Nursing 17 (1):65-72

25. Buston K (2002) Adolescents with mental health problems: what do they say about health services? Journal of Adolescence 25:231-242

26. Fitzpatrick R (1993) Scope and measurement of patient satisfaction. In: Fitzpatrick R, Hopkins A (eds) Measurement of patients' satisfaction with their care. Royal College of Physicians, London, pp 1-17

27. Garland AF, Aarons GA, Hawley KM, Hough RL (2003) Relationship of youth satisfaction with mental health services and changes in symptoms and functioning. Psychiatric services 54 (11):1544-1546

28. Garland AF, Haine RA, Boxmeyer CL (2007) Determinates of youth and parent satisfaction in usual care psychotherapy. Evaluation and program planning 30 (1):45-54

29. Godley SH, Fiedler EM, Funk RR (1998) Consumer satisfaction of parents and their children with child/adolescent mental health services. Evaluation and program planning 21 (1):31-45

30. Marriage K, Petrie J, Worling D (2001) Consumer satisfaction with an adolescent inpatient psychiatric unit. Canadian Journal of Psychiatry 46 (10):969-975

31. Achenbach TM, McConaughy SH, Howell CT (1987) Child/adolescent behavioral and emotional problems: implications of cross-informant correlations for situational specificity. Psychological bulletin 101 (2):213

32. Karver MS (2006) Determinants of multiple informant agreement on child and adolescent behavior. Journal of abnormal child psychology 34 (2):242-253

33. Kapp C, Perlini T, Baggio S, Stefan P, Rojas Urrego A, Rengade c-E, Macias M, Hainard N, Halfon O (2014) Qualités psychométriques du Consumer satisfaction questionnaire (CSQ-8) et du Helping alliance questionnaire (HAQ). Santé Publique 26 (3):337-344

34. Kermarrec S, Kabuth B, Bursztejn C, Guillemin F (2006) French adaptation and validation of the helping alliance questionnaires for child, parents, and therapist. Canadian Journal of Psychiatry 51:913-922

35. Sabourin S, Pérusse D, Gendreau P (1989) Les qualités psychométriques de la version canadienne-française du questionnaire de satisfaction du consommateur de services psychothérapeutiques. Revue Canadienne des Sciences du Comportement 21 (2):149-159

36. Attkisson CC, Greenfield TK (1994) Client satisfaction questionnaire-8 and service satisfaction scale-30. In: Maruish ME (ed) The use of psychological testing for treatment planning and outcome assessment. Laurence Erlbaum Associates, Hillsdale, NJ, England, pp 402-420

37. Ganzeboom HBG, Treiman DJ (1996) Internationally Comparable Measures of Occupational Status for the 1988 International Standard Classification of Occupations. Social Science Research 25:201-239

38. Perreault M, Rousseau M, Provencher H, Roberts S, Milton D (2012) Predictors of caregiver satisfaction with mental health services. Community mental health journal 48:232-237

39. Heinonen E, Lindfords O, Härkänen T, Virtala E, Jääskeläinen T, Knekt P (2014) Therapist's professional and personal characteristics as predictors of working alliance in shortterm and long-term psychotherapies. Clinical Psychology and Psychotherapy 21:475-494

40. Hart A, Saunders A, Thomas H (2005) Attuned practice: a service user study of specialist child and adolescent mental health, UK. Epidemiol Psichiatr Soc 14 (1):22-31

41. Holmboe O, Iversen HH, Hanssen-Bauer K (2011) Determinants of parents' experiences with outpatient child and adolescent mental health services. International journal of mental health systems 5:22

42. Biering P (2002) Caring for the involuntarily hospitalized adolescent: The issue of power in the nurse-patient relationship. Journal of Child and Adolescent Psychiatric Nursing 15 (2):65-74

43. Starfield B (2011) Is Patient-Centered Care the Same As Person-Focused Care? The Permanente Journal 15 (2):63-69

44. Barry MJ, Edgman-Levitan S (2012) Shared Decision Making — The Pinnacle of Patient-Centered Care. New England Journal of Medicine 366 (9):780-781

45. McCabe MA (1996) Involving children and adolescents in medical decision making: developmental and clinical considerations. Journal of pediatric psychology 21 (4):505-516

46. Stevens SE, Hynan MT, Allen M (2000) A Meta-Analysis of Common Factor and Specific Treatment Effects Across the Outcome Domains of the Phase Model of Psychotherapy. Clinical Psychology: Science and Practice 7 (3):273-290

47. Feeley M, DeRubeis RJ, Gelfand L (1999) The temporal relation of adherence and alliance to symptom change in cognitive therapy for depression. Journal of Consulting and Clinical Psychology 67:578-582

48. Karver MS, Handelsman JB, Fields S, Bickman L (2006) Meta-analysis of therapeutic relationship variables in youth and family therapy: the evidence for different relationship variables in the child and adolescent treatment outcome literature. Clin Psychol Rev 26 (1):50-65

	Characteristics (N)		N (%) or Mean (Std)		
Patients	Gender (660): Female / Male		356 (53.9%) / 304 (46.1%)		
	Age (662) in years	14.0 (2.9)			
	Parents' SES (588)	2.2 (0.7)			
	Treatment status (663): In-treatr	584 (88.1%) / 79 (11.9%)			
	Number of reasons for the consu	1.4 (0.7)			
	Number of people who made a i	2.3 (1.6)			
	Frequency of sessions (595):				
		28 (4.7%)			
		1x/week	261 (43.8%)		
		2x/month	150 (25.2%)		
		1x/month	96 (16.2%)		
		Variable	60 (10.1%)		
	Treatment received (663):		× ,		
	Indiv	564 (85.1%)			
	Med	216 (32.6%)			
	Prof	213 (32.1%)			
	Psyc	169 (25.5%)			
	Psyc	114 (17%)			
	Grou	123 (18.4%)			
	Fam	445 (67.1%)			
	Help	129 (19.5%)			
Parents	Parents' status (770): Mother / H	670 (87%) / 97 (12.6%)			
	Child's gender (765): Female / I	300 (39.2%) / 465 (60.8%)			
	Child's age (756) in years	9.9 (4.2)			
	Parents' SES (697)	2.2 (0.7)			
	Child's treatment status (770): I	633 (82.2%) / 137 (17.8%)			
	Number of reasons for the consu	2.2 (1.3)			
	Number of people who made a n	1.3 (0.6)			
	Frequency of sessions (730):				
		2x/week	0		
		1x/week	28 (3.8%)		
		2x/month	233 (31.9%)		
		1x/month	0		
		Variable	469 (64.3%)		
	Treatment received (770):				
	Individual therapy		646 (83.9%)		
	Me	edication	153 (19.9%)		
	Pro	ofessional network	245 (31.8%)		
	Ps	ychological assessment	176 (22.9%)		
	Ps	ychodrama	64 (8.3%)		
	Gr	oup therapy	80 (10.4%)		
	Fa	mily therapy	532 (69.7%)		
	He	elp from social worker	88 (11.4%)		

 Table 1. Socio-demographic data of the sample

	Domain	Predictors/determinants	В	Std. Error	β	t	р
, 1		Intercept	5.92	0.24		24.28	.000
Step		Drop-out	-0.94	0.22	-0.24	-4.26	.000
		Intercept	4.22	0.52		8.08	.000
Step 2		Drop-out	-0.91	0.18	-0.24	-5.14	.000*
	Socio-demographic variables	Patient age	0.00	0.02	0.00	-0.01	.996
		Patient gender	-0.04	0.09	-0.02	-0.49	.625
		Parents' SES	-0.07	0.07	-0.04	-1.03	.305
	Severity of the problem	Number of people addressing the patients	0.15	0.07	0.10	2.24	.026*
		Number of reasons for the consultation	-0.01	0.03	-0.02	-0.38	.701
	Mental state at the first appointment	Agreement for the first appointment	-0.25	0.05	-0.24	-4.59	.000*
		Reassurance at the first appointment	-0.21	0.05	-0.19	-4.04	.000*
	Organization of the service	Accessibility by phone	0.09	0.05	0.09	2.10	.037*
		Kind secretary	0.13	0.07	0.08	1.73	.085
		Agreeableness of the waiting room	-0.07	0.06	-0.06	-1.17	.242
	Organization of the therapy	Change of therapist	0.12	0.10	0.06	1.28	.203
		Waiting time for the first appointment	0.42	0.15	0.12	2.77	.006*

# **Table 2**. Regression analysis on patients' alliance

\* Significant difference with the present sample at p < .05