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The quality of therapeutic alliance among female adolescent inpatients with anorexia nervosa and their treatment providers and its association with treatment outcome

Par

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Résumé

L'alliance thérapeutique (AT) est reconnue comme étant une variable prometteuse pour prédire le résultat d'une intervention et s'avère d'une grande importance dans le traitement de l'anorexie mentale (AM). Toutefois, il existe peu d'études explorant l'AT auprès d'adolescents hospitalisés pour un problème d'AM. Cet article vise à examiner l'AT chez des adolescentes hospitalisées pour leur AM et leurs intervenantes au cours d'un traitement à court terme en milieu hospitalier et à explorer l'association entre l'AT et les résultats du traitement. L'étude a été menée auprès de 95 adolescentes et de leurs intervenantes (n = 5). L'AT a été évaluée au début et à la fin de l'hospitalisation à l'aide du *Working Alliance Inventory-Short Form*. Les changements dans les symptômes associés aux troubles alimentaires (*Eating Disorder Inventory-3)* ainsi que l'amélioration de l'indice de masse corporelle (IMC) ont permis de mesurer les effets de l'intervention. Des modèles mixtes à mesures répétées et des corrélations ont été employés. Les résultats indiquent que les adolescentes et leurs intervenantes semblent percevoir une bonne qualité d'AT au début et à la fin de l'hospitalisation. Les deux catégories de répondants ne diffèrent pas dans leurs scores d'AT, à l'exception de la sous-échelle mesurant la qualité du lien. L'AT mesurée à la fin de l'hospitalisation semble davantage liée aux résultats de l'intervention que celle mesurée au début. Plus précisément, l'AT perçue par les adolescentes est associée aux changements dans la symptomatologie du trouble et l'AT perçue par les intervenantes est associée au gain de poids. Ainsi, il semblerait qu'une AT de qualité peut se construire dans un contexte d'intervention intensive en milieu hospitalier avec des adolescentes souffrant d'AM. Les résultats soulignent également la pertinence de s'intéresser aux perspectives des patients et des intervenants dans les études portant sur l'AT.

Mots clés : alliance thérapeutique, anorexie mentale, adolescents, intervenants, hospitalisation, résultats d'une intervention, psychologie clinique.

Abstract

Objective: The therapeutic alliance (TA) is widely recognized as a robust predictor of treatment outcome and is relevant in anorexia nervosa (AN). However, data on adolescent inpatients are lacking. The current study examined adolescent patient and treatment provider TA ratings during a short-term hospitalization for AN and TA-outcome associations. **Method**: Participants were recruited from an inpatient Eating Disorder Program and included 95 female adolescents with AN and their reference treatment providers (n = 5). Patient and treatment provider TA was measured at the beginning and end of hospitalization using the Working Alliance Inventory-Short Form. Changes in eating disorder (ED) symptoms (as measured by the Eating Disorder Inventory-3) and improvement in body mass index (BMI) during hospitalization were used as outcome measures. Mixed model ANOVAs were performed to examine TA scores and correlations were used to assess TA-outcome associations. **Results:** TA remained high during hospitalization for both patients and treatment providers. Both respondents did not differ in the perceptions of TA, except for the Bond subscale. TA measured at the end of hospitalization was more strongly correlated with outcomes than TA measured at the beginning. More precisely, adolescent TA was significantly related to changes in ED symptomatology, while treatment provider TA was significantly related to BMI improvement. **Conclusions:** Establishing a good TA is possible in contexts of intensive inpatient treatment for AN and may be important for patient improvement. To better understand TA as well as TA-outcome associations, examining both patient and treatment provider perceptions seems necessary.

Keywords: Therapeutic alliance, anorexia, inpatient, adolescents, treatment providers, outcome, clinical psychology.

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List of Abbreviations

AN: anorexia nervosa

AN-BP: anorexia nervosa – binge eating/purging subtype

AN-R: anorexia nervosa – restricting subtype

ANOVA: analysis of variance

BMI: body mass index

ED: eating disorder

EDI-3: Eating Disorder Inventory – 3

EDRC: Eating Disorder Risk Composite

TA: therapeutic alliance

WAI: Working Alliance Inventory

WAI-S: Working Alliance Inventory – Short form

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Introduction

Anorexia nervosa (AN) is a serious illness associated with high mortality and chronicity and represents one of the most disabling psychiatric disorders (Herpertz-Dahlmann, 2015; Löwe et al., 2001; Steinhausen, 2002). It is characterized by restriction of food intake leading to significantly low body weight, intense fear of gaining weight, and severe disturbances in body image (American Psychiatric Association, 2013). There are two diagnostic subtypes: AN-restricting subtype (AN-R) and AN-binge eating/purging subtype (AN-BP). Patients with AN-R restrict their food intake through strict diets, skipping meals, and/or excessive exercise. In addition to placing severe restrictions on the amount of food they eat, patients with AN-BP also engage in binge eating and purging behaviours (American Psychiatric Association, 2013). Based on international epidemiological studies, the lifetime prevalence of AN for women ranges between 0.9 and 4% (Hudson et al., 2007; Keski-Rahkonen & Mustelin, 2016; Udo & Grilo, 2018). AN generally develops during adolescence, with an incidence rate highest for females around the age of 15 (Silén et al., 2020; Smink et al., 2016; Petkova et al., 2019). While the overall incidence rate of AN has been relatively stable over the past decades, the incidence among young adolescents (aged < 15 years) has increased (van Eeden et al., 2021). During this period, which is characterized by significant physical growth and brain development, severe nutrition disturbances and associated medical and psychiatric complications can lead to serious health consequences (Bravender et al., 2010; Sibeoni et al., 2017). In addition to physical symptoms, AN negatively affects adolescents' social, emotional, and cognitive developmental processes, and is associated with high psychiatric comorbidity (Herpertz-Dahlmann et al., 2001; Hudson et al., 2007; Loeb et al., 2011; Quine, 2012).

The serious negative effects of the illness, apparent in physical, psychological, and social aspects, as well as the high rate of relapse, comorbidity, and mortality underscore the importance of immediate and effective treatment (Bulik et al., 2007; National Collaborating Centre for Mental Health, 2004). However, patients with AN are known to be difficult to treat (Zaitsoff et al., 2016). They tend to be ambivalent about change and resistant to treatment due to the ego-syntonic nature of the disorder (Abbate-Daga et al., 2013; Gregertsen et al., 2017; Marzola et al., 2019). Additionally, adolescents who are hospitalized for AN often arrive in a life-threatening condition requiring immediate care and medical stabilization (Meads et al., 2001). This high degree of urgency requires treatment providers to act quickly and prioritize the treatment of physical aspects of AN, making it sometimes impossible for them to wait for patients to become ready and less ambivalent toward change (Isserlin & Couturier, 2012). Therefore, hospital staff members may face numerous challenges when attempting to form a relationship with adolescent patients with AN. Adolescents rarely refer themselves for treatment and may disagree with their parents or authority figures, which can also complicate treatment adherence and engagement (Bourion-Bedes et al., 2013). Moreover, AN treatment is characterized by a high dropout rate, with 24% of adolescent patients dropping out of inpatient treatment (Hubert et al., 2013), 11 to 14% dropping out of outpatient treatment (Lock et al., 2006; Lock et al., 2010), and 7 to 42% dropping out of day hospital programs for EDs (Dancyger et al., 2003; Goldstein et al., 2011; Grewal et al., 2014; Herpertz-Dahlmann et al., 2014; Ornstein et al., 2012). All these factors render treatment challenging for this population. However, given that the rates of recovery, improvement, and chronicity are more favourable with younger patients, early intervention is crucial (Steinhausen, 2009).

To effectively treat adolescents with AN, a better understanding of the factors influencing treatment is of great importance. One of the most thoroughly researched and empirically supported factors that have been found to predict treatment outcome is the therapeutic alliance (TA; Horvath & Symonds, 1991). TA is defined as the collaborative relationship between patient and therapist and involves three domains: affective bond, agreement on goals, and agreement on tasks (Bordin, 1979). Robust TA-outcome associations have been reported across a broad array of treatments and in a variety of client and problem contexts (e.g., Flückiger et al., 2018; Horvath & Bedi, 2002; Horvath et al., 2011; Horvath & Symonds, 1991; Karver et al., 2006; Martin et al., 2000; Shirk & Karver, 2003; Shirk et al., 2011). Fewer studies have focused on children and adolescents, but findings from meta-analytic reviews on youth therapy suggest similar TA-outcome associations to those found for adults (Shirk & Karver, 2003; Karver et al., 2006). Compared to other clinical populations, eating-disordered (ED) populations tend to have slightly lower TA-outcome associations in adult samples (Flückiger et al., 2018; Graves et al., 2017). The aforementioned challenges associated with AN (e.g., high ambivalence, ego-syntonicity, fear of weight gain, etc.) may explain the lower TA scores among this clinical population. Conflicts or disagreements between patients and treatment providers may arise when trying to reach an agreement on the goals of treatment (e.g., achieving a targeted weight) as well as the tasks necessary to fulfill these goals, such as increasing caloric intake or reducing exercise (Gregertsen et al., 2017; Werz, 2022). Given that AN patients rarely seek treatment on their own initiative, developing a strong bond with them may also represent a challenge and may take time (Gregertsen et al., 2017).

Moreover, a meta-analysis by Graves and colleagues (2017) underlined the bidirectional relationship between TA and patient improvement and showed stronger TA-outcome associations for younger patients undergoing therapy for EDs than for adult patients. However, the role of TA in ED treatment remains unclear. Although qualitative research indicates that both patients and treatment providers value TA as a crucial and helpful aspect of treatment (Escobar-Koch et al., 2012; Zaitsoff et al., 2016), quantitative research has yielded mixed results. Several studies on ED treatment for both adolescent and adult patients have found positive associations between TA and treatment outcome (e.g., Antoniou & Cooper, 2013; Constantino et al., 2005; Sly et al., 2013; Stiles-Shield et al., 2013; Zaitsoff et al., 2015), while other studies have found little or no association (e.g., Brown et al., 2013; Waller et al., 2012; Zaitsoff et al., 2008).

In the field of youth AN treatment, mixed results are also observed regarding the influence of TA on treatment outcome. There exists some support for the TA-outcome association when changes in ED symptomatology serve as the outcome measure. For instance, Rienecke and colleagues (2016) found that patient early and late TA were associated with improved ED symptoms (with an explained variance of 20% and 40%, respectively). Interestingly, TA did not change over the course of treatment (Rienecke et al., 2016). Isserlin and Couturier (2012) also reported significant positive effects of patient early TA on ED symptoms. However, Pereira and colleagues (2006) found that both early and late adolescent TA were not significantly associated with ED symptomatology. Moreover, previous studies have also found some support for the TA-outcome association when the outcome is defined by weight gain. Hughes and colleagues (2019) found that early weight gain could be predicted by greater early adolescent TA with their nurse during parent-focused treatment (separated FBT). In addition,

findings from Forsberg and colleagues (2013) suggest that adolescent TA is not a predictor of full remission, though it seems to be a non-specific predictor of partial remission as defined by reaching a predefined weight. In Pereira and colleagues' study (2006), although adolescent early TA was correlated with early weight gain, early weight gain remained a better predictor of overall weight gain. Another study (Bourion-Bedes et al., 2013), which investigated TA development among treatment providers, parents, and adolescents with AN in both inpatient and outpatient settings, found that patient early TA was a good predictor of achieving a target weight. To our knowledge, this study is the only one that examined patient and therapist perceptions of TA over the course of treatment for AN and its association with outcome. Their findings suggest that TA quality is perceived as being lower by treatment providers than by adolescents, but significant improvements in TA throughout therapy were observed for all respondents. Still, other studies reported no association between patient TA and weight gain (Rienecke et al., 2016). In summary, patient TA obtained at the beginning of treatment seems to be more strongly associated with outcome (Bourion-Bedes et al., 2013; Forsberg et al., 2013; Hughes et al., 2019; Isserlin & Couturier, 2012; Pereira et al., 2006; Rienecke et al., 2016), although some studies found no association between early and/or late patient TA and outcome (Forsberg et al., 2013; Pereira et al., 2006; Rienecke et al., 2016). Thus, while most studies demonstrate significant associations between patient TA and outcome, different associations may result depending on the type of outcome being measured.

Given the heterogeneous results of the studies conducted so far, Werz and colleagues (2022) aimed to provide an update on the available research examining the relationship between TA and treatment outcomes in ED patients. Among the seven studies focusing specifically on

youth AN treatment, none of them were conducted solely in an inpatient setting. Most took place in outpatient settings, and only one study included treatment providers' perspectives on TA. Additionally, comparisons between studies are limited due to the differences in timelines and measures of TA, as well as the various outcome measures used. Based on Werz and colleagues' systematic review (2022), TA seems to have a predictive effect on outcome (i.e., weight gain, ED symptomatology) for adolescent patients with AN. Generally, patients' early reports of TA predicted a better treatment outcome. Importantly, the lack of studies including treatment providers' reports of TA during youth AN treatment makes it difficult to draw conclusions regarding the predictive effects of treatment provider TA on outcome. The only study including therapist TA found that patients and therapists seemed to share dissimilar views of TA, with lower levels of TA according to therapists (Bourion-Bedes et al., 2012). However, the influence of therapist TA on outcome was not explored.

Overall, despite the potential challenges associated with AN treatment, several studies have shown that adolescent patients can establish a good TA with their treatment providers. However, studies examining TA in adolescents with AN have been done mainly with outpatient samples. The small number of available studies and the varying methodologies also make it difficult to interpret discrepant findings in the literature. Moreover, the lack of studies incorporating treatment provider TA renders it difficult to conclude in terms of differences between perspectives and associations with outcome. Given the bidirectional and collaborative nature of TA, investigating both patients' and treatment providers' perspectives seems necessary and central to understanding its role in leading to effective treatment (Wampold & Flückiger, 2023). There is a need for further research on that topic, which could provide valuable

information for young patients in such a life-threatening condition. No study, to our knowledge, has examined the quality of TA, as perceived by both patients and treatment providers, over the course of a short-term intervention in a homogeneous group of female adolescent inpatients with AN. Thus, the aims of this study were to 1) describe patient and treatment provider global and subscale TA scores at the beginning and end of hospitalization for AN, 2) compare global TA scores (and subscales scores as a secondary research objective) over time (beginning and end of hospitalization) and between respondents, and 3) examine the association between TA and two treatment outcomes (i.e., changes in ED symptomatology and %BMI improvement). Based on previous research, it was hypothesized that patients would present higher TA compared to treatment providers, but that both respondents would show improvements in their TA over the course of inpatient treatment. It was also hypothesized that both patient and treatment provider TA would be associated with outcome, with stronger associations between patient TA and changes in ED symptoms. Given the exploratory nature of the secondary objective pertaining to TA subscale scores, no prior hypotheses were made.

Method

Participants and procedure

Participants were recruited from an Eating Disorder Program at a University Children's Health Center in Montreal, Canada, between January 2012 and January 2015. The ethics committee of the hospital and university formally approved the study. Recruitment was done within the first week following admission to the inpatient unit, during which research assistants met with the participants to present the procedure and objectives of the study. Participation was voluntary and informed and signed consent from one parent and the adolescent was obtained for

all participants (See Appendix A). Informed and signed consent was also obtained from each participating treatment provider (See Appendix B).

To be eligible, patients had to 1) be between 11 and 18 years old, 2) receive short-term inpatient treatment for an ED, and 3) be stable physically (as evaluated by the treating doctor) and able to complete self-administered questionnaires. Adolescents who presented with an intellectual disability that was documented in their medical file were not included in the study. Among the estimated number of 225 patients hospitalized for an ED, 133 patients accepted to participate in the research project and signed the consent forms, corresponding to a participation rate of approximately 60%.

Two additional inclusion criteria were then used to select participants for the present study. Patients needed to have: 1) a diagnosis of AN and 2) at least one measure of TA completed by either the patient or the treatment provider at either time point. Diagnoses were made by a pediatrician specialized in the field of EDs using DSM-IV-TR criteria (2000). Among the 133 patients who gave their consent for research, 113 patients had a diagnosis of AN. Out of the patients with AN, 18 failed to complete the questionnaires, corresponding to a premature dropout rate of 16%. These participants were not included in the present study as no questionnaire was completed.

On the basis of these criteria, the final sample for the present study was comprised of 95 female adolescent patients with a diagnosis of AN and their reference treatment providers (n = 5). Participating treatment providers were all female and included two nurses, two psycho-

educators, and one educator, all of whom specialized in the treatment of EDs in adolescents. Eighty-eight adolescents presented AN with restricting subtype (AN-R; 92.6%) and seven presented AN with binge eating/purging subtype (AN-BP; 7.4%). Characteristics of patients are presented in Table 1. Patients had a mean age of 14.92 years (*SD* = 1.79) and a mean BMI upon admission of 15.03 kg/m^2 (*SD* = 1.94), falling below the 3rd BMI-for-age percentile (Kuczmarski et al., 2002).

The attrition rate between T1 and T2 for the present study was approximately 30%. Among the 95 patients, we obtained complete data for 32 of them. The rest of the sample had missing data that can be mainly explained by administrative shortcomings unrelated to the variables being studied (e.g., the patients left the inpatient unit before the research assistant had the time to give the questionnaires). Of note, participants with missing data did not differ from participants without missing data on age, length of hospitalization, TA, BMI, and EDRC scores (all *p* values > .05). Thus, data were assumed to be missing at random.

Treatment delivered during hospitalization

The average duration of hospitalization was 51.25 days (*SD* = 21.20). Treatment at the ED inpatient unit involved a multidisciplinary team and included the re-establishment of adequate caloric intake, meal support, individual and group clinical activities, and regular medical and psychological/psychiatric monitoring. An individualized intervention plan was built for each patient and revised weekly depending on the patient's progress. In addition, patients had regular meetings with their reference treatment providers, which were recorded using logbooks that were designed specifically for the study (see Appendix C). Most of the interventions carried out by reference treatment providers were done on an individual basis (67%), with a frequency of

1 to 3 times per week and a duration of 30 minutes per intervention, on average. Group interventions (19%) occurred once a week for an hour, while family interventions (14%) occurred once a week for 30 minutes, on average. In terms of frequency, reference treatment providers engaged in evaluation/intervention 56%, support/listening 26%, discipline 11%, and education 7% of the time, on average.

Measures

Working Alliance Inventory-Short Form

TA was assessed using the Working Alliance Inventory-Short Form (WAI-S; Tracey & Kokotovic, 1989). This self-administered questionnaire reflects the quality of the therapeutic relationship as perceived by the respondent. The WAI is based on Bordin's (1979) conceptualization of the alliance, which includes three components: affective bond, agreement on goals, and agreement on tasks. The 12 items were rated using a Likert scale ranging from 1 (never) to 5 (always). Three subscales are derived (Task, Bond, and Goal) and, when taken together, make up the global measure of TA. Sum scores for the global scale (ranging from 12 to 60) as well as for the three subscales (ranging from 4 to 20) were used as indicators of TA quality, with higher scores indicating greater TA. One version of the WAI-S was completed by adolescents and another by reference treatment providers. Given that TA is a collaborative and dyadic construct that needs sufficient patient-treatment provider interaction to develop, it is typically measured after the third or fourth session (Wampold & Flückiger, 2023). Thus, each participant in the present study completed the questionnaire twice, once after the third meeting (approximately within the first 10 days; T1) and a second time at the end of hospitalization (T2). The WAI is the most widely used self-report measure of TA quality and has been shown to have good internal validity, test-retest reliability, and interrater reliability (Horvath & Bedi, 2002). In

the current sample, Cronbach's alpha for the WAI-S global score was as follows: patients at T1, $\alpha = 0.95$; treatment providers at T1, $\alpha = 0.90$; patients at T2, $\alpha = 0.98$; treatment providers at T2, $\alpha = 0.88$. For the subscales, alpha coefficients ranged from 0.86 to 0.96 for patients and from 0.65 to 0.93 for treatment providers.

Eating Disorder Inventory-3

The Eating Disorder Inventory-3 (EDI-3; Garner, 2004) is a self-administered questionnaire designed to measure behavioural and psychological characteristics associated with EDs. For this study, the Eating Disorder Risk Composite (EDRC) was used as an indicator of ED symptomatology. The EDRC combines the three ED-specific scales of the EDI-3 (i.e., Drive for Thinness, Bulimia, and Body Dissatisfaction) and can be used to obtain one score reflecting the level of eating and weight concerns (Garner, 2004). Based on the EDRC, the severity of symptoms can also be classified into clinical qualitative ranges (Low Clinical, Typical Clinical, and Elevated Clinical). Patients completed the questionnaire at the beginning (T1) and end of hospitalization (T2). Raw scale scores were converted to T-scores using diagnostic group norms. Then, EDRC composite T-scores were formed by summing the three ED scale scores. The differences in EDRC scores were used as an outcome measure, quantifying changes in ED symptomatology over the course of inpatient treatment. Validity and reliability have been established for the EDI-3 (Garner, 2004). In the present sample, Cronbach coefficients ranged from 0.72 to 0.92 (T1) and from 0.82 to .95 (T2) for the three ED subscales, with an alpha coefficient of 0.95 at T1 and 0.94 at T2 for the EDRC scale.

BMI Improvement

The hospital staff assessed the weight and height of participants throughout hospitalization. Weight and height measured at admission and at discharge were used to compute

BMI values (kg/m^2) at both time points. As weight gain is one of the primary aims of inpatient treatment for AN, the present study used the percentage of BMI improvement over the course of hospitalization ($[(BMI_2\text{-}BMI_1/BMI_1)*100]$) as the second outcome measure. Age- and sex-adjusted BMI percentiles were also calculated based on the Centers for Disease Control and Prevention (CDC) growth charts (Kuczmarski et al., 2002).

Statistical Analysis

Mixed models were performed on data obtained from all participants (n = 95), including those with missing values. A mixed model allows the use of all observations under the assumption of data Missing At Random (MAR; Rubin, 1987). This assumption implies that valid inferences can be drawn based on the observed data (Sterne et al., 2009). Specifically for the present study, EDRC scores and BMI values from baseline to end of hospitalization were examined using a mixed model ANOVA with one repeated factor (Time) for both outcome measures separately. To examine TA quality over time (beginning and end of treatment) and between respondents (patient and treatment provider), mixed models for repeated measures ANOVAs were conducted for global TA scores as well as for subscale scores (exploratory analyses). Effect sizes (i.e., Eta squared and Cohen's d) were obtained using a General Linear Model (GLM) or Student t-test that was calculated using the sub-sample with complete data (n = 32). Effect sizes were interpreted according to Cohen's guidelines (1988). Moreover, associations between global TA scores and outcome measures (i.e., differences in EDRC scores and %BMI) were investigated using Pearson's correlations. Correlations were computed using only available pairs of data (i.e., TA and outcome), which explains the varying sample size for different correlations. Given the presence of missing data, the sample size varies across the reported analyses and is indicated for each statistical analysis in their respective tables. Data

were analyzed using both Statistical Analysis System (SAS) 9.4 and IBM Statistical Package for the Social Sciences (SPSS) 28.0 for Mac, with $p < .05$ considered statistically significant.

Results

Comparing TA scores

Table 2 summarizes patients' and treatment providers' perceptions of TA (global and subscale scores) at the beginning and end of hospitalization. TA scores were generally strong for both patients and treatment providers, with answers on the WAI-S generally falling between 3 and 4 on the 5 point-Likert scale, on average, for both respondents and at both time points.

Mixed ANOVA results are presented in Table 3. Regarding global TA scores, there was no significant interaction between Group (patients or treatment providers) and Time (beginning and end of hospitalization), which suggests that both patient and treatment provider global TA evolved similarly during inpatient treatment. Despite slight increases, global TA scores did not differ significantly between the beginning and end of hospitalization for both respondents. Similarly, despite slightly higher scores according to treatment providers, global TA scores did not differ significantly between respondents. However, a medium-to-large effect size was reported for the Group main effect ($\eta^2 = .113$).

To gather exploratory data, the subscale TA scores were also examined. For the Task subscale, there was no significant interaction and no significant differences over time and between respondents. However, a medium-sized effect was found for the Group main effect ($\eta^2 = .070$), with slightly higher scores on the Task subscale according to treatment providers. For the Goal subscale, there was no significant interaction and well as no significant difference over

time and between respondents, all of which were characterized by small effect sizes. With regard to the Bond subscale, the Group X Time interaction was found to be nonsignificant, though it was characterized by a medium effect size (η^2 = .077). There was no significant difference in Bond scores between the beginning and end of treatment; there was, however, a significant difference between patients and treatment providers, which was characterized by a large effect (η^2 = .235). Treatment providers showed higher scores on the Bond subscale compared to patients.

Overall, TA quality seemed to be perceived as good according to both patients and treatment providers. No statistically significant differences in global TA scores were found between respondents as well as between the beginning and end of hospitalization. However, after examining TA at the subscale level, respondents seemed to differ in terms of the perceived quality of their bond, which was consistently rated higher by treatment providers and lower by patients.

Patient improvement during hospitalization

Patient symptomatology at the beginning and end of hospitalization can be found in Table 4. The mean EDRC T score for patients upon admission (*M* = 50.36, *SD* = 9.63) was in the typical clinical range, suggesting important eating and weight concerns (i.e., desire to be thinner, fear of weight gain, binge eating tendencies, and body dissatisfaction). An EDRC score in this range, within the 34th and 80th percentile, is common among adolescents diagnosed with EDs (Garner, 2004). By the end of hospitalization, the mean EDRC T score (*M* = 46.66, *SD* = 10.16) fell in the low clinical range. An EDRC score in this range, within the 1st and 33rd percentile, is common among adolescent respondents in nonclinical samples and, thus, suggests that patients

showed less eating and weight concerns relative to other adolescent patients with clinical EDs (Garner, 2004). More precisely, patients' EDRC T scores lowered significantly from the beginning to end of hospitalization ($F(1, 93) = 15.58$, $p < .001$); Cohen's $d = 0.486$), which can be characterized by a medium effect size.

Based on CDC growth charts, patients' mean BMI upon admission ($M = 15.03$, $SD = 1.94$) fell below the 3rd percentile, corresponding to the underweight category, as defined by a BMI that is less than the 5th percentile for sex and age. Patients' mean BMI at the end of hospitalization ($M = 16.72$, $SD = 1.67$) fell below to 10th percentile, corresponding to the healthy weight category, as defined by a BMI that is at or above the 5th to less than the 85th percentile (Kuczmarski et al., 2002). The BMI classification should, however, be interpreted cautiously[1]. BMI scores thus increased by 1.68 kg/m^2 (95% confidence interval [1.50, 1.86]) over the course of treatment ($F(1, 94) = 338.91$, $p < .001$), Cohen's $d = 1.889$), corresponding to a large effect size. On average, patients showed a BMI improvement of 12%.

Therefore, results indicate that patients were in a critical condition upon admission to the inpatient unit, but showed significant improvements in terms of ED symptomatology and BMI at the end of hospitalization.

[1] The CDC uses a sex- and age-adjusted BMI below the 5th percentile as suggesting underweight among children and adolescents. The clinical validity of this cut-off has been questioned and some researchers have argued in favour of a weight cut-off at the 10th BMI-for-age percentile when diagnosing AN in youth (e.g., Andersen et al., 2018; Herpertz-Dahlmann et al., 2014; Knoll et al., 2011). In this article, the BMI classification was only used for descriptive purposes.

Associations between TA and outcome

Correlations between patient and treatment provider global TA scores at the beginning (T1) and end of hospitalization (T2) and both outcome measures (i.e., %BMI improvement and difference in EDRC scores) were performed. Given that correlations were computed using only available pairs of data (e.g., TA and outcome), the sample size varied and is indicated for each correlation (see Table 5).

Regarding patient TA, no significant correlation was found between TA at both time points and BMI improvement. Concerning changes in ED symptomatology during treatment, a nonsignificant positive correlation was observed between patient TA obtained at the beginning of hospitalization and changes in ED symptoms (r = .198). Additionally, a significant positive correlation was found between the evolution of TA over time (i.e., the difference in TA scores between T2 and T1) and changes in ED symptoms (r = .380), corresponding to a medium effect size. Consequently, a significant positive correlation was observed between patient TA obtained at the end of hospitalization and changes in ED symptoms (r = .348), corresponding to a medium effect size.

Regarding treatment provider TA, no significant correlation was found between TA at both time points and changes in ED symptomatology, although a medium effect size characterized the positive association between TA measured at the end of hospitalization and changes in ED symptoms (r = .274). Concerning the second outcome measure, a nonsignificant positive correlation was observed between TA obtained at the beginning of hospitalization and BMI improvement (r = .185). Additionally, a marginally significant positive correlation was found between the evolution of TA over time and BMI improvement (r = .231), corresponding to

a small-to-medium effect size. A significant positive correlation was observed between treatment provider TA obtained at the end of hospitalization and BMI improvement (r = .330), which can be characterized by a medium effect size.

Overall, TA obtained at the end of inpatient treatment seems to be more strongly related to outcome. More precisely, patient TA (T2) appears to be associated with changes in ED symptoms, while treatment provider TA (T2) appears to be associated with BMI improvement.

Discussion

The current study examined patient and treatment provider TA over the course of a short-term hospitalization for adolescents with AN and its association with treatment outcome. Both patients and their reference treatment providers reported strong TA quality at the beginning and end of treatment, which suggests that establishing a good TA is possible in contexts of intensive inpatient treatment and high symptom severity. Moreover, the level of patient TA in the current sample is consistent with the use of the WAI with other ED samples (e.g., Pereira et al., 2006, Rienecke et al., 2016, Zaitsoff et al., 2008). Importantly, the fact that TA was measured within the first 10 days following admission could partly explain those high early TA scores. The relationship between patients and treatment providers may have started to evolve before the questionnaires were completed. Similarly, participants who agreed to participate may have been more likely to show higher TA scores than those who refused or failed to complete the questionnaires.

There are, however, certain clinical aspects that may also have contributed to the establishment of a strong TA early in treatment. First, given their critical condition upon

admission, patients may have perceived hospitalization as necessary and been more open to treatment. Studies on adolescent inpatients with AN have shown that patients with a lower percentage of expected body weight (%EBW) and more severe ED psychopathology presented a greater perceived need for hospitalization (Hillen et al., 2015). Prior outpatient treatment could also have prepared patients for inpatient treatment. Patients and their families had likely tried other strategies or interventions before without success, which could have contributed to their perceived need for hospitalization and facilitated the establishment of a good TA. Second, reference treatment providers shared a privileged relationship with their patients. Their relationship was characterized by group activities, meal support, and regular individual meetings (1 to 3 times per week, on average), during which they mainly did evaluation/intervention and offered support/active listening. This could have created opportunities for them to get to know each other, talk about treatment goals and tasks, and work on alliance ruptures or disagreements. Similarly, reference treatment providers reported doing little discipline with their patients (11 % of the time, on average), which may also have contributed to TA development. Lastly, treatment plans were individualized and built according to each patient's evolution. As such, treatment plans were presented to patients collaboratively and implemented progressively, which may have helped in creating a shared understanding of the treatment process. Adolescents may have also been motivated to get better, as this would allow them to return to their normal train of life (e.g., home, family, friends, etc.).

Moreover, TA did not change significantly from the beginning to end of inpatient treatment for both patients and treatment providers, with TA quality remaining relatively high. Unlike what we initially hypothesized and unlike findings from Bourion-Bedes et al. (2013), TA

quality did not improve significantly over time. These findings, however, resemble those of previous studies (e.g., Brown et al., 2013; Isserlin & Coutier, 2013; Rienecke et al., 2016). Consistent with Rienecke and colleagues (2016), the stability in TA over the course of treatment could be due, in part, to the relatively short time frame being assessed (approximately seven weeks), during which changes in TA may not have had time to emerge. Additionally, given that TA ratings were already high at the start of hospitalization, significant increases in TA could have been limited. Furthermore, the result showing that TA did not decrease during inpatient treatment is an encouraging finding. Despite changes in weight and eating behaviours, patients and treatment providers were able to maintain a strong relationship. Therefore, although patients with AN often fear gaining weight, they were able to work through changes in their bodies and continue to collaborate with their treatment providers. The short-term nature of the intervention could have also helped in maintaining a clear focus on the goals of treatment and the tasks needed to reach these goals.

In addition, unlike what we initially hypothesized, patients did not present higher TA compared to reference treatment providers. TA did not differ between patients and treatment providers, except with regard to the Bond subscale. This suggests that both respondents shared similar perspectives regarding the goals and tasks of treatment. Therefore, despite the treatment obstacles known to be associated with adolescence and AN, patients and their treatment providers both seemed to agree on what aspects should be worked on and how this can be done. The therapeutic bond at both time points was perceived as stronger according to treatment providers and lower according to patients, though it was still relatively high. Different factors may influence patients' perceptions of the quality of the bond they shared with their reference

treatment providers. First, adolescent patients are often referred to treatment by their caregivers and may be reluctant to getting help. As a result, it may take more time for them to develop a trusting relationship. They may agree with treatment providers regarding the goals and tasks of treatment but may need a longer time to gain mutual trust. Second, individuals with AN are known to present self-esteem difficulties (Kästner et al., 2019). Given that certain items of the WAI-S Bond subscale relate to self-worth (e.g., "I think my treatment provider appreciates me"), patients may tend to rate such items lower.

Furthermore, patients showed significant clinical improvements over the course of hospitalization in terms of changes in ED symptomatology and improvement in BMI. Concerning the TA-outcome association, no significant association was found between patient and treatment provider global TA obtained at the beginning of inpatient treatment and outcome, whereas moderate associations were found between global TA obtained at the end of treatment and outcome. These results could indicate that the way TA evolved over hospitalization resulted in stronger associations between TA measured at the end of treatment and outcome. As such, the potential benefits of TA on outcome could become more apparent over time or once TA has started to evolve. However, these findings may also relate to the fact that variables measured at the nearly same time (proximal variables) are typically more highly correlated than distal variables (Fluckiger et al., 2018). While some studies in the field of EDs support a stronger association between early TA and outcome, our findings replicate those of previous studies that found late TA as being a better predictor of outcome (e.g., Marzola et al., 2019, Rienecke et al., 2016, Stiles-Shields et al., 2013). It is, however, important to note that, given the short-term nature of the inpatient treatment in the current study, our different TA assessment points may not

be easily compared to those of other studies done with outpatient samples receiving longer treatment.

Concerning TA obtained at the end of hospitalization, patient TA was found to be more strongly associated with changes in ED symptoms, while treatment provider TA was found to be more strongly associated with BMI improvement. As hypothesized, the strongest association was found between patient TA and changes in ED symptoms. Consistent with previous research (Isserlin & Couturier, 2012; Rienecke et al., 2016), such findings support the idea that patient TA may be important more so for psychological recovery (e.g., modification of ED-related thoughts, behaviours, and attitudes) than physical recovery (e.g., weight gain). This represents an encouraging finding as thoughts and attitudes related to EDs are known to be harder to modify (Marzola et al., 2019). Establishing a good TA, therefore, seems like an important factor in facilitating psychological and behavioural change in adolescent patients with AN. Moreover, given that treatment providers monitor patients' weights regularly and may not have complete access to patients' cognitions, they may base their perceptions regarding TA more so on patients' physical improvement. In other words, they may perceive that they share a greater agreement on tasks and goals with patients who seem to be doing better in terms of weight gain. As hypothesized, both patient and treatment provider TA are associated with outcome measures. Unlike previous studies focusing solely on patients' reports of TA, our findings add to the literature by showing that both perspectives of TA are important.

Strengths and limitations

One strength of our study is the homogeneous sample of adolescent inpatients with AN, which increases the degree to which results can be interpretable for such a specific population

presenting with unique challenges. The inclusion of treatment providers also represents a strength as their perceptions have received little attention in the field of youth ED treatment. Another strength is the fact that two measures of TA were gathered, making it possible to observe the evolution of TA between the beginning and end of hospitalization. TA was also assessed using a well-validated and commonly used measure, making it more easily comparable across studies. Furthermore, the inpatient treatment offered by reference treatment providers is well documented, allowing us to better understand the relationship shared between patients and their reference treatment providers. However, it is important to reiterate the fact that only a portion of inpatient treatment (i.e., only the interventions done by reference treatment providers) was examined in the present study.

Despite the interesting findings of this study, several limitations should be considered. First, only relationships between patients and reference treatment providers were explored. Interventions performed by other members of the multidisciplinary team (e.g., doctors, psychologists, etc.) that could have influenced the treatment process and the patients' TA were not addressed in the current study. As a result, our findings cannot be generalized to the whole inpatient treating team. Second, even though our sample size was important compared to other studies in the field of youth ED treatment, several missing data were present and limited statistical power. Although certain findings did not reach significance, moderate effect sizes were found that could have potential clinical significance and warrant further exploration. The small sample of included treatment providers could also have limited the variance of their measures of TA. Third, given the correlational nature of our analyses, the direction of the TA-outcome relationship cannot be concluded from this study. It is, therefore, not possible to separate the

influence of TA on outcome from the influence of early symptom change or weight gain on later TA. A fourth limitation relates to the fact that the duration of hospitalization varied for each patient, meaning that variables obtained at the end of inpatient treatment were not consistently measured after the same amount of time across all patients. Consequently, the potential impact of extended treatment duration on TA development was not examined. Fifth, we did not compare respondents and non-respondents (e.g., participants who refused to participate or participants who failed to complete the questionnaires). There is a possibility that non-respondents had different characteristics and our results should, thus, be interpreted cautiously. Lastly, all questionnaires used were self-reports completed by patients and treatment providers. Differences in participants' tendency to self-disclose or to answer in socially desirable ways could have biased results.

Conclusion

The results of this study add to the existing literature by including two measures of TA and by examining perspectives from both adolescent inpatients and their treatment providers. To our knowledge, no other study has investigated patient and treatment provider TA with repeated measures during inpatient treatment for adolescents with AN. Examining both perspectives of TA and understanding the influence of TA on patient improvement can provide insight into how to intervene with adolescent inpatients with AN most effectively. Taken together, our findings provide further support to earlier research indicating that AN patients can establish acceptable levels of TA (Graves et al., 2017). Given that very little data exist on adolescent inpatients with AN, we provide valuable information demonstrating that such patients can establish and maintain a good TA, even in contexts of intensive treatment and severe ED symptomatology. Moreover, our results indicate that both patients and treatment providers generally share similar

perceptions of TA. Although these results appear inconsistent with previous research (Bourion-Bedes et al., 2013), the limited pool of studies including both adolescent patients with AN and treatment providers makes it difficult to compare. Additionally, TA obtained at the end of hospitalization was more associated with outcomes than TA obtained at the beginning, suggesting that TA's potential benefits on outcome may require more time to develop with adolescent inpatients. Lastly, our findings highlight the importance of considering both patient and treatment provider perceptions when examining TA and its association with treatment outcome.

These results have several potentially important implications for future TA research, specifically in the context of adolescent AN. To gain a deeper understanding of the TA-outcome relationship, future studies may benefit from the use of longitudinal designs with multiple TA assessments, the investigation of the predictive value of TA, and the recruitment of a larger sample including both adolescent inpatients and treatment providers. In addition, given that recovery from AN is marked by relapse and remissions, future studies could examine the impact of TA at later time points along the course of recovery. From a clinical point of view, it would also be interesting to examine the relationship between different interventions on TA quality and patient improvement.

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Tables

Table 1.

Patients' characteristics (n = 95).

	M (SD)
Age (years)	14.92 (1.79)
BMI at admission $(\mathrm{kg/m^2})$	15.03 (1.94)
BMI at discharge $(\mathrm{kg/m^2})$	16.72 (1.67)
Duration of hospitalization (days)	51.25 (21.20)

Note. BMI = body mass index.

Table 2.

Description of global and subscale therapeutic alliance scores (n =95).

	Patient		Treatment provider	
	T1	**T2**	**T1**	**T2**
	M (SD)	*M (SD)*	*M (SD)*	*M (SD)*
n	87	63	64	57
Global	41.01 (12.23)	41.29 (14.14)	42.45 (5.55)	43.81 (4.83)
Bond	13.66 (4.29)	14.08 (5.12)	15.08 (1.77)	15.63 (1.33)
Task	13.95 (4.40)	13.75 (4.85)	13.98 (2.31)	14.49 (2.00)
Goal	13.55 (4.22)	13.46 (4.82)	13.39 (2.24)	13.68 (2.16)

Table 3.

Mixed model ANOVA results: TA quality over time and between respondents (n=95).

		df	*F*	*p*	η^2
Global TA					
	Time	(1, 83)	0.62	.433	.010
	Group	(1, 59)	1.22	.275	.113
	Time x Group	(1, 31)	0.51	.479	.036
Bond subscale					
	Time	(1, 83)	1.73	.192	.005
	Group	(1, 59)	7.78	.007	.235
	Time x Group	(1, 31)	0.43	.518	.077
Task subscale					
	Time	(1, 83)	0.12	.731	.039
	Group	(1, 59)	0.24	.628	.070
	Time x Group	(1, 31)	1.62	.212	.022
Goal subscale					
	Time	(1, 83)	0.06	.814	.000
	Group	(1, 59)	0.00	.988	.033
	Time x Group	(1, 31)	0.12	.732	.020

Note. Eta squarred calculated from complete data set (n=32) using GLM.

Table 4.

Patient symptomatology at baseline (T1) and end of hospitalization (T2; n=95).

	T1		T2				
	M (SD)	*n*	*M (SD)*	*n*	*F*	*df*	Cohen's d
EDRC	50.36 (9.63)	91	46.66 (10.16)	62	15.58***	1, 93	0.486
BMI	15.03 (1.94)	95	16.72 (1.67)	95	338.91***	1, 94	1.889

Note. ***p < .001; EDRC = Eating Disorder Risk Composite; BMI = body mass index.

Table 5.

Correlations between global therapeutic alliance and outcome.

		Δ EDRC		% BMI	
		r	*n*	*r*	*n*
Patient TA					
	T1	.198	57	.190†	87
	T2	.348**	59	.134	63
	T2-T1	.380**	57	.116	61
Treatment provider TA					
	T1	.203	34	.185	64
	T2	.274	32	.330*	57
	T2-T1	.129	30	.231†	55

Note. EDRC = Eating Disorder Risk Composite; BMI = body mass index.

† $p < .10$; * $p < .05$; ** $p < .01$.

Appendix A

Patient Consent Form

CHU Sainte-Justine
Le centre hospitalier universitaire mère-enfant
Pour l'amour des enfants
Université de Montréal

FORMULAIRE D'INFORMATION ET DE CONSENTEMENT - ADOLESCENTE

Étude des facteurs associés à l'établissement d'une alliance thérapeutique chez les adolescentes hospitalisées pour un trouble de la conduite alimentaire.

CHERCHEURS PRINCIPAUX
Dominique Meilleur, Ph.D., Professeure adjointe au Département de Psychologie, Université de Montréal,
Jean-Yves Frappier, pédiatre, CHU Sainte-Justine

Ce projet de recherche reçoit un appui financier du Fonds de recherche sur la société et la culture du Québec (FQRSC) dans le cadre du programme « Établissement de nouveaux professeurs-chercheurs».

1. Objectifs de la recherche

Le but de cette recherche est d'étudier les facteurs associés à l'établissement de l'alliance thérapeutique chez les adolescentes lors d'une intervention pendant une hospitalisation. L'alliance thérapeutique se définit comme l'entente et la collaboration qui existent entre une adolescente et son (ou ses) intervenant(s) en ce qui concerne les objectifs à atteindre et les moyens pris pour y arriver. Plus spécifiquement, nous voulons mieux comprendre les relations entre différentes caractéristiques individuelles, familiales et sociales des adolescentes et le développement de la relation thérapeutique avec les intervenants en contexte d'hospitalisation. Nous sollicitons la participation des adolescentes âgées entre 12 et 17 ans qui sont hospitalisées pour un trouble de la conduite alimentaire à l'unité des grands au CHU Sainte-Justine.

2. Participation à la recherche

- ✓ En participant à cette étude, tu seras invité(e) à remplir successivement neuf questionnaires portant sur : la qualité de l'alliance de travail établie avec deux intervenants, certaines caractéristiques individuelles telles que la nature et l'intensité de tes difficultés présentes, le degré de préparation au changement, le sentiment d'efficacité personnelle, les stratégies d'adaptation en situation de stress, les attitudes face à l'autorité, certaines caractéristiques liées aux personnes significatives soit le soutien social perçu et la qualité perçue de l'environnement familial.

- ✓ Il y aura deux temps de mesures pour l'ensemble des questionnaires soit le premier temps (T1) dans les 10 premiers jours après ton arrivée dans les services et le temps 2 (T2) à la fin de ton hospitalisation (6 à 12 semaines plus tard). Pour les mesures au temps 1, la plupart des questionnaires pourront être remplis dès ton arrivée dans les services, sauf les questionnaires portant sur l'alliance. Ces derniers pourront être remplis après que tu auras eu 3 rencontres (en moyenne) avec ton intervenant de référence (par exemple : l'infirmière, la psycho-éducatrice, l'éducatrice, le médecin, le psychologue, ou la travailleuse sociale) et avec un deuxième intervenant au choix.

- ✓ Les intervenants rencontrés pendant ton séjour à l'hôpital (médecin, infirmière, psycho-éducatrice, éducatrice, psychologue, travailleuse sociale) compléteront quelques données sur les entrevues effectuées (par exemple : nombre d'entrevues, types d'intervention, durée). Tes réponses aux questionnaires ne seront pas communiquées aux intervenants.
- ✓ Le temps estimé pour remplir les questionnaires est de 60 à 75 minutes pour chaque temps soit au début de ton hospitalisation (T1) et à la fin (T2).

3. Avantages et inconvénients

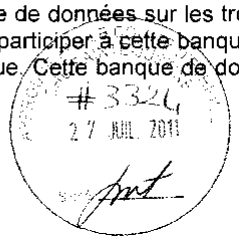
Tu ne retireras aucun avantage direct en participant à ce projet de recherche. Cependant ta participation pourra contribuer à l'avancement des connaissances sur les facteurs associés à l'établissement d'une bonne alliance thérapeutique entre les adolescentes hospitalisées pour un trouble de la conduite alimentaire et les intervenants chargés de leur traitement. Il y a peu de risques liés à la participation à cette étude. Toutefois, certaines questions ou sujets abordés à travers les différents questionnaires de recherche pourraient générer des émotions négatives. En cas de malaise, il sera possible d'en parler avec l'agente de recherche en tout temps pendant la collecte de données ou ultérieurement avec la chercheuse principale de l'étude. L'inconvénient principal rattaché à ta participation à cette recherche est le temps nécessaire pour remplir les questionnaires (environ entre 60 et 75 minutes).

4. Confidentialité des informations

Les renseignements que tu nous communiqueras demeureront **strictement confidentiels, à moins d'une autorisation de ta part ou d'une exception de la loi.** Aucune information ne sera divulguée à tes parents ou aux intervenants. Un code de recherche sera attribué à chaque participante; ainsi à aucun endroit, ton nom ne sera demandé ou écrit. Les données seront conservées dans un classeur barré dans un bureau fermé à clé à l'Université de Montréal. Les données de cette étude seront conservées pour une durée de 5 ans après la fin de l'étude sous la responsabilité de la chercheure principale Dominique Meilleur. Il est possible que les résultats de cette recherche soient publiés dans un journal scientifique ou présentés dans un congrès scientifique. En de tel cas, aucune information permettant de t'identifier ne sera divulguée ou publiée. Il est possible que nous devions permettre l'accès aux dossiers de recherche au Comité d'éthique de la recherche du CHU Sainte-Justine ou à un membre de l'organisme qui subventionne le projet à des fins de vérification ou de gestion de la recherche. Ces derniers adhèrent à une politique de stricte confidentialité. Nous te mentionnons que la loi nous oblige à dévoiler aux autorités toute situation d'abus ou de négligence qui mettrait ta sécurité ou ton développement en danger.

Tu ne pourras pas obtenir tes résultats individuels. Par contre, si tu souhaites obtenir de l'information concernant la recherche ou le moment où les résultats seront accessibles, tu pourras communiquer avec la chercheure principale de l'étude : Dominique Meilleur, PhD (dominique.meilleur@umontreal.ca, 514-343-5866).

Les données recueillies pourraient être versées dans la banque de données sur les troubles de la conduite alimentaire à l'adolescence, si tu as accepté de participer à cette banque et si les données sont utiles et pertinentes aux objectifs de la banque. Cette banque de données



a déjà fait l'objet d'une approbation par le comité d'éthique à la recherche du CHU Sainte-Justine.

5. Liberté de participation et droit de retrait

Ta participation est entièrement volontaire. Tu es libre de te retirer en tout temps, sur simple avis verbal, sans préjudice et sans devoir justifier ta décision. Si tu souhaites te retirer de la recherche, tu peux simplement communiquer avec un des chercheurs. Ta décision n'affectera en rien tes relations présentes ou futures avec les membres du CHU Sainte-Justine et n'aura aucun effet sur la qualité des soins qui te seront offerts. Si tu te retires de la recherche, les données qui auront été recueillies avant ton retrait seront détruites.

Personnes disponibles pour répondre à tes questions concernant l'étude :
Dr. Jean-Yves Frappier : (514) 345-4722
Dominique Meilleur, PhD : 514-343-5866

Responsabilité des chercheurs

En acceptant de participer à cette recherche, tu ne renonces à aucun de tes droits prévus par la loi. De plus, tu ne libères pas les chercheurs de leur responsabilité légale et professionnelle advenant une situation qui te causerait préjudice.

Si tu as des questions au sujet de tes droits ou une plainte à formuler, contacte le commissaire local aux plaintes et à la qualité des services du CHU Sainte-Justine au (514) 345-4749.

Nous te remercions pour ta collaboration.

CHUQ Saint-Justine

FORMULAIRE D'INFORMATION ET D'ASSENTIMENT - ADOLESCENTE

Assentiment pour la participation à l'étude

Étude des facteurs associés à l'établissement d'une alliance thérapeutique chez les adolescentes hospitalisées pour un trouble de la conduite alimentaire.

En signant le présent formulaire, je certifie que :

- J'ai lu le formulaire d'information et de consentement.
- J'ai eu l'occasion de poser des questions auxquelles on m'a donné des réponses. Je sais que je peux poser d'autres questions en tout temps.
- Je comprends que je vais recevoir une copie signée du présent formulaire d'assentiment
- Je comprends que je peux me retirer de l'étude en tout temps sans conséquence sur les soins de santé.
- J'autorise l'équipe de recherche à consulter mon dossier médical pour obtenir les informations pertinentes à ce projet.
- Je comprends qu'en signant ce document, je ne renonce pas à mes droits.

J'accepte de participer à cette étude.

Nom : _____ Prénom : _____

Signature : _____ Date : _____

CHU Sainte-Justine

CONSENTEMENT PARENTAL OU DU REPRÉSENTANT LÉGAL (TUTEUR)

Étude des facteurs associés à l'établissement d'une alliance thérapeutique chez les adolescentes hospitalisées pour un trouble de la conduite alimentaire.

En signant le présent formulaire, je certifie que :

- J'ai lu le formulaire d'information et de consentement.
- J'ai eu l'occasion de poser des questions auxquelles on m'a donné des réponses. Je sais que je peux poser d'autres questions en tout temps.
- Je comprends que je vais recevoir une copie signée du présent formulaire de consentement.
- Je comprends que mon enfant peut se retirer de l'étude en tout temps sans conséquence sur les soins de santé de mon enfant.
- J'autorise l'équipe de recherche à consulter le dossier médical de mon enfant pour obtenir les informations pertinentes à ce projet.
- Je comprends qu'en signant ce document, je ne renonce pas à mes droits, ni à ceux de mon enfant.

J'accepte que mon enfant participe à cette étude

_____

NOM de l'adolescente Prénom de l'adolescente

_____

NOM du parent PRÉNOM du parent

_____

Signature du parent Date

J'ai expliqué au participant et/ou à son parent/tuteur tous les aspects pertinents de la recherche et j'ai répondu aux questions qu'ils m'ont posées. Je leur ai indiqué que la participation au projet de recherche est libre et volontaire et qu'elle peut être cessée en tout temps.

_____ _____ _____

Nom de la personne qui a obtenu le consentement Signature date

Appendix B

Treatment Provider Consent Form

FORMULAIRE D'INFORMATION ET DE CONSENTEMENT – INTERVENANT(E)

Étude des facteurs associés à l'établissement d'une alliance thérapeutique chez les adolescentes hospitalisées pour un trouble de la conduite alimentaire.

CHERCHEURS PRINCIPAUX

Dominique Meilleur, Ph.D., Professeure adjointe au Département de Psychologie,

Université de Montréal,

Jean-Yves Frappier, pédiatre CHU Sainte-Justine

Ce projet de recherche reçoit un appui financier du Fonds de recherche sur la société et la culture du Québec (FQRSC) dans le cadre du programme Établissement de nouveaux professeurs-chercheurs.

A) RENSEIGNEMENTS AUX PARTICIPANTS

1. Objectifs de la recherche

Le but de cette recherche est d'étudier les facteurs associés à l'établissement de l'alliance thérapeutique chez les adolescentes lors d'une intervention pendant une hospitalisation. Plus spécifiquement, nous voulons mieux comprendre les relations entre différentes caractéristiques individuelles, familiales et sociales des adolescentes et le développement de la relation thérapeutique avec les intervenants en contexte d'hospitalisation. Nous sollicitons votre participation à titre d'intervenant impliqué auprès des adolescentes âgées entre 12 et 17 ans qui sont hospitalisées pour un trouble de la conduite alimentaire à l'unité pour adolescents au CHU Sainte-Justine.

2. Participation à la recherche

- ✓ En participant à cette étude, vous serez invité à remplir trois questionnaires portant sur : 1) la qualité de l'alliance de travail établie avec une adolescente, 2) votre sentiment d'efficacité personnelle par rapport à l'intervention, 3) un journal de bord indiquant brièvement (choix de réponses à cocher) les interventions effectuées auprès de la jeune.
- ✓ Il y aura deux temps de mesures pour les deux premiers questionnaires (alliance et sentiment efficacité personnelle) soit le premier temps (T1) dans les 10 premiers jours après l'arrivée de l'adolescente dans les services ou après avoir rencontré l'adolescente à au moins 3 reprises; et le temps 2 (T2) à la fin de l'hospitalisation de

l'adolescente (6 à 12 semaines plus tard). Pour le troisième questionnaire, soit le journal de bord, ce dernier devra être complété à chaque semaine. Cet outil a pour but de répertorier, de manière brève, les principales interventions effectuées auprès de la jeune pendant son séjour. L'outil s'apparente à un tableau sur lequel on indique à chaque semaine, à l'aide de choix de réponses, quels sont les principaux objectifs poursuivis et les interventions effectuées au cours de la semaine.

- ✓ Si vous acceptez de participer à cette recherche, vous aurez à remplir les questionnaires uniquement que pour les adolescentes qui ont accepté de participer à l'étude et dont vous êtes l'intervenant de référence.
- ✓ Le temps estimé pour remplir les deux premiers questionnaires est de 15 minutes (au temps 1 et au temps 2) et pour le journal de bord est de 5 minutes (à chaque semaine).

3. Avantages et inconvénients

Vous ne retirerez aucun avantage personnel en participant à ce projet de recherche. Cependant votre participation pourra contribuer à l'avancement des connaissances sur les facteurs associés à l'établissement de l'alliance thérapeutique entre les adolescentes hospitalisées pour un trouble de la conduite alimentaire et les intervenants chargés de leur traitement. Il y a peu de risques liés à la participation à cette étude. L'inconvénient principal rattaché à votre participation à cette recherche est le temps nécessaire pour remplir les questionnaires (environ entre 15 minutes).

4. Confidentialité, diffusion ou anonymat des informations

Les renseignements que vous nous communiquerez demeureront **strictement confidentiels, à moins d'une autorisation de votre part ou d'une exception à la loi.** Les informations recueillies à l'aide des questionnaires de recherche ne permettront pas de vous identifier et vos réponses ne seront pas divulguées à l'adolescente ni aux membres de l'équipe clinique. Les membres de l'équipe de recherche doivent signer un formulaire d'engagement à la confidentialité, c'est-à-dire qu'ils s'engagent à ne divulguer vos réponses à personne. On vous attribuera un numéro de code et seule la chercheuse principale et son assistant auront la liste correspondante. Les données seront conservées dans un bureau fermé à clé à l'Université de Montréal pour une durée de 5 ans après la fin de l'étude sous la responsabilité de la chercheure principale Dominique Meilleur. Il est possible que les résultats de cette recherche soient publiés dans un journal scientifique ou présenter dans un congrès scientifique. En de tel cas, aucune information permettant de vous identifier ne sera divulguée ou publiée. Il est possible que nous devions permettre l'accès aux dossiers de

recherche au Comité d'éthique à la recherche du CHU Sainte-Justine ou à un membre de l'organisme qui subventionne le projet à des fins de vérification ou de gestion de la recherche. Ces derniers adhèrent à une politique de stricte confidentialité.

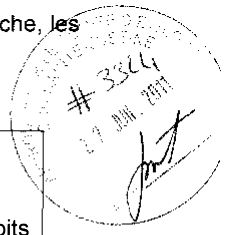
Vous ne pourrez pas obtenir vos données individuelles. Par contre, si vous souhaitez obtenir de l'information concernant la recherche ou le moment où les résultats seront accessibles, vous pourrez communiquer avec la chercheure principale de l'étude : Dominique Meilleur, PhD (dominique.meilleur@umontreal.ca, 514-343-5866).

5. Utilisation des données dans le cadre d'autres projets de recherche

Les données recueillies pourraient être versées dans la banque de données sur les troubles de la conduite alimentaire à l'adolescence, si vous avez accepté de participer à cette banque et si les données sont utiles et pertinentes aux objectifs de la banque. Cette banque de données a déjà fait l'objet d'une approbation par le comité d'éthique à la recherche du CHU Sainte-Justine.

6. Droit de retrait

Votre participation à cette recherche est entièrement volontaire. Vous êtes libre de vous retirer en tout temps, sur simple avis verbal, sans préjudice et sans devoir justifier votre décision. Si vous souhaitez vous retirer de la recherche, vous pouvez simplement communiquer avec la chercheure principale de l'étude Dominique Meilleur (dominique.meilleur@umontreal.ca, 514-343-5866). Si vous vous retirez de la recherche, les données qui auront été recueillies avant votre retrait seront détruites.



Responsabilité des chercheurs

En acceptant de participer à cette recherche vous ne renoncez à aucun de vos droits prévus par la loi. De plus vous ne libérez pas les chercheurs de leur responsabilité légale et professionnelle advenant une situation qui vous causerait préjudice.

Si vous avez des questions au sujet de vos droits ou une plainte à formuler, veuillez contacter le conseiller local aux plaintes et à la qualité des services au CHU Sainte-Justine au 514- 345- 4749.

Merci pour votre collaboration.

FORMULAIRE DE CONSENTEMENT – INTERVENANT(E)

Étude des facteurs associés à l'établissement d'une alliance thérapeutique chez les adolescentes hospitalisées pour un trouble de la conduite alimentaire.

En signant le présent formulaire, je certifie que :

- J'ai lu le formulaire d'information et de consentement.
- J'ai eu l'occasion de poser des questions auxquelles on m'a donné des réponses.
- Je comprends que je vais recevoir une copie signée du présent formulaire de consentement.
- Je comprends que je peux me retirer de l'étude en tout temps sans préjudice
- Je comprends qu'en signant ce document, je ne renonce pas à mes droits

J'accepte de participer à cette étude

_____
Nom et prénom (Lettres moulées)

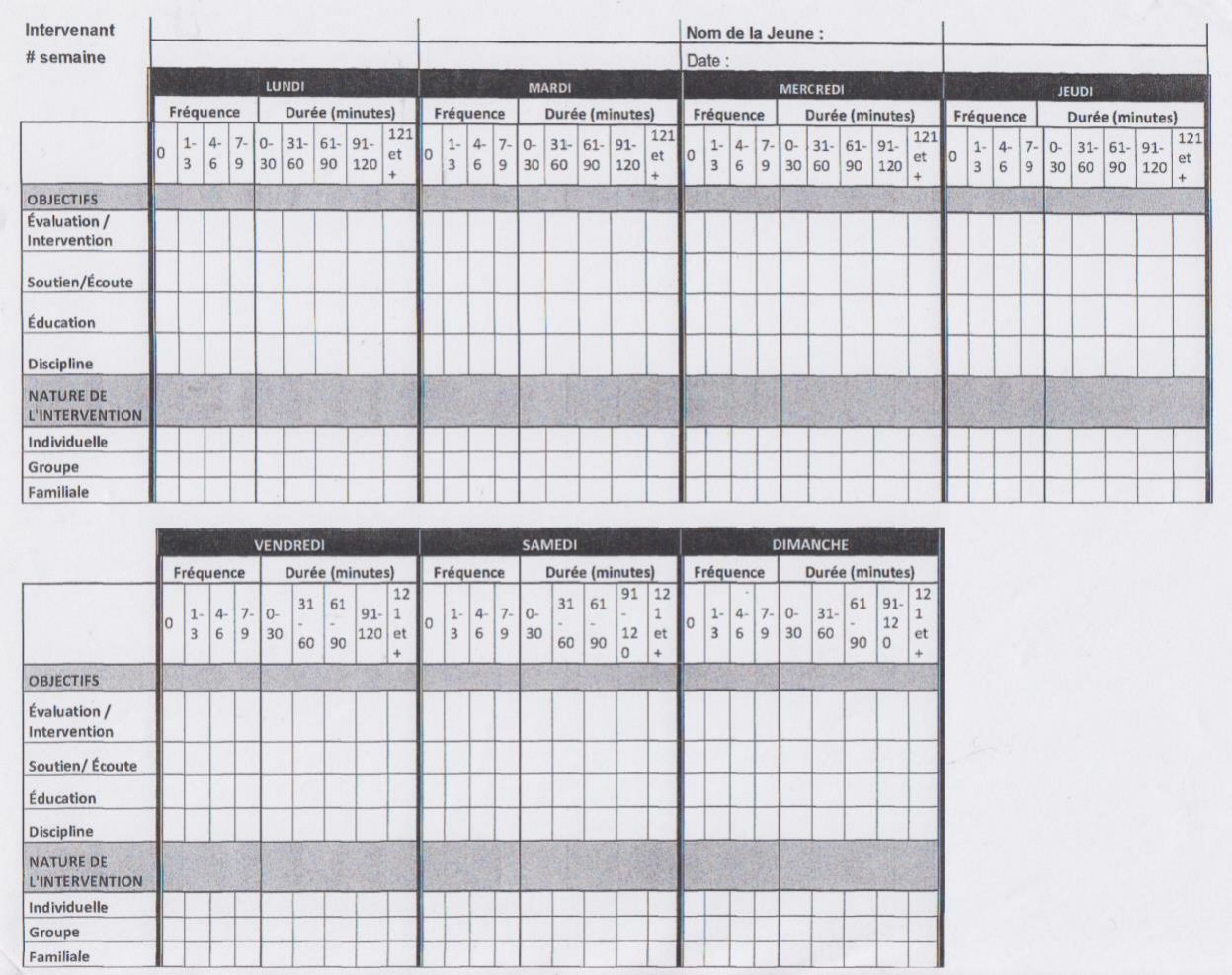
_____ _____
Signature Date

J'ai expliqué au participant tous les aspects pertinents de la recherche et j'ai répondu aux questions qu'il/elle m'a posées. Je lui ai indiqué que la participation au projet de recherche est libre et volontaire et que la participation peut être cessée en tout temps. Je lui remettrai une copie signée du présent formulaire.

_____ _____ _____
Nom de la personne qui a obtenu le consentement (Lettres moulées) Signature Date

Appendix C

Weekly Logbook



Intervenant
semaine
Nom de la Jeune :
Date :

	LUNDI									MARDI									MERCREDI									JEUDI								
	Fréquence				Durée (minutes)					Fréquence				Durée (minutes)					Fréquence				Durée (minutes)					Fréquence				Durée (minutes)				
	0	1-3	4-6	7-9	0-30	31-60	61-90	91-120	121 et +	0	1-3	4-6	7-9	0-30	31-60	61-90	91-120	121 et +	0	1-3	4-6	7-9	0-30	31-60	61-90	91-120	121 et +	0	1-3	4-6	7-9	0-30	31-60	61-90	91-120	121 et +
OBJECTIFS																																				
Évaluation / Intervention																																				
Soutien/Écoute																																				
Éducation																																				
Discipline																																				
NATURE DE L'INTERVENTION																																				
Individuelle																																				
Groupe																																				
Familiale																																				

	VENDREDI									SAMEDI									DIMANCHE								
	Fréquence				Durée (minutes)					Fréquence				Durée (minutes)					Fréquence				Durée (minutes)				
	0	1-3	4-6	7-9	0-30	31-60	61-90	91-120	121 et +	0	1-3	4-6	7-9	0-30	31-60	61-90	91-120	121 et +	0	1-3	4-6	7-9	0-30	31-60	61-90	91-120	121 et +
OBJECTIFS																											
Évaluation / Intervention																											
Soutien/ Écoute																											
Éducation																											
Discipline																											
NATURE DE L'INTERVENTION																											
Individuelle																											
Groupe																											
Familiale																											