# Internal Representations of the Therapeutic Relationship Among Adolescents in Psychodynamic Psychotherapy

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This study examined changes in adolescents' internal representations of their relationship with their therapist and the extent to which these changes were related to changes in their representations of their relationship with their parents and to treatment outcomes.

Method: Thirty adolescents (aged 15–18 years, 70% women) undergoing psychodynamic psychotherapy participated in relationship anecdote paradigms interviews based on the core conflictual relationship theme method and completed outcome measures at the beginning of treatment and a year later.

Results: Adolescents' positive representations of their therapists increased throughout the year of treatment, whereas their negative representations did not change. There was an association between the development of the therapeutic relationship and improvement in the perception of the relationship with parents over the course of therapy. Increases in the level of positive representations and decreases in the level of negative representations of the therapist were associated with greater satisfaction with treatment but not with the other outcome measures. These results support the centrality of the therapeutic relationship in the process of change during adolescents' psychodynamic psychotherapy. Copyright © 2014 John Wiley & Sons, Ltd.

#### Key Practitioner Message:

- The finding that positive representations of the therapist increased throughout treatment but that negative representations remained steady suggests that therapists who treat adolescents should expect and be able to hear adolescent clients' positive and negative internal representations of themselves. Therapists need to realize that although adolescents often experience negative emotions and perceptions in therapy as in other significant relationships, this does not necessarily block the development of positive emotions.
- The finding that changes in the representations of the therapist are associated with changes in the representations of parents is in line with psychodynamic theory, which posits that psychotherapy facilitates new interpersonal experiences and new insights through the exploration of the therapeutic relationship. Working in the 'here and now' may eventually impact the nature of other significant relationships, particularly with parents in the case of adolescents.

Keywords: Adolescents, Therapeutic Relationships, CCRT, Outcome, Process, Psychodynamic Psychotherapy

## INTRODUCTION

Researchers and theoreticians concur that the therapeutic relationship is the key to success in the treatment of adolescents (Blos, 1968; Karver, Handelsman, Fields, & Bickman, 2006; Kazdin, 2004). However, compared with the abundant literature on relationship variables in adult psychotherapy, research on client–therapist relationships in adolescence lags far behind (Kazdin, 2004). The unique attributes of this age group, including their tendency to be highly ambivalent towards treatment and the relatively high dropout rates, have led various models of therapy to emphasize the importance of developing a strong therapeutic relationship with adolescents to gain their trust and keep them in treatment (Kazdin, 2004; Russell, 2008; Shirk, Karver, & Brown, 2011). Most studies that have examined adolescent-therapist relationships have been carried out in the context of cognitive behavioral or family therapy (cf., Karver *et al.*, 2006). In these approaches, the therapeutic relationship is a necessary condition for treatment success although not itself a change mechanism.

In the psychodynamic model, therapeutic relationships are considered a central vehicle of change beyond that of a positive alliance (Shedler, 2010). The centrality of the therapeutic relationship in psychodynamic psychotherapy stems from its focus on the exploration of clients' internalized representations of their relationships with significant others. Internal representations of relationships

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develop primarily during infancy and early childhood through dyadic exchanges and experiences with early caregivers. These representations tend to be recreated in other relationships, such that early experiences of attachment figures affect the way other relationships are experienced. Repetitive themes in a person's relationship and modes of interaction tend to emerge in some form in the therapeutic relationship. The recurrence of interpersonal themes in the therapeutic relationship provides clients with a unique opportunity to explore and rework them in vivo to develop more flexible ways of perceiving and experiencing their relationships. Subsequently, changes in these internal representations are expected to apply to real-life relationships with others. In psychodynamic theory, the working assumption is that symptoms have meaning, serve psychological function and occur in psychological context. As a person's scope of awareness expands and she becomes better able to recognize and articulate a broader range of experiences with self and others, the meaning and function of the symptom may become clear. Generally, as this occurs, the client is able to find new solutions to old problems, and the symptom fades (Shedler, 2010; Summers & Barber, 2010).

Though the nature of psychodynamic psychotherapy with adolescents presents specific challenges to therapists, there is growing evidence of its effectiveness for this age group (for reviews, see Midgley & Kennedy, 2011; Palmer, Nascimento, & Fonagy, 2013). In psychodynamic psychotherapy of adolescents, the central goal is to help the teenager return to the path of normal development and mastery of ageappropriate tasks. To encourage optimal psychic functioning in harmony with the self and the client's social world, psychodynamic psychotherapy aims to help the adolescent develop the capacity to tolerate a modicum of anxiety and depression, since both these affects are known to be intensified during adolescence (Blos, 1983). In adolescent psychodynamic psychotherapy, perhaps more than any other client population, the main crucible for new experiences is the work associated with the therapeutic relationship. The main emphasis is on generalizing the adolescent's new experiences developed in the therapeutic relationship to relationships with their parents (Gaines, 1999; Levy-Warren, 1999; Midgley, Anderson, Grainger, Nesic-Vuckovic, & Urwin, 2009). The adolescent-parent relationship is characterized by an increased level of conflict that usually stems from continual attempts by both sides to negotiate and redefine the relationship (e.g., De Goede, Branje, Delsing, & Meeus, 2009; Smetana, Campione-Barr, & Metzger, 2006). In fact, conflict with parents is one of the main reasons why adolescents seek therapy (Tishby et al., 2001).

Studies of adults that have examined the basic premise of the psychodynamic model regarding the association between clients' internal representations of the therapist and their representations of their other relationships have provided evidence of significant similarity between these two sets of internal representations and show that it tends to increase throughout treatment (e.g., Barber, Foltz, DeRubeis, & Landis, 2002; Connolly Gibbons, 2004; Philips, Wennberg, Werbart, & Schubert, 2006; Waldinger et al., 2002). To the best of our knowledge, only one study has examined this association in adolescents (Blatt, Stayner, Auerbach, & Behrends, 1996). The study assessed representations of the therapist and parents over a 2-year period in a group of severely disturbed inpatient adolescents receiving multifaceted treatment. It showed that as the treatment progressed, there was greater convergence between these two sets of representations. A more recent study that examined changes in the content of the internal representations of adolescents' relationships with their parents in a group of adolescents in treatment compared with a non-treatment community group (Atzil-Slonim, Shefler, Slonim, & Tishby, 2013) found three main themes of interactions between adolescents and parents: close and supportive, emotionally painful and struggle for autonomy. The results indicated that although adolescents undergoing treatment had a greater number of emotionally painful representations than the non-treatment group, they added more close and supportive representations to their repertoire through treatment, whereas the non-treatment group did not change. The current study extends previous research by focusing on representations of the therapist in a sample of outpatient adolescents undergoing individual psychodynamic psychotherapy. Our first aim was to identify the main themes of their internal representations of the therapist and to explore how these representations develop throughout 1 year of treatment. The second aim, based on the premises of psychodynamic therapy, was to assess whether changes in internal representations of the therapist are related to changes in internal representations of parents.

The empirical literature on the association between changes in internal representations of relationships and symptom reduction is inconclusive. Although some studies have found this association to be significant (Atzil-Slonim, Shefler, Gvirsman, & Tishby, 2011; Atzil-Slonim et al., 2013; Harpaz-Rotem & Blatt, 2009; Luborsky & Crits-Christoph, 1998), others have not (Wilczek, Barber, Gustavsson, Åsberg, & Weinryb, 2004). McCarthy, Gibbons and Barber (2008) suggested that these contradictory findings may be attributed to different measurement techniques and that more studies are needed to examine the theoretical psychodynamic assumption that changes in internal representations are associated with changes in symptomatology. Thus, the third aim of the current study was to explore the association between changes in adolescents' representations of their therapist and changes in symptoms, presenting problems and satisfaction with treatment.

This naturalistic field study coincides with the emphasis on the therapeutic relationship as it develops spontaneously in psychodynamic therapy as actually practiced. In recent adult psychotherapy research literature, studying the process of change in naturalistic treatments is considered a useful complement to randomized controlled trials (e.g., Ablon, Levy, & Katzenstein, 2006; Bond & Perry, 2004). Researchers in youth psychotherapy have responded to the call for more studies that can balance internal and external validity to better connect study findings to clinical practice (Bambery, Porcerelli, & Ablon, 2007; Kazdin, 2004).

#### RESEARCH QUESTIONS AND HYPOTHESES

#### Hypothesis 1

Consistent with previous findings regarding changes in adolescents' internal representations of their parents throughout psychodynamic psychotherapy (Atzil-Slonim *et al.*, 2013), we predicted that positive internal representations of the therapist would increase throughout 1 year of treatment whereas negative representations would not change.

#### Hypothesis 2

On the basis of the basic premise of psychodynamic psychotherapy for adolescents (Midgley *et al.*, 2009) and findings on adults (e.g., Connolly Gibbons, 2004) and severely disturbed inpatient adolescents (Blatt *et al.*, 1996), we predicted that changes in internal representations of the therapist would be associated with changes in internal representations of parents.

#### Hypothesis 3

On the basis of previous studies showing an association between changes in internal representations and changes in symptoms (e.g. Atzil-Slonim *et al.*, 2011; Harpaz-Rotem & Blatt, 2009; Philips *et al.*, 2006), we predicted that changes in internal representations of relationships with the therapist would be related to changes in treatment outcomes.

#### METHOD

#### Participants

The data in this study were obtained from 30 adolescents in treatment drawn from a larger sample that also included 42 adolescents who were not in treatment (Atzil-Slonim *et al.*, 2011, 2013). Data were collected from several outpatient clinics in Jerusalem, Israel, that agreed to participate in the study. Forty-two adolescents who began psychodynamic treatment in these public clinics completed the first interview and questionnaires. Nine of these adolescents dropped out of treatment shortly after they began, and three who were in treatment did not appear for the second interview for various reasons (e.g., relocation). The results of this study are based on the data analysis of the 30 participants (nine males and 21 females) who remained in

treatment and completed the second interview.<sup>1</sup> The participants' ages ranged from 14 to 18 years (mean age = 15.98 years, standard deviation [SD] = 1.13). Twenty-one of the adolescents came from intact families and nine from divorced families. The parents' mean number of years of education was 13.28 (SD=2.83) for the mothers and 13.73 (SD = 2.83) for the fathers. Twenty-five (83%) of the adolescents were born in Israel, and five (17%) were born elsewhere (USA or Europe). Regarding the source of referral, 16 (53.3%) of the participants were referred by their parents or by teachers and school counsellors, and 14 (46.7%) turned to psychotherapy of their own volition. This latter finding is not representative of adolescent samples in general (Russell, 2008). It may be due to the nature of one of the public clinics which openly encourages adolescents to engage in therapy. Similarly, one of the high schools where several adolescent clients attended was highly supportive of seeking therapy. A series of *t*-tests and chi-square tests showed no significant relationships between the study variables and either the demographic variables or dropout from therapy.

Participants were evaluated on the basis of the clinicians' intake, which indicated that 88% presented with mild to moderate symptoms of depression and/or anxiety, 52% presented with somatic distress, 44% had problems with interpersonal relationships and 44% had social problems (e.g., delinquent or aggressive behavior). Exclusion criteria included adolescents who came in for crisis intervention following severe trauma and adolescents diagnosed as psychotic or drug users. Symptom severity and functioning level, as assessed by the Youth Outcome Questionnaire Self-Report (Y-OQ-SR; Wells, Burlingame, & Rose, 1996), indicated that at baseline, 92% of the adolescents were above the clinical cutoff (which is 46 according to the Y-OQ manual) with a mean of 74.33 (SD = 23.86). According to the Target Complaints Scale (TCS; Battle et al., 1966), the mean level of problem severity at intake was 9.46 (SD = 1.62) on a scale of 1 ('not at all') to 13 ('could not be worse'). The participating adolescents sought treatment for problems with parents (66%), distress (14%), identity issues (10%) and problems with friends (10%).

#### Therapists and Therapy

The study began with 42 adolescents undergoing treatment by 38 different therapists from three different clinics. After excluding the dropouts, we were left with 30 adolescents undergoing treatment by 30 therapists. The therapists included 24 females and six males and consisted of 16 clinical

<sup>&</sup>lt;sup>1</sup>This dropout rate is very low compared with the typical range of 40– 60% in adolescent populations. The reasons for dropping out in this study were unknown; however, previous studies have shown that no single factor may be necessary or sufficient regarding the dropout of treatment; instead, there are multiple factors involved in this process (Midgley & Navridi, 2007).

psychology interns, 10 licensed clinical psychologists and four clinical social workers with 3–15 years' experience. Interns received weekly individual supervision from supervisors trained in psychodynamic psychotherapy. The treatment method employed by the staff in these clinics is psychodynamic, based on a blend of object relations, self-psychology and relational theories (Kohut, 1971; Mitchell, 1988; Winnicott, 1971). Treatment was not time-limited by policy. Treatment consisted of weekly 45to 50-min sessions over a period from 12 to 39 months (mean treatment length = 16.73 months; SD = 6.64).

#### Instruments

#### Process Measure

The Core Conflictual Relationship Theme (CCRT; Luborsky & Crits-Christoph, 1998) is a method for conceptualizing and assessing clients' repetitive mental representations of interpersonal relationships. The CCRT model views interpersonal patterns as consisting of three basic components: (a) a person's Wishes, needs or intentions during an interpersonal interaction with a specific other (W); (b) actual or expected Responses of the Other (RO); and (c) expressed or unexpressed Responses of the Self during the interaction (RS). In this study, we used the Relationship Anecdote Paradigm interview (RAP; Luborsky & Crits-Christoph, 1998) to collect narratives for the CCRT. In a RAP interview, which is approximately 45 min in length, the client is asked to describe specific episodes in which she or he interacted with another person by describing what happened, what was said, how she or he reacted and how the interaction ended. These interviews were recorded and transcribed, and concrete W, RO and RS categories were inferred from the narratives (termed relationship episodes [REs]) and were scored according to the CCRT protocol (Luborsky & Crits-Christoph, 1998). The participants were asked to describe three REs involving several significant others (mother, father, peers and the therapist). In the present study, we only analyzed the REs associated with the therapist. The interviews were conducted by clinicians who were trained in the CCRT method prior to the study.

#### **Outcome Measures**

The youth outcome questionnaire self-report. The Y-OQ assesses adolescents' psychological, symptomatic and social functioning (Y-OQ-SR; Wells *et al.*, 1996). This 64-item self-report questionnaire is comprised of six subscales (Intrapersonal Distress, Somatic, Interpersonal Relations, Critical Items, Social Problems and Behavioural Dysfunction) that assess behavioral domains of children and adolescents experiencing mental health difficulties. The Y-OQ is designed for repeated measurement of clients' emotional and behavioral symptoms (Burlingame, Wells, Lambert, & Cox, 2004). The scores of the 64 items are summed across the six content areas to produce a total score, where higher scores indicate greater symptom severity. The total Y-OQ score demonstrates high internal consistency ( $\alpha = 0.95$ ) and test-retest reliability (Burlingame et al., 2004). In the current study, we used the total score as a measure of psychological distress severity. The Y-OQ total score is highly correlated with other frequently used assessment instruments (Burlingame et al., 2004), such as the Child Behavior Checklist (Achenbach, 1991) (r = 0.83). According to the Y-OQ manual, clients who change in a positive or negative direction by at least 13 points are regarded as having made a 'reliable change' (Burlingame et al., 2004). The cutoff on the Y-OQ at which a young person's score is more likely to come from a dysfunctional population than a functional population has been estimated to be 46. When a client's score falls at or below 46, it is concluded that this client's functioning is similar to a non-client's level of functioning at that point in time. The Y-OQ was translated into Hebrew by three clinicians. The translation and back translation were supervised by the first and second authors of this study, guided by instructions from the primary author of the Y-OQ (Lambert, personal communication). The total Y-OQ score of the Hebrew version demonstrated high internal consistency ( $\alpha = 0.94$ ).

Target complaints scale. For this idiographic, widely used outcome measure, clients describe the three main problems in descending order that prompted them to go into therapy (TCS; Battle et al., 1966). The severity of each complaint is rated on a scale ranging from 1 ('not at all') to 13 ('could not be worse'). Clients are asked to re-rate the same problems at the end of therapy. The test-retest reliability is 0.65, and the criterion validity ranges from 0.7 to 0.79. Paivio, Jarry, Chagigiorgis, Hall and Ralston (2010) indicated convergence of the TCS and other measures of symptom distress (r values = 0.31–0.43). According to Paivio et al. (2010), the recovered index—which refers to post-test scores that are above clinical cutoff-is 6.19 and pre-post improvement that meet criteria for reliable change index (RCI) is 3.21. Here, we used the mean score of the three problem ratings at each time point.

*Satisfaction with treatment scale.* This is a seven-point Likert scale ranging from 1 ('I am not at all satisfied with this treatment; it did not help my condition') to 7 ('I am extremely satisfied with this treatment; it helped me a great deal') that has been used in several studies to assess clients' satisfaction with treatment (e.g., Blatt, Zuroff, Bondi, & Sanislow, 2000).

#### Procedure

At intake, the adolescents and their parents were asked to sign consent forms. Once therapy began, therapists confirmed with their clients that they were willing to be contacted by the research coordinator. The participants were interviewed twice.

#### Time 1

A week after the beginning of treatment, the initial Y-OQ and TCS were administered to the adolescents by the research coordinator. The initial RAP interviews were conducted with the participants 4–5 weeks after beginning therapy. At this point, the therapeutic relationship is presumed to have begun to develop, although changes in CCRTs are not yet expected to occur (Barber, Luborsky, Crits-Christoph, & Diguer, 1995).

#### Time 2

Twelve months after completing the initial data collection, participants were invited to a second meeting in which they were administered the Y-OQ, TCS and RAP interview. All questionnaires and interviews were conducted identically to those at Time 1. In addition, at Time 2, the participants were asked to rate their satisfaction with treatment.

Participants were paid \$10.00 for each interview as a token of appreciation for their time and their readiness to cooperate. All research materials were collected with the approval of the Helsinki Ethics Committee.

#### Rating the Core Conflictual Relationship Theme

To analyze the CCRT responses, the interviews were transcribed and then rated by three judges (a senior clinical psychologist, a clinical psychology graduate student and a social work graduate student). All the judges were given extensive training in the CCRT rating method as described by Luborsky and Crits-Christoph (1998). The judges used the standard category list in Luborsky and Crits-Christoph (1998) that contains a total of 114 categories: 37 Ws, 35 ROs and 42 RSs. They were asked to rate the extent to which each category was present in the RE on a scale of 1 (the category is not present) to 7 (the category is mostly present in the episode). The judges were blind to the research questions. To estimate inter-rater agreement, 20% of the REs were rated by two randomly assigned judges out of the three in a balanced, incomplete block design (Fleiss, 1981). The interrater reliability was determined by calculating the intraclass correlation coefficient (ICCs [2k]; Shrout & Fleiss, 1979), where 'judge' was considered a random effect and k was the number of judges (k = 2 in the current study). Thus, the ICC estimates refer to the reliability of the aggregated score from two judges' ratings. The average ICC [2,2] was 0.90 for Ws, 0.90 for ROs and 0.87 for RSs, which is high. Thus, on the basis of this extrapolation, the ratings for the judges were consistent.

In addition, for the same REs, both assigned judges provided a consistent rating of 1—the lowest score—for 47 categories. These 47 categories appeared to be much less relevant to the adolescent–therapist relationship (e.g., Ws: to feel sexual, to help others; ROs: other is romantically interested in me, other is dependent; RSs: feel jealous, am helpful). Thus, they were removed from subsequent analyses, which focused on the remaining 70 CCRT categories.

## *Cluster Analysis of Core Conflictual Relationship Theme Categories*

Internal representations of the therapist were obtained using a data-driven clustering approach that was originally proposed by Atzil-Slonim *et al.* (2013). We replicated their procedure. Note that the clusters were initially constructed on the basis of CCRT data collected with respect to participants' parents in the 2013 study. Here, the clusters were based on CCRT data collected on the same study participants with respect to their relationships with their therapist.

The mathematical procedure is described in detail in Atzil-Slonim et al. (2013) and is only summarized here. The data for each of the 70 CCRT categories that were included in this study were represented as a vector comprising the entire RAP scores reported for this category across all study participants. For each participant, six REs were taken into account: three for the therapist at Time 1 and three for the therapist at Time 2. Because we had a total of 30 participants in the study, the data vector representing each category consisted of  $180 (30 \times 6)$ RAP scores, ranging from 1 to 7. The Pearson correlations (PCs) between each pair of CCRT categories were estimated. The Iclust sequential algorithm<sup>2</sup> (Slonim, Atwal, Tkačik, & Bialek, 2005; Yom-Tov & Slonim, 2009) was then applied to partition the categories into three clusters as was performed in the original procedure. The clusters are listed in Table 1. The left column indicates the cluster and the label we chose to reflect the theme of the categories assigned to this cluster. The first cluster consisted of categories mainly associated with 'being helped'. The second cluster consisted of categories that mainly represented 'feeling liked'. The third cluster consisted of categories associated with negative emotions, which we referred to as the 'negative experience' cluster. The next columns in Table 1 indicate the CCRT component with which the category was associated (W, RO or RS) and the CCRT category name. In addition, for each category, the table indicates its typicality in its cluster, which is formally defined as the average PC of the category with respect to all other categories assigned to the same cluster.

#### RESULTS

## Changes in Internal Representations of the Therapist over the Course of 1 Year of Therapy (Hypothesis 1)

To examine changes in the clusters over time, we conducted a series of paired sample *t*-tests comparing the mean cluster scores at the two time points. *T*-tests were chosen rather than analysis of variances due to the small sample size and because there were no significant differences in the initial

<sup>&</sup>lt;sup>2</sup>An implementation of this algorithm is freely available at http:// quantbio-tools.princeton.edu/cgi-bin/Iclust. The Matlab code is freely available upon request.

Table 1. The clusters

Cluster title	CCRT	CCRT category included	Typicality	
Cluster title	component	Included	Typicality	
'Being helped'	W	To be helped	0.274	
		To be open	0.224	
		To be understood	0.167	
	RO	Helps	0.389	
		Understands	0.324	
		Enables	0.305	
		Respects me	0.251	
		Accepts	0.238	
		Is strong	0.157	
	RS	Being helped	0.369	
		Am open	0.336	
		Respect the other	0.321	
		Feel accepted	0.319	
		Feel respected	0.232	
		Dependent	0.227	
'Feeling liked'	W	To be liked	0.257	
-		To be taken care of	0.221	
		To be close	0.181	
		To feel good	0.156	
		Not to be hurt	0.153	
		To be respected	0.13	
	RO	Cares about me	0.205	
		Likes me	0.265	
		Is open	0.176	
		Is happy	0.156	
		Cooperates	0.154	
	RS	Feel loved	0.23	
		Like the other	0.229	
		Self-confident	0.189	
		Feel happy	0.184	
		Feel sad	0.114	
		Feel comfortable	0.095	
'Negative	W	To oppose	0.132	
experience'		To assert self	0.093	
1		To be distant	0.091	
		To be independent	0.062	
		To be opened up to	0.059	
		To be accepted	0.036	
		To feel good	0.009	
		To have trust	0.001	
	RO	Does not understand	0.157	
		Opposes me	0.117	
		Rejects me	0.115	
		Is controlling	0.105	
		Is limited	0.103	
		Is not trustworthy	0.098	
		Is distant	0.093	
		Hurts me	0.093	
		Does not like me	0.092	
		Is invasive	0.089	
		Does not help	0.066	
		Does not respect me	0.062	
	RS	Feel not understood	0.156	
	110	Angry	0.150	
		Oppose others	0.134	
			0.140	
		Am not open Do not understand	0.13	
		Do not understand	0.115	

(Continues)

Table 1. (Continued)

Cluster title	CCRT component	CCRT category included	y Typicality	
	Disappointed Hurt Do not like others Avoid conflict Feel not accepted Ashamed Understand Ambiyalent		$\begin{array}{c} 0.111 \\ 0.104 \\ 0.101 \\ 0.099 \\ 0.078 \\ 0.068 \\ 0.061 \\ 0.06 \end{array}$	
		Helpless Feel unloved Accept other Indifferent	0.055 0.054 0.053 0.032	

CCRT = core conflictual relationship theme. W = wish. RO = response of others. RS = response of self.

Typicality refers to the average Pearson coefficient correlation of the category with respect to all the categories in the cluster.

levels of the clusters with respect to the demographic variables. Table 2 presents the mean scores, SDs and *t*-tests comparing the CCRT clusters at the two time points. The results indicate that the clusters 'being helped' and 'feeling liked' increased significantly from Time 1 to Time 2 ( $t_{(29)} = -2.25$ , p < 0.05;  $t_{(29)} = -2.2$ , p < 0.05, respectively). The third cluster, 'negative experience', did not change significantly over time.

#### The Relationship Between the Clusters Associated with the Therapist and the Clusters Associated with the Parents (Hypothesis 2)

To explore the association between internal representations of the different protagonists, we used the clusters obtained in the current study towards the therapist and the clusters obtained in Atzil-Slonim et al. (2013) from the CCRT data of the same study participants with respect to their parents. The clusters associated with parents were 'close and supportive', 'painful interaction' and 'struggle for autonomy' (see Atzil-Slonim et al., 2013 for a detailed description of the process used to obtain the clusters associated with parents). PC coefficients were calculated between the mean scores of the clusters associated with the therapist and those associated with the parents at each time point. The results indicate that at Time 1, there were no significant correlations between the clusters associated with the therapist and the clusters associated with the parents. The upper section of Table 3 presents the PC between the clusters associated with the therapist and the clusters associated with the parents at the second time point. At Time 2, a significant negative correlation was found between the cluster 'being helped' towards the therapist and the 'struggle for autonomy' cluster towards the parents (r = -0.4, p < 0.05). This suggests

		Time 1		Tin	Time 2		
						t	
Measure		М	SD	М	SD	df = 29	p <
CCRT clusters	'Being helped' 'Feeling liked' 'Negative experience'	3.01 2.04 1.79	1.09 0.81 0.64	3.55 2.5 1.93	1.33 1.14 0.61	-2.25 -2.20 -0.90	0.05* 0.05* 0.33

Table 2. Descriptive statistics for the core conflictual relationship theme clusterss for t	the two	time points
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CCRT = core conflictual relationship theme.

\*Difference is significant at the 0.05 level.

that a better experience with the therapist was related to a lower experience of struggle in the adolescents' relationship with their parents. Additionally, the 'being helped' cluster associated with the therapist was positively correlated with the 'close and supportive' cluster associated with the parents (r = 0.5, p < 0.01). This suggests that as adolescents came to view the therapist as being more helpful, they viewed their parents as being closer and more supportive. Finally, the 'negative experience' cluster associated with the therapist was positively correlated with the 'struggle for autonomy' cluster associated with parents (r = 0.45, p < 0.05), suggesting that after 12 months of treatment, low negative emotions towards the therapist were related to a low experience of struggle with the parents and vice versa.

Next, PC coefficients were calculated between changes in the cluster score associated with the therapist and changes in cluster scores associated with the parents, using adjusted (residual) gain scores corrected for the initial level. The only significant correlation that was identified was between changes in the 'negative experience' cluster towards the therapist and changes in the 'struggle for autonomy' cluster towards the parents (r = 0.62; p < 0.05). This suggests that

the decrease in negative experiences with the therapist was associated with a decrease in the experience of struggle in the relationship with parents.

#### Research Question 3: The Relationship Between Changes in the Clusters and Outcome

In the previous study (Atzil-Slonim *et al.*, 2011) that examined the same dataset, the treatment group improved significantly on both outcome measures compared with the nontreatment community group, which did not change over time. Throughout the year of treatment in the present study, the mean level of the Y-OQ decreased from 74.33 (SD = 23.86) at the initial time point to 58.73 (SD = 28.75) at the second time point. According to the Y-OQ manual, this is a reliable change (more than 13 points). Whereas 92% of the adolescents were above the clinical cutoff (46) at Time 1, only 63% were above this cutoff at Time 2. With regard to the severity of complaints, the scores of the adolescents decreased throughout the year of treatment from 9.46 (SD = 1.62) at Time 1 to 4.35 (SD = 2.42) at Time 2. That is, adolescents

Table 3.	Pearson correlations betwee	n the clusters associate	d with the therapist, the clusters	associated with the parents and the
outcome	measures at time 2		-	-

			Clusters associated with the therapist		
			'Being helped'	'Feeling liked'	'Negative experience'
Clusters associated with parents	'Close and supportive'	PC	0.50	0.28	-0.20
1	11	Significance	0.004**	0.13	0.28
	'Emotionally painful'	PČ	-0.16	-0.15	0.09
	5 1	Significance	0.38	0.42	0.62
	'Struggle for autonomy'	PČ	-0.40	-0.18	0.45
		Significance	0.02*	0.33	0.01*
Outcome measures	Y-OQ	PČ	-0.21	-0.18	10
		Significance	0.26	0.32	0.58
	TCS	PČ	-0.28	-0.11	0.30
		Significance	0.12	0.55	0.09
	Satisfaction	PČ	0.50	0.30	-0.60
		Significance	0.005**	0.09	0.00**

PC = Pearson correlation. Y-OQ = Youth Outcome Questionnaire. TCS = Target Complaints Scale.

\*Correlation is significant at the 0.05 level.

\*\*Correlation is significant at the 0.01 level.

decreased in subjective complaints below the clinical cutoff (6.19), and their pre-post score improvement met criteria for reliable change (3.21). Satisfaction with treatment was also assessed at the second time point (M = 5.56, SD = 1.38).

To assess the association between internal representations of the therapist and symptom distress, PC values were calculated between the mean cluster scores and the outcome measures at each time point, as well as between the clusters and treatment satisfaction. The results indicated no significant correlations at Time 1 between the clusters and outcome measures. The lower section of Table 3 shows the correlations between the clusters and outcome measures at the second time point. At Time 2, a significant positive correlation was found between the cluster 'being helped' and satisfaction with treatment (r = 0.5, p < 0.01), and a negative correlation was found between the cluster 'negative experience' and satisfaction with treatment (r = -0.6, p < 0.01). This suggests that higher levels of experienced help and lower levels of negative experience were associated with greater treatment satisfaction at the second time point. Next, to examine the relationship between changes in the cluster scores and changes in outcome measures, we used adjusted (residual) gain scores. This was performed to assess change when corrected for the initial level observed for each measure. The results indicated that change in the 'negative experience' cluster was correlated with treatment satisfaction (r = -0.5, p < 0.01), suggesting that the decrease in the 'negative experience' cluster with the therapist was related to higher rates of satisfaction with treatment. Changes in the other outcome measures were not significantly correlated with changes in the clusters.

### DISCUSSION

This study focused on internal representations of the therapeutic relationship among adolescents in psychodynamic psychotherapy. As hypothesized, the positive clusters associated with the therapist ('being helped' and 'feeling liked') increased significantly from Time 1 to Time 2, whereas the negative cluster ('negative experience') did not change. These findings are consistent with the psychodynamic model, which aims to help people expand their repertoire of experiences with the self and others to enjoy greater freedom and choice (Shedler, 2010). Contemporary psychodynamic perspectives highlight the importance of expanding individuals' range of emotions and perceptions through treatment rather than replacing negative perceptions with positive ones (Mitchell, 1993). A previous study found an increase in flexibility of internal representations following a year of psychodynamic treatment of adolescents (Atzil-Slonim et al., 2011). Another study showed an increase in positive internal representations of adolescents towards their parents throughout psychodynamic treatment (Atzil-Slonim *et al.*, 2013). A study that examined changes in psychodynamic treatment of adults found an increase in positive responses towards different characters in the clients' lives (Wilczek *et al.*, 2004). The findings reported in the current study show that adolescents' internal representations of the therapist underwent changes in a similar direction.

We examined the relationship between adolescents' internal representations of the therapist and their internal representations of their parents. The results indicate a possible link between the development of the therapeutic relationship and a more positive perception of their relationship with parents over the course of therapy. Specifically, at the beginning of treatment, there were no significant associations between the clusters associated with the therapist and the clusters associated with the parents. However, a year later, the experience of 'being helped' in treatment was associated with lower levels of experienced 'struggle for autonomy' with parents and higher levels of feeling 'close and supportive' with them. Additionally, lower levels of 'negative experience' in the relationship with the therapist were related to diminished levels of experienced 'struggle for autonomy' with parents. The absence of a relationship between the therapist and parent clusters at the beginning of therapy, unlike the positive association at the end is consistent with the development of transference over time. Furthermore, changes in the level of 'negative experience' with the therapist were associated with changes in the experience of 'struggle for autonomy' with parents. These results are consistent with findings from the adult psychotherapy research literature (e.g., Barber et al., 2002; Connolly Gibbons, 2004) and a study with highly disturbed inpatient adolescents (Blatt et al., 1996), which noted an association between internal representations of the therapist and representations of others. These studies showed that the similarity between these two sets of representations becomes stronger over time. Our findings lend further support to this dynamic among outpatient adolescents in individual psychodynamic psychotherapy. According to the psychodynamic model, through the exploration of the therapeutic relationship, clients can develop increased self-awareness and insights into themselves and find new ways of experiencing and perceiving self and others. The new perceptions and emotional experiences that were acquired within the therapeutic relationship can be generalized to other relationships and particularly with parents in the case of adolescents (Gaines, 1999; Levy-Warren, 1999).

Finally, the results indicated no associations between the clusters at the initial time point and the outcome measures. However, at the second time point, higher levels of experienced help and lower levels of negative experience with the therapist were associated with greater treatment satisfaction. Furthermore, decreases in the cluster 'negative experience' were correlated with greater treatment satisfaction. No significant correlations were found between changes in the other outcome measures and changes in the clusters.

The literature on the association between internal representations of relationships and symptoms is inconclusive due to the use of different methodologies and different definitions of changes in internal representations (for a review, see McCarthy et al., 2008). The psychodynamic model posits that when individuals are able to find new solutions to old problems and expand their repertoire of relationship experiences, the meaning and function of the symptom may become clearer. This can lead to fading of the symptom, but this association between dynamic changes and symptomatic changes may not be captured in a simple linear manner. Dose-response research indicates that most symptom improvement occurs relatively quickly at the initial phase of treatment (Hansen & Lambert, 2003), whereas dynamic changes are slower processes that continue to unfold after treatment has ended (Palmer et al., 2013). This issue should be studied further with other methodologies to better clarify these connections, as recommended by Barber (2009).

Several limitations of this study should be noted. First, the findings are based on a relatively small sample of adolescents undergoing treatment (n = 30). However, it is difficult to collect extensive data on adolescents in treatment due to high dropout rates and difficulties in getting this age group to complete a study (Russell, 2008). This problem could be addressed in the future by designing collaborative studies that gather data from several outpatient clinics. Second, the lack of a control group and the length of time between the initial and second time points make maturation a potential threat to internal validity. This study was designed as a naturalistic field exploration of psychodynamic therapy in adolescents. Although the internal validity of such a design is more limited, it has an advantage in terms of external validity since it more accurately reflects the reality of clinical work with adolescents in public clinics (Bambery *et al.*, 2007; Morrison, Bradley, & Westen, 2003). Furthermore, although we found associations between changes in the clusters associated with the therapist and the clusters associated with parents, as well as between changes in the clusters and satisfaction with treatment, we cannot infer causal relationships between the variables. We can only say that there were associations, while controlling for initial levels. Another potential limitation is that internal representations of the therapeutic relationship were assessed solely from the point of view of the clients. In future studies, it would be valuable to explore the point of view of the therapists as well. Finally, the high rate of self-referred adolescents (46.7%) is not a representative feature of adolescent samples in general. This may be due to specific cultural characteristics of the Israeli sample. These may have predisposed the adolescents in our sample to more positive growth. Future studies should replicate the results with other adolescent samples from other cultures.

Our results have several clinical implications. The finding that the negative clusters associated with the therapist did not decrease throughout 1 year of treatment, along

with the increase in the level of the positive clusters, is consistent with both psychodynamic and developmental theories. These both highlight adolescents' struggle for independence and autonomy, which is often accompanied by intense negative emotions and conflict. It is important that therapists who treat adolescents be able to balance positive and negative representations of themselves manifested by their clients. Adolescents' negative transference can be very difficult to tolerate and may in some cases lead to premature termination of treatment. However, although adolescents often experience negative emotions and perceptions in therapy (as in other significant relationships), this does not mean that the negative emotions necessarily block the emergence of positive emotions. Allowing adolescents to express their frustration, feelings of being misunderstood and 'testing' the therapist may often even be what strengthen the positive feelings in therapy.

The finding that changes in the therapeutic relationship are associated with changes in the relationship with parents reinforces the importance of working in the 'here and now'. Paying attention to fluctuations and changes in the therapeutic relationship clarifies the subtleties of adolescents' relational patterns with others, which can then be worked through and expanded.

#### REFERENCES

- Ablon, J. S., Levy, R. A., & Katzenstein, T. (2006). Beyond brand names of psychotherapy: identifying empirically supported change processes. *Psychotherapy: Theory, Research, Practice, Training*, 43(2), 216–231. DOI: 10.1037/0033-3204.43.2.216
- Achenbach, T. M. (1991). Manual for the Child Behavior Checklist 14–18 and 1991 Profile. University of Vermont, Department of Psychiatry: Burlington.
- Atzil-Slonim, D., Shefler, G., Gvirsman, S. D., & Tishby, O. (2011). Changes in rigidity and symptoms among adolescents in psychodynamic psychotherapy. *Psychotherapy Research*, 21(6), 685–697. DOI: 10.1080/10503307.2011.602753
- Atzil-Slonim, D., Shefler, G., Slonim, N., & Tishby, O. (2013). Adolescents in psychodynamic psychotherapy: changes in internal representations of relationships with parents. *Psychotherapy Research*, 23(2), 201–217.
- Bambery, M., Porcerelli, J. H., & Ablon, J. S. (2007). Measuring psychotherapy process with the adolescent psychotherapy Q-set (APQ): development and applications for training. *Psychotherapy: Theory, Research, Practice, Training,* 44(4), 405–422. DOI: 10.1037/0033-3204.44.405
- Barber, J. P. (2009). Toward a working through of some core conflicts in psychotherapy research. *Psychotherapy Research*, *19*(1), 1–12. DOI: 10.1080/10503300802609680
- Barber, J. P., Foltz, C., DeRubeis, R. J., & Landis, J. R. (2002). Consistency of interpersonal themes in narratives about relationships. *Psychotherapy Research*, 12(2), 139–159. DOI: 10.1093/ptr/12.2.139
- Barber, J. P., Luborsky, L., Crits-Christoph, P., & Diguer, L. (1995). A comparison of core conflictual relationship themes before psychotherapy and during early sessions. *Journal of Consulting*

and Clinical Psychology, 63(1), 145-148. DOI: 10.1037/0022-006X.63.1.145

- Battle, C., Imber, S., Hoehn-Saric, R., Stone, A., Nash, E., & Frank, J. (1966). Target complaints as criteria for improvement. *American Journal of Psychotherapy*, 20, 184–192.
- Blatt, S. J., Stayner, D. A., Auerbach, J. S., & Behrends, R. S. (1996). Change in object and self-representations in long-term, intensive, inpatient treatment of seriously disturbed adolescents and young adults. *Psychiatry: Interpersonal and Biological Processes*, 59(1), 82–107.
- Blatt, S. J., Zuroff, D. C., Bondi, C. M., & Sanislow, C. A. (2000). Short and long-term effects of medication and psychotherapy in the brief treatment of depression: further analyses of data from the NIMH TDCRP. *Psychotherapy Research*, 10(2), 215–234. DOI: 10.1093/ptr/10.2.215
- Blos, P. (1968). Character formation in adolescence. *The Psychoanalytic Study of the Child*, 23, 245–263.
- Blos, P. (1983). The contribution of psychoanalysis to the psychotherapy of adolescents. *Psychoanalytic Study of the Child*, 38, 577–600.
- Bond, M., & Perry, J. (2004). Long-term changes in defense styles with psychodynamic psychotherapy for depressive, anxiety, and personality disorders. *American Journal of Psychiatry*, 161(9), 1665–1671. DOI: 10.1176/appi.ajp.161.9.1665
- Burlingame, G. M., Wells, M. G., Lambert, M. J., & Cox, J. C. (2004). Youth outcome questionnaire (Y-OQ). In M. E. Maruish (Ed.), The use of psychological testing for treatment planning and outcomes assessment: instruments for children and adolescents (3rd ed., pp. 235–273). Mahwah, NJ: Lawrence Erlbaum Associates Publishers.
- Connolly Gibbons, M. B. (2004). The role of interpersonal relationships in the process of psychotherapy. *Psychotherapy Research*, 14(4), 401-414.
- De Goede, I. H., Branje, S. J., Delsing, M. J., & Meeus, W. H. (2009). Linkages over time between adolescents' relationships with parents and friends. *Journal of Youth and Adolescence*, 38(10), 1304–1315. DOI: 10.1007/s10964-009-9403-2
- Fleiss, J. L. (1981). Balanced incomplete block designs for interrator reliability studies. *Applied Psychological Measurement*, 5, 105–112.
- Gaines, R. (1999). The interpersonal matrix of adolescent development and treatment. In A. H. Esman, L. T. Flaherty, & H. A. Horowitz (Eds.), Adolescent Psychiatry: The Annals of the American Society for Adolescent Psychiatry (Vol. 24, pp. 25–47). Hillsdale, NJ: The Analytic Press.
- Hansen, N. B., & Lambert, M. J. (2003). An evaluation of the dose-response relationship in naturalistic treatment settings using survival analysis. *Mental Health Services Research*, 5(1), 1–12. doi:10.1023/a:1021751307358
- Harpaz-Rotem, I., & Blatt, S. J. (2009). A pathway to therapeutic change: changes in self-representation in the treatment of adolescents and young adults. *Psychiatry: Interpersonal and Biological Processes*, 72(1), 32–49. DOI: 10.1521/psyc.2009.72.1.32
- Karver, M. S., Handelsman, J. B., 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. *Clinical Psychology Review*, 26(1), 50–65. DOI: 10.1016/j.cpr.2005.09.001
- Kazdin, A. E. (2004). Psychotherapy for children and adolescents. In A. E. Bergin, & S. Garfield (Eds.), Handbook of Psychotherapy and Behavior Change (4th ed., pp. 543–594). New York, NY: Wiley.

- Kohut, H. (1971). The Analysis of the Self: A Systematic Approach to the Psychoanalytic Treatment of Narcissistic Personality Disorders. Chicago, IL: University of Chicago Press.
- Levy-Warren, M. H. (1999). I am, you are, and so are we: a current perspective on adolescent separation-individuation theory. In A. H. Esman, L. T. Flaherty, & H. A. Horowitz (Eds.), Annals of the American Society for Adolescent Psychiatry (pp. 3–24). Mahwah, NJ: Analytic Press.
- Luborsky, L., & Crits-Christoph, P. (1998). Understanding Transference: The Core Conflictual Relationship Theme Method (2nd ed.). Washington, DC: American Psychological Association.
- McCarthy, K. S., Gibbons, M. B., & Barber, J. P. (2008). The relation of rigidity across relationships with symptoms and functioning: an investigation with the revised central relationship questionnaire. *Journal of Counseling Psychology*, 55(3), 346–358. DOI: 10.1037/a0012578
- Midgley, N., & Kennedy, E. (2011). Psychodynamic psychotherapy for children and adolescents: a critical review of the evidence base. *Journal of Child Psychotherapy*, 37(3), 232–260. doi:10.1080/0075417x.2011.614738
- Midgley, N., Anderson, J., Grainger, E., Nesic-Vuckovic, T., & Urwin, C. (Eds.). (2009). Child Psychotherapy and Research: New Approaches, Emerging Findings. New York, NY: Routledge/Taylor & Francis Group.
- Midgley, N., & Navridi, E. (2007). An exploratory study of premature termination in child analysis. *Journal of Infant, Child,* and Adolescent Psychotherapy, 5(4), 437–458. DOI: 10.1080/ 15289160701382360
- Mitchell, S. A. (1988). Relational Concepts in Psychoanalysis: An Integration. Cambridge, MA: Harvard University Press.
- Mitchell, S. A. (1993). Hope and Dread in Psychoanalysis. New York: Basic Books.
- Morrison, K. H., Bradley, R., & Westen, D. (2003). The external validity of controlled clinical trials of psychotherapy for depression and anxiety: a naturalistic study. *Psychology and Psychotherapy: Theory, Research and Practice, 76*(2), 109–132. DOI: 10.1348/147608303765951168
- Paivio, S. C., Jarry, J. L., Chagigiorgis, H., Hall, I., & Ralston, M. (2010). Efficacy of two versions of emotion-focused therapy for resolving child abuse trauma. *Psychotherapy Research*, 20 (3), 353–366. DOI: 10.1080/10503300903505274
- Palmer, R., Nascimento, L. N., & Fonagy, P. (2013). The state of the evidence base for psychodynamic psychotherapy for children and adolescents. *Child and Adolescent Psychiatric Clinics of North America*, 22(2), 149–214. doi:10.1016/j. chc.2012.12.001
- Philips, B., Wennberg, P., Werbart, A., & Schubert, J. (2006). Young adults in psychoanalytic psychotherapy: patient characteristics and therapy outcome. *Psychology and Psychotherapy: Theory, Research and Practice*, 79(1), 89–106. DOI: 10.1348/147608305X52649
- Russell, R. L. (2008). Child and adolescent psychotherapy research: introduction to the special section. *Psychotherapy Research*, *18*(1), 1–4. DOI: 10.1080/10503300701725090
- Shedler, J. (2010). The efficacy of psychodynamic psychotherapy. *American Psychologist*, 65(2), 98–109. DOI: 10.1037/a0018378
- Shirk, S. R., Karver, M. S., & Brown, R. (2011). The alliance in child and adolescent psychotherapy. *Psychotherapy*, 48(1), 17–24. DOI: 10.1037/a0022181
- Shrout, P., & Fleiss, J. (1979). Intraclass correlation: Uses in assessing rater reliability. *Psychological Bulletin*, 86(2), 420–428. DOI: 10.1037//0033-2909.86.2.420

- Slonim, N., Atwal, G. S., Tkačik, G., & Bialek, W. (2005). Information-based clustering. Proceedings of the National Academy of Sciences, 102(51), 18297–18302. DOI: 10.1073/pnas.0507432102
- Smetana, J. G., Campione-Barr, N., & Metzger, A. (2006). Adolescent development in interpersonal and societal contexts. *Annual Review of Psychology*, 57, 255–284. DOI: 10.1146/annurev. psych.57.102904.190124
- Summers, R. F., & Barber, J. P. (2010). Psychodynamic Therapy: A Guide to Evidence-Based Practice. New York, NY: Guilford Press.
- Tishby, O., Turel, M., Gumpel, O., Pinus, U., Lavy, S. B., Winokour, M., ... Sznajderman, S. (2001). Help-seeking attitudes among Israeli adolescents. *Adolescence*, 36(142), 249–264.
- Waldinger, R. J., Diguer, L., Guastella, F., Lefebvre, R., Allen, J. P., Luborsky, L., & Hauser, S. T. (2002). The same old song?

Stability and change in relationship schemas from adolescence to young adulthood. *Journal of Youth and Adolescence*, 31(1), 17–29.

- Wells, M. G., Burlingame, G. M., & Rose, P. M. (1996). Youth-Outcome Questionnaire Self-Report. Wilmington, DE: American Professional Credentialing Services.
- Wilczek, A., Barber, J. P., Gustavsson, J. P., Åsberg, M., & Weinryb, R. M. (2004). Change after long-term psychoanalytic psychotherapy. *Journal of the American Psychoanalytic Association*, 52(4), 1163–1184.
- Winnicott, D. W. (1971). Playing and Reality. Oxford, UK: Penguin.
- Yom-Tov, E., & Slonim, N. (2009). Parallel pairwise clustering. SIAM International Conference on Data Mining (SDM).