

# Mechanisms of Change in Intensive Short-Term Dynamic Psychotherapy: Systematized Review

Pejman Hoviatdoost, M.Psych.(Clin.), Robert D. Schweitzer, Ph.D., Sia Bandarian, Ph.D., Stephen Arthey, Ph.D.

**Objective:** Despite increasing evidence for the effectiveness of intensive short-term dynamic psychotherapy (ISTDP), evidence supporting the purported mechanisms of change in ISTDP is lacking. This systematized review aimed to describe the major theorized mechanisms of change in ISTDP, critically evaluate the emerging literature pertaining to its purported mechanisms, and explore directions for future research.

**Methods:** A systematized search of the literature was conducted by using online databases (PsychInfo, PubMed, EMBASE, and CINAHL).

**Results:** Fourteen studies met inclusion criteria. The included studies explored at least one theorized ISTDP mechanism of change and attempted to operationalize or otherwise empirically

examine the mechanism in relation to the therapeutic process. Examined mechanisms included “unlocking the unconscious” and specific therapist interventions.

**Conclusions:** The current body of literature has several limitations, most notably the lack of a consensus definition for unlocking the unconscious. This difficulty in measuring mechanisms of change is common across therapeutic modalities and limits the validity and comparability of findings. Despite these limitations, the literature suggests a possible association between theorized mechanisms of change and positive therapy outcomes. Future research directions are discussed.

*Am J Psychother* 2020; 73:95–106;  
doi: 10.1176/appi.psychotherapy.20190025

Intensive short-term dynamic psychotherapy (ISTDP) is a short form of psychodynamic treatment developed by Habib Davanloo during the 1970s (1–4). The efficacy of ISTDP has an increasingly strong evidence base across a broad range of clinical presentations, including personality disorders, psychosomatic disorders, and treatment-resistant depression (5–9). Despite increasing evidence regarding ISTDP’s effectiveness, its underlying mechanisms of change have been difficult to explore. In particular, it has been challenging to operationalize its theoretical psychodynamic constructs and processes. Despite these difficulties, investigation of these mechanisms of change may enhance our understanding of this therapy’s processes and may inform development of clinical interventions and underlying theory. In this article, we aimed to provide an overview of theorized mechanisms of change in ISTDP, review current initial evidence regarding several of these mechanisms, and provide directions for future investigation.

## PROPOSED MECHANISMS OF CHANGE IN ISTDP

ISTDP’s development was influenced by Freud’s second theory of anxiety (10) and Bowlby’s theory of attachment (11–13). ISTDP assumes that early attachment experiences have a

strong developmental influence, contributing to enduring attachment patterns in adulthood. Feelings or impulses that may damage attachment relationships can therefore be experienced as unacceptable to the individual and may be pushed out of conscious awareness (1, 3). ISTDP posits that many pathological symptoms are explained by a “triangle of conflict” (14).

## HIGHLIGHTS

- This systematized review explored emerging literature regarding mechanisms of change in intensive short-term dynamic psychotherapy (ISTDP).
- Fourteen studies examining proposed mechanisms, including “unlocking of the unconscious” and specific therapist interventions, met inclusion criteria for the review.
- Initial findings suggested limited support for mechanisms of change as proposed by ISTDP theory.
- Issues with research quality and generalizability were identified, indicating the need for more rigorous studies of the mechanisms of change underpinning ISTDP.

At the center of the triangle lie emotions. Emotions or impulses that may have caused a past rupture in an attachment relationship can become a source of anxiety and are avoided by using defensive processes. Defenses thus function to protect the individual from unconscious, complex feelings and impulses, which may cause attachment disruption. In the long term, this avoidance of emotional experience also produces pathological symptoms and maintains problematic relationship patterns (3).

ISTDP aims to support patients in bringing unconscious impulses and feelings into conscious awareness (2). This process is known as “unlocking the unconscious.” Depending on the complexity and intensity of the experienced feelings, unlocking can be achieved at different levels. Most commonly, these complex feelings first arise toward the therapist. Once the feelings are within the patient’s awareness, therapy focuses on supporting the patient to understand the relationship between these feelings and past attachment experiences, thus achieving a higher level of insight, which reduces anxiety and empowers the patient to change pathological patterns. Because defenses serve to protect the patient from unwanted experiences, varying levels of resistance may manifest. Tension arises between the self-perpetuating nature of defenses (resistance) and patients’ unconscious, healthy desires to better understand themselves and to be known by others (the unconscious therapeutic alliance). The therapist applies interventions to overcome resistance but must temper the intensity of the interventions to account for the psychological fragility of the patient. Fragile patients are those who do not have enough adaptive defenses to self-regulate or cope with pressure and/or challenge to defenses in order to explore unconscious feelings. In ISTDP, fragile patients are supported to restructure their defensive system to improve functioning.

ISTDP theory suggests that the process of experiencing the underlying emotions and developing insight into the relationships among emotions, anxiety, and defenses results in symptom reduction and behavioral change (15).

Davanloo (4) reported four major levels of unlocking the unconscious: partial, major, extended major, and extended multiple major. Davanloo (4) also proposed that the intensity of mixed emotions toward the therapist, without the experience of anxiety and defenses, and the stronger link between the past and the present, predicts deeper levels of unlocking. For example, in a partial unlocking, the patient may only partly experience rage toward the therapist; therefore, he or she will experience only low amounts of guilt regarding the rage and limited memories of the same emotional experience toward previous attachment figures. In a major unlocking, however, the patient is able to make clear links between his or her transference toward the therapist and past experiences with his or her caregivers. Major unlocking thus involves the patient transferring feelings from a past attachment figure onto the therapist. Extended major unlocking and extended multiple major unlocking, may involve deeper levels of rage (often murderous, torturous impulses), with intense

experiences of guilt and love toward attachment figures and very clear links to the origin and development of the patient’s psychopathology.

The current literature regarding ISTDP mechanisms of change, however, has not been systematically explored. In this review, our goal was to provide a systematized analysis of the current literature regarding mechanisms of change in ISTDP and particularly on unlocking the unconscious.

## METHODS

We used a systematized review methodology with predetermined search terms and criteria for study inclusion (16). We assessed studies in English that were released in a peer-reviewed publication or as a relevant unpublished dissertation, that referred to ISTDP as a primary intervention, that had an empirical study format with quantitative measures, and that explored a purported ISTDP mechanism of change. To maximize the number of studies for review, our criteria did not include date limitations.

We conducted two separate literature searches via online databases (PsycINFO, PubMed, EMBASE, and CINAHL). For the first search, our search terms were “intensive short-term dynamic psychotherapy,” “ISTDP,” or “Davanloo.” For the second search, our search terms were “mechanism of change,” “change mechanism,” and “unlocking.” After completing the searches, we assessed the titles and abstracts for potential relevance. We then reviewed full texts of the relevant literature. Articles included in the final review were approved via consensus between two researchers.

## RESULTS

After we removed duplicate titles, our searches produced 358 results. After screening titles and abstracts, we identified 38 papers for full text review, and 14 met inclusion criteria. An outline of the review process in the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) format (17) is available in an online supplement. Table 1 outlines the studies included in the current review.

We categorized the 14 studies into three overlapping groups: those focused on unlocking the unconscious, studies exploring patterns of interaction between therapists and patients, and studies focused on other mechanisms of change. Results indicated a dearth in the literature regarding ISTDP’s mechanisms of change. Specific mechanisms of change are explored below.

### Unlocking the Unconscious

*Abbass et al., 2017.* Four of the 14 studies refer specifically to the concept of unlocking the unconscious as a key process underpinning change (18–21). Abbass et al. (18) explored instances of unlocking the unconscious during the initial assessment session, referred to as the “trial therapy.” Participants were 500 patients referred to a university- and hospital-based tertiary psychotherapy care unit. The researchers

TABLE 1. Studies of the mechanisms of intensive short-term dynamic psychotherapy (ISTDP) included in the systematized review (N=14)<sup>a</sup>

Study	N	Objective	Design	Measures	Findings
Abbass et al., 2017 (18) <sup>b</sup>	500	Effects of major unlocking on therapy outcome	Outcome data, open design, no control group	BSI, IIP	Unlocking observed in 25% of patients; major unlocking positively associated with improvements in self-reported symptoms and interpersonal problems in both fragile and psychoneurotic patients; fragile patients had more symptoms at baseline and were less likely to have unlocking.
Abbass et al., 2008 (33)	30 (effectiveness group); 5 (intervention-response group)	Effectiveness of a single session of ISTDP for patients on a tertiary psychotherapy service; therapist-patient intervention-response processes	Naturalistic design, no control group, pre-post results, random selection of therapy sessions for study	BSI, IIP, medication use, need for further treatment at 1-month follow-up	Trial therapy reported to be clinically effective and cost-effective in a tertiary setting; 43% had recovery from case criteria as shown through BSI scores; one-third required no further treatment; most commonly used therapist interventions were "pressure" (59%), "linkage" between past-present feelings, anxiety, and defenses (19%), "clarification and challenge" (14%).
Bernardelli et al., 2002 (27)	1	Identify therapist's response mode or pattern of intervention	Single-case design; mixed quantitative and qualitative data	HCVRCs-R	The bulk of counselor response was characterized by a pattern of four techniques, namely information seeking (46%), providing information (21%), interpretation (17%), and confrontation (10%); ISTDP was observed to use a consistent set of verbal response modes; the combination of these response modes was almost exclusively present in all the sessions examined; frequency of response modes seemed to remain similar in the two earlier sessions with a predominance of interpretation, whereas in the last session provision of information increased; when the therapist functioned at a semantic level, the grammatical structure of the interventions followed statistically significant patterns.
Calahan, 2000 (36)	6	Changes in patients' resistance and association with outcome	Naturalistic study; six case studies	BEC, BECA, GAF	Resistance decreased from early to late therapy; decrease in resistance marginally correlated with therapeutic improvement (GAF).

*continued*

TABLE 1, *continued*

Study	N	Objective	Design	Measures	Findings
De Stefano et al., 2001 (29)	1	Association between therapist response mode and client good moments	Single case	HCVRC-S-R, CSCGM	Significant association between therapist verbal responses and subsequent occurrences of client good moments; confrontation and information seeking were associated with the appearance of immediate good moments; interpretation and provision of information were not.
Fleury et al., 2016 (21) <sup>b</sup>	1	Variations in HRV and RSA during an unlocking phase; physiological responses associated with unlocking	Single case design	HRV, CSI, CVI, RSA	Distinct somatic pathway of rage; activation of sympathetic system during defensive responses associated with anxiety and during the passage of unconscious aggressive impulses; increased vagal tone following the experience of unconscious guilt, corresponding to the phase of reunification.
Johansson et al., 2014 (19) <sup>b</sup>	412	Effectiveness of ISTDP for patients on a tertiary unit; association between unlocking and outcome	Outcome data, open design; no control group	BSI, IIP	Overall effectiveness of ISTDP supported in a tertiary unit. Patients classified as fragile and/or psychotic had more symptom severity pretreatment and a steeper rate of recovery; average number of sessions provided was 10.2. Professional therapists (vs. trainees) did not seem to conduct more effective treatments; patients with extreme resistance seemed to require major unlocking of the unconscious to benefit. Patients of a single therapist, considered expert in ISTDP, had better outcomes than patients of the other therapists on one of the outcome measures.
McCullough et al., 1991 (34)	16	Association between in-session interactions and patient affective and defensive responses	Case series	SAS; target complaints	Average of 40 sessions; symptom improvement was predicted by an intervention pattern where the therapist made an interpretation of the therapeutic relationship, followed by an affective response from the patient; the same intervention followed by a defensive response had a negative association with symptom outcomes; therapist interventions in isolation (without patient response) did not predict outcome.

*continued*

TABLE 1, continued

Study	N	Objective	Design	Measures	Findings
Paserpskytė, 2012 (unpublished)	4	Exploration of insight as a potential mediating variable in the relationship between affective experiencing and symptom change	Case series	BDI-II, CORE-OM, WAI, AES, DIS	Insight was not found to play a mediating role in the relationship between affect experiencing and symptom change.
Salvadori, 2010 (unpublished)	6	Associations between affect experiencing, inhibition, working alliance, and distress	Case series	BDI-II, CORE-OM, WAI, AES, DIS	The study found mixed results; two participants showed a reduction in distress associated with increased affective experiencing and working alliance; two patients showed no association between these variables; two participants showed mixed results.
Stalikas et al., 1997 (32)	1	Client good moments/ change events	Single case study	CSCGM	Good moments were related to the patient's provision of information, exploration of feelings, and insight and understanding. In-session behavioral change also was an important component of therapeutic process.
Town et al., 2013 (20) <sup>b</sup>	89	Association between unlocking and outcome	Quasi-experimental treatment outcome study	BSI, IIP, BDI, BAI, functional gains (frequency of working days and discontinuation of medication); health care costs	Superior effects on self-reported outcomes among patients with major unlocking: functional measures and service utilization posttreatment.
Town et al., 2017 (37)	4	Association between peak affective arousal and change in self-reported symptoms among patients with major depressive disorder	Single case A-B-phase design	BDI-II, CORE-OM, IIP-SC, AES, WAI Client, WAI Therapist	Peak AE associated with reduction in symptoms next session. Increased AE predicted strong therapeutic alliance next session in three cases. Duration of treatment varied among patients.

continued

TABLE 1, continued

Study	N	Objective	Design	Measures	Findings
Winston et al., 1994 (35)	28	Association between patient defenses, therapist interventions to address defenses, and patient outcomes for patients with personality disorders	Correlational design	PICS, target complaints, SCL-90-R, SAS	Significant decrease in overall defensive behaviors over time, although only intermediate defensive behaviors (e.g., intellectualization, reaction-formation) changed; no correlation between frequency of defensive behavior and patient outcome.

<sup>a</sup> AACRS, Adult Attachment Clinical Rating Scale; AAI, Adult Attachment Interview; AES, Affect Experiencing Scale; BAI, Beck Anxiety Inventory; BDI, Beck Depression Inventory II; BSI, Brief Symptom Inventory; BEC, break in eye contact; BECA, break in eye contact during anxiety; CORE-OM, Clinical Outcomes in Routine Evaluation—Outcome Measures; CSI, Cardiac Symptoms Index; CVI, Cardiac Vagal Index; CSCGM, Category System of Client Good Moments; DIS, Degree of Inhibition Scale; GAF, Global Assessment of Functioning; HRV, heart rate variability; HCVRCs-R, Hill Counselor Verbal Response Category System—Revised; IIP, Inventory of Interpersonal Problems; IIP-SC, Inventory of Interpersonal Problems—Short Circumplex Form; RSA, respiratory sinus arrhythmia; WAI, Working Alliance Inventory; SAS, Social Adjustment Scale; PICS, Psychotherapy Interaction Coding System; SCL-90-R, Symptom Checklist-90—Revised; CORE-OM, Clinical Outcomes in Routine Evaluation—Outcome Measure.

<sup>b</sup> Study explored unlocking.

explored whether the therapy was more effective for patients who experienced a major unlocking during their initial session.

Three raters observed either live interviews or video recordings of the initial session. The raters identified sessions with at least one instance of major unlocking, as determined by a clinical assessment of the unlocking process. A major unlocking event was identified if a clear image transfer occurred. In major unlocking, while a patient is looking toward the therapist, an image of a past attachment figure may emerge. For example, a patient may be participating in therapy and have a sudden image of his or her mother transferred onto the therapist. The researchers assessed interrater reliability across 30 video-recorded vignettes and reported adequate interrater agreement ( $\kappa \geq 0.66$ ); however, one of the raters was also the clinical supervisor of the study.

The authors considered resistance as a potential moderating variable. For the purpose of the study, resistance was used as a binary variable, with patients classified as either “psychoneurotic” or “fragile (resistant).” Outcomes were measured by the Brief Symptom Inventory (BSI) (22) and the Inventory of Interpersonal Problems (IIP) (23) at baseline and at 1-month follow-up.

The authors indicated that 25% of participants had experienced a major unlocking event during their first ISTDP session and that these participants had experienced greater improvement on both the BSI and IIP from baseline to the trial’s end. Participants classified as fragile had experienced more symptoms at baseline and were less likely to experience a major unlocking. This finding is consistent with ISTDP theory, which posits that fragile patients have lower emotional capacity and require interventions to build anxiety tolerance prior to experiencing unlocking. Unlocking events had a similar positive impact for patients categorized as fragile or psychoneurotic. The effects seen in the group with major unlocking were reported as moderate to large.

The Abbass et al. findings were correlational. The involvement of the study’s clinical supervisor as a rater to identify instances of unlocking raises questions about the validity of the process followed.

*Johansson et al., 2014.* Johansson et al. (19) investigated whether an experience of major unlocking of the unconscious predicted better treatment outcome among 412 patients. Therapists were licensed mental health professionals and ISTDP trainees. The mean  $\pm$  SD for treatment length was  $10.20 \pm 13.30$ .

The study provided no operationalized definition of unlocking, instead referring readers to Davanloo’s work for details (4, 24). Patients were categorized into two groups: those who experienced major unlocking and those who did not. Resistance was considered a moderating variable, with patients categorized as either “fragile and/or psychotic” or “psychoneurotic.” An experienced ISTDP supervisor coded unlocking events and resistance by reviewing video recordings of treatment sessions. Outcomes were measured with the BSI and IIP.

This study demonstrated overall effectiveness for ISTDP and that major unlocking of the unconscious during therapy

predicted better outcomes. Patients classified as fragile and/or psychotic had more symptom severity pretreatment than those classified as psychoneurotic. Patients classified as fragile and/or psychotic showed a steeper change in BSI scores compared with patients classified as psychoneurotic.

Interestingly, the experienced therapists were no more effective than trainee therapists in the Johansson et al. study (19). This finding contrasts with Abbass and colleagues (15), who found that greater length of therapist training was associated with treatment cost reduction in the long term, suggesting that the utility of treatment may have varied with level of therapist training.

Johansson et al.'s findings were correlational. The rise of complex transference feelings, unlocking of the unconscious, and resistance were coded by using nonvalidated measures. Because the coding was conducted by a single clinical supervisor, it was impossible to assess interrater reliability of the coding measures, raising questions about validity.

*Town et al., 2013.* The Town et al. study (20) explored differences in self-reported symptom outcomes, cost savings, or functional outcomes between patients who had experienced major unlocking of the unconscious and those who had not. The study used an existing data set (25). Resistance was considered a possible covariate and was dichotomized as lesser or extreme.

The study provided no information on the coding process used to identify instances of unlocking the unconscious. On the basis of Davanloo's case material and manualized framework (26), the experimental group was divided into patients who experienced one or more major unlocking of the unconscious during therapy and patients who did not.

Within the treated sample ( $N=89$ ), 57 patients had experienced major unlocking, and 32 had not. Town et al. (20) showed significantly better outcomes for patients with major unlocking on self-reported outcomes (psychiatric symptoms and interpersonal functioning), functional measures (patients' return to work and discontinuation of medication), and service utilization posttreatment.

The authors concluded that unlocking of the unconscious should be considered a key therapeutic process of ISTDP. A secondary finding showed that patients with high levels of resistance seemed to require major unlocking of the unconscious to benefit. This finding is in alignment with the ISTDP principle that resistance limits patients' capacities to experience emotions. Major unlocking may be necessary for highly resistant patients to achieve positive change.

A major shortcoming of the Town et al. (20) study was the potential for experimenter bias because the therapist also acted as the rater. The authors argued that bias was less likely because ratings were done without knowledge of the health care cost data outcomes.

*Fleury et al., 2016.* Fleury et al. (21) examined a patient's physiological responses during episodes of unlocking the unconscious. Measures were examined during episodes of

unlocking in two ISTDP sessions with a patient suffering from panic disorder. No information was provided on how episodes of unlocking were identified.

Measurements were taken at times when the patient self-identified or discussed with the therapist a strong emotional experience within the session. Measurements included sympathetic and parasympathetic indices, vagal tone, and patient responses. The authors hypothesized that specific self-reported feelings in session (i.e., anxiety, rage, guilt) would be associated with distinct patterns of autonomic nervous system activity (sympathetic and parasympathetic). They also hypothesized that respiratory sinus arrhythmia would increase following an unlocking event.

Consistent with ISTDP theory, the experience of self-reported rage in the transference manifested as a distinct somatic pathway. The authors suggested that the sympathetic system activates during defensive responses associated with anxiety and during the passage of unconscious-aggressive impulses. Following the experience of possible unconscious guilt, the authors noted increased vagal tone corresponding to the phase of reunification with attachment figures.

Although variance in physiological measures throughout a psychological intervention is interesting, the conclusions to be drawn from this study are limited. The study depended on the premise that the authors' perceptions of the patient's emotions and unconscious processes were accurate. No operationalized definition or system of identification for unlocking or self-reported measures of distress or emotional activation were provided. Moreover, the single-case design prevents generalization of the findings. Thus, although the Fleury et al. (21) findings are of interest, they are far from conclusive.

### Interactions Within the Therapist-Patient Dyad

*Bernardelli et al., 2002.* Six studies focused on in-session processes and interactions between therapists and patients in ISTDP. Bernardelli et al. (27) coded occurrences of various therapist interventions for a single patient receiving ISTDP. Although no quantitative outcome data were reported, the authors indicated that the intervention was successful, and the patient made good progress. Three sessions (early, middle, and late) of the complete 16-session treatment were analyzed. Therapist statements were categorized by independent raters to explore the pattern of interventions. The Hill Counselor Verbal Response Category System-Revised (28) was used to examine the therapist's statements.

Results revealed that most of the therapist's statements could be characterized as information seeking (46%), providing information (21%), interpretation (17%), or confrontation (10%). The results showed an absence of self-disclosure and few restatements, reflections, or direct advice. This study painted a picture of a therapist focused exclusively on the client's disclosures and drawing upon a psychodynamic frame of reference. The information seeking was consistent with the model's theoretical framework, with a focus on exploring dynamic patterns that maintained the client's distress (1).

Although the therapist's interventions were congruent with ISTDP principles, the lack of reported outcome data makes it impossible to determine whether the interventions were associated with positive change. In addition, the identified interventions were consistent with many forms of therapy, particularly psychodynamic modalities. The Bernardelli et al. findings therefore do not provide specific support for ISTDP, and the single-case design of the study limits the generalizability of the results.

*De Stefano et al., 2001.* De Stefano et al. (29) investigated the association between therapist interventions and occurrence of "good moments" (occurrences of client movement, progress, or change) (30) of a single patient receiving ISTDP. Independent raters coded therapist responses in three sessions (early, middle, and late) of a 16-session treatment by using the Hill Counselor Verbal Category System-Revised (28) and the Category System of Client Good Moments (30).

Each therapist statement was rated as representing one verbal response mode, and each client statement was rated as to whether it was a good moment. The bulk of therapist response modes were coded as confrontation, interpretation, providing information, and information seeking.

Confrontation and information seeking were associated with the appearance of immediate good moments, whereas interpretation and provision of information were not. The authors concluded that the effectiveness of interpretation varied with factors, such as timing, accuracy, validity, and content. The authors further concluded that while interpretations had established therapeutic value, their use may not be associated with indications of immediate client change. Similarly, provision of information appeared unrelated to occurrence of good moments. This finding may reflect that in ISTDP, provision of information is used primarily as a clarifying statement aimed at helping patients to notice and understand the nature of their psychodynamic conflict (31).

The findings of this single case of ISTDP align with Davanloo's assertion that the therapist's confrontation of the patient's defenses may serve as a mechanism of change by mobilizing intense affective processes. However, this is not a unique feature of ISTDP; such interventions are common across many treatment modalities. Moreover, the single-case design of the study prohibits the generalizability of the findings. The study also did not report pre- to postintervention outcome data. Whereas the authors used observational data to conclude that the treatment was successful, it is difficult to assess how the examined interventions contributed to symptom change.

*Stalikas et al., 1997.* Stalikas et al. (32) explored clients' therapy process within and across sessions to identify occurrences of good moments. The main research questions concerned the types of good moments that emerged in ISTDP and the sequential pattern of good moments across sessions. In this single-case study, the authors rated client responses during three sessions (early, middle, and late) of the 16-session treatment.

The Category System of Client Good Moments (30) was used as a measure of therapeutic process. Results suggested that good client change events were related to provision of significant information to the therapist, exploration of feelings, and insight and understanding. Most good moments involved patients sharing significant material about themselves or interpersonal relationships. This pattern suggests a concatenation of exploration, insight, and understanding, leading to behavioral change. This finding is consistent with the ISTDP model; however, the single-case design of the Stalikas et al. study inhibited the generalizability of the findings. The lack of outcome data for the intervention also limited the conclusions regarding efficacy.

*Abbass et al., 2008.* Abbass et al. (33) conducted a naturalistic study of the effectiveness of a single session of ISTDP in a tertiary psychotherapy service. Patients were evaluated prior to the session and at 1-month follow-up to assess the need for further treatment. Five randomly selected trial therapy sessions were studied by the therapist and an independent, trained clinician-therapist to gain a deeper understanding of therapy processes. Results supported the effectiveness of a single ISTDP session; BSI scores showed that 43% of those meeting case criteria before intervention no longer did at follow-up.

The session process analysis indicated that the therapists were highly active during the sessions, with an average of 165.50 interventions per hour. Pressure was the most common intervention, occurring an average of 97 times per hour and comprising 59% of all interventions. Pressure refers to any therapist intervention that encourages the patient to feel, acknowledge, examine, or otherwise face avoided feelings, thoughts, relationships, or actions (31). The second most common intervention involved exploring the links between past and present, feelings, anxiety, and defenses. Therapists used such interventions an average of 29 times per hour (19%). Other interventions included clarification (helping patients to notice or understand the nature of their conflict) and challenge of defenses (focusing on patient defenses and encouraging reduced defenses), which together occurred at an average of 23 times per hour (14%); inquiry into problem areas (5%); and dynamic exploration at an average of 5 per hour (3%). These interventions are consistent with ISTDP treatment protocols (2, 4). The study outcomes suggest that these interventions were associated with positive therapeutic change, even after a single session.

Because of the naturalistic nature of the Abbass et al. (33) study, caution should be practiced in generalizing the findings. Given the multiplicity of identified interventions, it is difficult to assess the impact of a singular intervention. However, this is a research issue true of most therapy modalities.

*McCullough et al., 1991.* McCullough et al. (34) explored the relationship between interactions in the therapy session and patient affective or defensive responses. Sixteen clients attended weekly 50-minute sessions for an average of 40 sessions. All



clients met *DSM-III* criteria for axis II personality disorders. Three types of therapist intervention were explored: interpretations of the therapeutic relationship, interpretations of relationships with significant others, and clarifications (rephrasing the patient's words). Affective responses were defined as either verbal or nonverbal (e.g., sighing, crying, lowering head) expression of emotion by the patient. Defensive responses were patient reactions that exemplified mechanisms used to resist facing difficult issues.

Symptom improvement was predicted by interpretations of the therapeutic relationship that were followed by an affective response from the patient. Interpretations of the therapeutic relationship followed by a defensive response were negatively correlated with patient outcome. Therapist interventions independent of patient response were not associated with outcomes, supporting the first hypothesis. Although the McCullough et al. results were correlational, the findings highlighted the importance of the therapeutic relationship and patient responses as potential predictors of therapeutic outcome.

Winston et al., 1994. Winston et al. (35) studied patient defensive behaviors and the intervention of "therapist addressing defenses" (TAD) in therapy for 28 outpatients with personality disorders. The authors hypothesized that the frequency of defensive behaviors would decrease over the course of therapy, patient defenses would shift from lower to higher levels of maturity, and a positive correlation between the change in level of defense and patient outcome would emerge.

Additionally, it was expected that the therapist would use more frequent TAD interventions when there was higher frequency of low-level defense reactions. It was expected that more frequent use of TAD to address low-level defenses would predict decreased subsequent use of those defenses.

Two brief psychodynamic therapies were used: short-term dynamic therapy and brief affective psychotherapy (BAP). BAP is a more cognitive form of psychotherapy that focuses more on patients' maladaptive patterns. Eighteen therapists (12 psychiatrists, four psychologists, and two social workers) delivered the 40-session intervention. Four recorded sessions from each patient were coded for patient and therapist variables.

Winston et al. found a significant decrease in overall defensive behaviors over time, although only intermediate defensive behaviors (e.g., intellectualization, reaction formation) changed. There was no correlation between frequency of defensive behavior and patient outcome. Several changes in patient defensive behavior were found that were significantly related to TAD, highlighting the importance of the therapist-patient relationship.

### Studies Exploring Underlying Purported ISTDP Hypotheses

Callahan, 2000. The Callahan study (36) examined the ISTDP hypothesis that as treatment progresses, resistance and defenses decrease. This study attempted to operationalize

defenses according to Davanloo's (2) assertion that defenses are marked by specific nonverbal cues. These cues include breaks in eye contact, defiant body posture, slowed speech, and involuntary smiling. The authors concluded that breaks in eye contact during anxiety (BECAs) were the easiest variable to objectively assess. Therefore, the study assessed resistance by the frequency of BECAs during a session. Two raters coded instances of BECA, defined as eye contact that was broken for more than 1 second and accompanied by nonverbal anxiety cues. It was hypothesized that BECAs would decrease from early to late therapy and that their frequency would correlate with measures of therapeutic improvement, so that as patients improved, BECA frequency would decrease.

Six participants received weekly ISTDP. Total number of sessions ranged broadly, from 17 to 155 sessions (mean =  $60 \pm 53.1$ ). Outcome was assessed via change in patient scores, as rated by the treating therapist, on the Global Assessment of Functioning (GAF) from the first to last sessions. Results showed that BECAs decreased from early to late therapy. There was a marginally significant correlation between improvements in GAF scores and decreases in BECAs, from early to late therapy. The author argued that the findings provided limited support for the idea that degree of therapeutic improvement is related to degree of reduction in resistance in the transference.

A marginally significant correlation, however, should be considered very limited evidence of a relationship between BECAs and therapeutic outcome. In addition, reliance on a single, therapist-rated measure of improvement is problematic in itself. This measure also provided no information regarding self-reported distress or psychological symptoms. Similarly, the reliance on a single, observer-rated, nonverbal cue as an indication of resistance makes it difficult to conclude that resistance was validly measured. Any conclusions that can be drawn from the Callahan results are therefore extremely limited.

Town et al., 2017. The Town et al. (37) study examined process-outcome associations across 20 sessions of ISTDP. Participants were four clients who met diagnostic criteria for major depressive disorder. The study explored the relationship between affect experiencing (AE) and subsequent self-reported distress. AE relates to the degree of adaptive emotional arousal in session and is part of a broader measure—the Achievement of Therapeutic Objectives Scale. AE was assessed by independent raters who watched recordings of therapy sessions.

Town et al. (37) showed that for participants who had significant improvement in distress and depressive symptoms, higher peak AE in a session was associated with decreased distress in the next session. These findings offer some evidence that directly experiencing the somatic component of feelings contributed to significant therapeutic change (4). However, there was no association between in-session AE and reduced stress during sessions 1–10. For patients classified as fragile, ISTDP initially focuses on capacity building rather than affect experiencing. This result may therefore be

understood through the moderating influence of the patient's capacity to process feelings and the use of the graded format of ISTDP (2).

Town et al. (37) concluded that their results were consistent with ISTDP theory, suggesting that increase in a patient's emotional experience was associated with positive symptom change. The study also found that increased affective experiencing was associated with an increase in therapeutic alliance. Furthermore, the authors concluded that their findings provided preliminary support for another ISTDP assumption: that a patient's capacity to process feelings (associated with resistance) might be a moderating factor in the relationship between AE and symptom improvement. However, it should be noted that an association between increased capacity to experience emotions and decreased distress is not a concept unique to ISTDP.

*Salvadori, 2010.* In an unpublished dissertation, Salvadori (2010, unpublished) used a case series design to explore the relationship between AE, inhibition, and distress in the context of ISTDP. Salvadori predicted that an increase in AE and a decrease in inhibition would occur with ISTDP, correlated with an improvement in working alliance and patient distress. Affective capacity referred to the ratio of AE to the degree of inhibition. Participants were six outpatients with common mental health issues (e.g., depression, social phobia). The study examined video recordings of sessions 1–20 of treatment. Sessions were coded for peak affect and average inhibition, and patients gave weekly self-reported measures of distress. Results of the study were mixed. For two participants who were considered recovered at the conclusion of therapy, distress decreased over the course of therapy, and this improvement was positively correlated with increases in affective capacity. In these two cases, affective capacity was also found to correlate with working alliance. Two participants showed no relationship among affective capacity, time in therapy, and distress. Other participants showed mixed results. The study was limited in that the participants had a wide range of disorders and the results were correlational. However, the case series design of the study provided for an in-depth analysis of each participant. Although Salvadori's results were mixed, they suggest that AE in psychotherapy may be associated with positive treatment outcomes.

*Paserpskytė, 2012.* In another unpublished dissertation, Paserpskytė (2012, unpublished) used the data from four of the six participants of the Salvadori study (2010, unpublished). Similarly, it used a case series design. The study aimed to explore insight as a mediating variable between AE and patient outcomes. It was hypothesized that participants would show greater insight following therapy segments in which they showed greater AE and that insight would act as a mediator between peak affect in session and session outcome. Paserpskytė specifically chose to study two participants who were considered recovered and two participants who did not change during therapy. Neither

hypothesis was supported. Interestingly, insight and AE were found to be possible independent predictors of patient outcomes.

## DISCUSSION

This review explored current literature regarding mechanisms of change in ISTDP. In general, the results indicated a dearth of research regarding mechanisms of change. Just 14 studies met our inclusion criteria, and only four of those studies explored the concept of unlocking the unconscious. The studies that did explore this crucial mechanism of change had significant methodological problems.

Despite these limitations, the reviewed studies may provide some evidence that unlocking the unconscious is associated with positive therapeutic change. Three independent studies (18–20) demonstrated a positive association between unlocking events and positive change. Outcomes included improvements in distress, relationships, and functional gains. These findings are consistent with previous research on psychodynamic treatments, suggesting that the experience and resolution of unconscious feelings and impulses may enhance treatment effectiveness (35, 37).

Perhaps the most significant shortcoming in current research was the difficulty of operationalizing and measuring unlocking of the unconscious. In all four studies, unlocking was identified through nonvalidated measures. Only one study reported on interrater reliability, making it difficult to assess the consistency of the ratings. This is a fundamental shortcoming, which makes it difficult to draw conclusions from the study results. The lack of a validated rating system may reflect the inherent difficulty of measuring abstract psychodynamic constructs regarding the unconscious. Moreover, three of the four studies were carried out by the same authors, raising questions regarding possible researcher allegiance and bias.

In addition, all the studies treated unlocking the unconscious as a binary variable (present or not present). This is inconsistent with Davanloo (2), who conceptualized unlocking as occurring at different levels. It is not possible to examine this concept with the current literature.

The same issue applies to the concept of resistance in the ISTDP literature. In ISTDP theory, resistance is conceptualized as ranging from low resistance to high resistance and fragility (4, 15). In all the reviewed studies, however, resistance was considered a dichotomous variable, which may have led to a loss of nuance. In addition, rather than comparing levels of resistance, most of the studies distinguished between patients who were fragile (did not have adequate defenses to cope with intense intervention) and patients who had a functional level of resistance. However, this distinction does not provide any insight regarding differences between high and low resistance.

Despite these shortcomings, there have been some noteworthy findings on the concept of unlocking. First, the literature points to two distinct patterns of change among patients treated with ISTDP, and resistance appears to be an important

moderating factor. Fragile patients in general had a lower rate of unlocking compared with nonfragile patients in three studies (18–20), although they manifested a steeper rate of recovery from psychological symptoms.

Davanloo asserted that fragile patients require capacity building or defense restructuring, a process which he referred to as a treatment in a “graded format,” before the patient is able to tolerate unconscious emotions during the unlocking process (4, 38). The results of this review indicate that capacity building may be a key intervention for patients with primitive defenses.

Another interesting finding was the relationship between resistance and unlocking of the unconscious. In one study, extremely resistant patients did not make significant positive changes, unless they experienced a major unlocking of the unconscious (20). These results provide some initial indication that unlocking of the unconscious is associated with positive change, but that the impact of unlocking may vary depending on the patient's levels of resistance.

Two studies explored some of the fundamental assumptions of ISTDP. Callahan (36), a single-case study found that resistance and anxiety decreased from early to late therapy. It also found that the reduction in resistance was marginally associated with symptom improvement. Town et al. (37) provided evidence that, consistent with ISTDP theory, increases in a patient's emotional experience may be associated with positive symptom change.

However, these studies had significant methodological and conceptual shortcomings. Callahan's (36) conclusions were based on the assumption that BECA is a valid measure of resistance in the transference relationship. This assumption is consistent with ISTDP theory but has not been validated by empirical evidence. Moreover, the results showed only a marginally significant correlation between GAF score and BECA frequency from early to late therapy. The six studies that explored therapist-patient interactions suggested that therapists used interventions consistent with ISTDP theory. These included exploration of internal dynamics, absence of self-disclosure, information seeking, pressure, and confrontation. One case study found that information seeking and confrontation were associated with good moments of progress in therapy. This finding was consistent with ISTDP theory regarding the use of therapist interventions to overcome resistance and promote insight. The findings are consistent with previous research, demonstrating that insight preceded symptom change and was significantly associated with positive outcomes (39, 40).

Conclusions drawn from the reviewed studies have been limited by methodological problems. With one exception (33), all used a case study design. Although these studies provide an opportunity to micro-analyze the therapeutic process, they raise questions about external validity and generalizability of the findings. Additionally, the studies did not go beyond a two-step interaction between the therapist and the patient. This limited approach, where only the two-step interaction pattern between the therapist and patient is explored,

does not consider how therapeutic interventions evolve over time or build upon one another to achieve long-term therapeutic goals.

## CONCLUSIONS

The current review highlights the need for expanded research regarding mechanisms of change in ISTDP. In particular, the lack of a generally accepted operational definition of unlocking is a major shortcoming needing further exploration. ISTDP theory differentiates between levels of unlocking, depending on the intensity and complexity of emotions experienced. Yet the examined studies focused only on major unlocking, treating unlocking as a binary event (present or not present). Future studies could differentiate levels of unlocking and their relationship with therapeutic outcome. This would allow for exploration of an interesting theoretical question: Can unlocking the unconscious can be treated as a continuous variable, with patients deriving some therapeutic benefit even if major unlocking does not occur?

The ISTDP research literature would also benefit from the development of validated measures and methodologies to identify theoretical constructs. These should include the use of multiple raters with calculated interrater reliability to identify interventions or events in therapy. Similarly, future ISTDP research could explore the role of resistance as a moderating variable in the relationship between unlocking and positive change, by examining resistance on a scale. Current research has focused on unlocking the unconscious as the primary mechanism of change in ISTDP. However, this ignores an alternative mechanism: defensive restructuring. In ISTDP, patients are first assessed for their level of resistance. Fragile patients are considered vulnerable to decompensation in the face of significant stressors. For such patients, it is recommended that the therapist first work toward supporting the defensive structure and general level of functioning for the patient, rather than attempting to access unconscious experiences. Future studies would benefit from exploring the concept of treatment matching and the role of defensive restructuring as a potential mechanism of change.

## AUTHOR AND ARTICLE INFORMATION

Faculty of Health, School of Psychology and Counseling, Queensland University of Technology, Brisbane, Queensland, Australia (Hoviatdoost, Schweitzer); Department of Health, School of Applied Psychology, Griffith University, Gold Coast, Queensland, Australia (Bandarian); private practice, Gold Coast, Queensland (Arthey).

Send correspondence to Dr. Schweitzer (r.schweitzer@qut.edu.au).

The authors report no financial relationships with commercial interests.

Received June 20, 2019; revisions received November 21, 2019, and February 1, 2020; accepted March 3, 2020; published online May 8, 2020.

## REFERENCES

1. Davanloo H: Short-Term Dynamic Psychotherapy. New York, Jason Aronson, 1980
2. Davanloo H: Unlocking the Unconscious. Chichester, Wiley, 1990

3. Davanloo H: Intensive Short-Term Dynamic Psychotherapy. Chichester, Wiley, 2000
4. Davanloo H: Intensive short-term dynamic psychotherapy; in Kaplan and Sadock's Comprehensive Textbook of Psychiatry. Edited by Sadock BJ, Sadock VA. Philadelphia, Lippincot Williams & Wilkins, 2005
5. Abbass AA, Hancock JT, Henderson J, et al: Short-term psychodynamic psychotherapies for common mental disorders. *Cochrane Database Syst Rev* 2006; 4:CD004687
6. Abbass A, Kisely S, Kroenke K: Short-term psychodynamic psychotherapy for somatic symptom disorders. systematic review and meta-analysis. *Psychother Psychosom* 2009; 78:265–274
7. Abbass A, Town J, Driessen E: Intensive short-term dynamic psychotherapy: a systematic review and meta-analysis of outcome research. *Harv Rev Psychiatry* 2012; 20:97–108
8. Crits-Christoph P: The efficacy of brief dynamic psychotherapy: a meta-analysis. *Am J Psychiatry* 1992; 149:151–158
9. Anderson EM, Lambert MJ: Short-term dynamically oriented psychotherapy: a review and meta-analysis. *Clin Psychol Rev* 1995; 15:503–514
10. Freud S: Inhibitions, symptoms and anxiety; in *The Standard Edition of the Complete Psychological Works of Sigmund Freud*. Edited by Strachey J. London, Hogarth Press, 1975
11. Bowlby J: Attachment and Loss, vol. 1. New York, Basic Books, 1970
12. Bowlby J: Separation: Anxiety and Anger. London, Tavistock, 1973
13. Bowlby J: Attachment and Loss, vol. 3. New York, Basic Books, 1980
14. Malan DH: Individual Psychotherapy and the Science of Psychodynamics. London, Butterworth, 1979
15. Abbass AA, Town JM: Key clinical processes in intensive short-term dynamic psychotherapy. *Psychotherapy* 2013; 50:433–437
16. Grant MJ, Booth A: A typology of reviews: an analysis of 14 review types and associated methodologies. *Health Info Libr J* 2009; 26:91–108
17. Moher D, Liberati A, Tetzlaff J, et al: Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. *J Clin Epidemiol* 2009; 62:1006–1012
18. Abbass A, Town J, Ogrodniczuk J, et al: Intensive short-term dynamic psychotherapy trial therapy: effectiveness and role of “unlocking the unconscious”. *J Nerv Ment Dis* 2017; 205:453–457
19. Johansson R, Town JM, Abbass A: Davanloo's intensive short-term dynamic psychotherapy in a tertiary psychotherapy service: overall effectiveness and association between unlocking the unconscious and outcome. *Peer J* 2014; 2:e548
20. Town JM, Abbass A, Bernier D: Effectiveness and cost effectiveness of Davanloo's intensive short-term dynamic psychotherapy: does unlocking the unconscious make a difference? *Am J Psychother* 2013; 67:89–108
21. Fleury G, Fortin-Langelier B, Ben-Cheikh I: The cardiac rhythm of the unconscious in a case of panic disorder. *Am J Psychother* 2016; 70:277–300
22. Derogatis LR, Melisaratos N: The Brief Symptom Inventory: an introductory report. *Psychol Med* 1983; 13:595–605
23. Horowitz LM, Rosenberg SE, Baer BA, et al: Inventory of interpersonal problems: psychometric properties and clinical applications. *J Consult Clin Psychol* 1988; 56:885–892
24. Davanloo H: Intensive short-term dynamic psychotherapy: extended major direct access to the unconscious. *European Psychotherapy* 2001; 2:25–70
25. Abbass A: Intensive short-term dynamic psychotherapy in a private psychiatric office: clinical and cost effectiveness. *Am J Psychother* 2002; 56:225–232
26. Davanloo H: Intensive short-term dynamic psychotherapy: spectrum of psychoneurotic disorders. *Int J Short-Term Psychother* 1995; 10:121–155
27. Bernardelli A, De Stefano J, Stalikas A: An analysis of counseling response mode profile in short-term dynamic psychotherapy. *Psychology: The Journal of the Hellenic Psychological Society* 2002; 9:1–8
28. Friedlander ML: Counseling discourse as a speech event: revision and extension of the Hill Counselor Verbal Response Category System. *J Couns Psychol* 1982; 29:425–429
29. De Stefano J, Bernardelli A, Stalikas A, et al: The relationship of therapist verbal response mode and client good moments in short-term dynamic psychotherapy. *Can J Counsell* 2001; 35:260–276
30. Mahrer AR: Research and clinical application of “good moments” in psychotherapy. *Int J Eclect Psychother* 1988; 7:81–93
31. Kuhn N: Intensive Short-Term Psychodynamic Therapy: A Reference. North Charleston, SC, Experient Publications, 2014
32. Stalikas A, De Stefano J, Bernardelli A: Client process in short term dynamic psychotherapy. *Couns Psychol Q* 1997; 10:29–38
33. Abbass A, Joffres M, Ogrodniczuk J: A naturalistic study of intensive short-term dynamic psychotherapy trial therapy. *Best Treatment and Crisis Intervention* 2008; 8:164–170
34. McCullough L, Winston A, Farber BA, et al: The relationship of patient-therapist interaction to outcome in brief psychotherapy. *Psychotherapy* 1991; 28:525–533
35. Winston B, Samstag LW, Winston A, et al: Patient defense/therapist interventions. *Psychotherapy* 1994; 31:478–491
36. Callahan PE: Indexing resistance in short-term dynamic psychotherapy (STDP): change in breaks in eye contact during anxiety (BECAs). *Psychother Res* 2000; 10:87–99
37. Town JM, Salvadori A, Falkenström F, et al: Is affect experiencing therapeutic in major depressive disorder? Examining associations between affect experiencing and changes to the alliance and outcome in intensive short-term dynamic psychotherapy. *Psychotherapy* 2017; 54:148–158
38. Gibbons MB, Crits-Christoph P, Barber JP, et al: Unique and common mechanisms of change across cognitive and dynamic psychotherapies. *J Consult Clin Psychol* 2009; 77:801–813
39. Diener MJ, Hisenroth MJ: Affect-focused techniques in psychodynamic psychotherapy; in *Handbook of Evidence-Based Psychodynamic Psychotherapy: Bridging the Gap Between Science and Practice*. Edited by Levy RA, Ablon JS. Totowa, NJ, Humana Press, 2009
40. Connolly Gibbons MB, Crits-Christoph P, Barber JP, et al: Insight in psychotherapy: a review of empirical literature; in *Insight in Psychotherapy*. Edited by Castonguay L, Hill C. Washington, DC, American Psychiatric Association, 2007