

# Intensive Transactional Analysis Psychotherapy (ITAP): A Single-Case Time Series Study

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**Abstract:** Intensive Transactional Analysis Psychotherapy (ITAP) integrates Transactional Analysis and brief psychodynamic approaches for the intensification of therapist intervention based on the moment-by-moment analysis of intrapsychic and interpersonal process of the patient. We present a quantitative and qualitative, time series study to evaluate ITAP therapy effectiveness in a single case. Quantitative outcome data were collected using the *Clinical Outcome in Routine Evaluation – Outcome Measure*, in 3 baseline measures, after each session and in 3 follow-up evaluations. Qualitative data were collected using the *Change Interview* that allows the documentation of more relevant changes for the patients and a scoring of their relevance. Quantitative results provide evidence of ITAP effectiveness, with very large ES of self-reported change. Qualitative results are consistent with the recovery observed in self-reported measures and confirm that the perception of the patient is consistent in several points with ITAP theory.

**Keywords:** ABA design, Brief dynamic therapy, Change effect size, Change interview, CORE-OM, Evidence-based treatments, Mixed qualitative/quantitative design, Psychotherapy outcome, Subjective change, Transactional analysis.

## INTRODUCTION

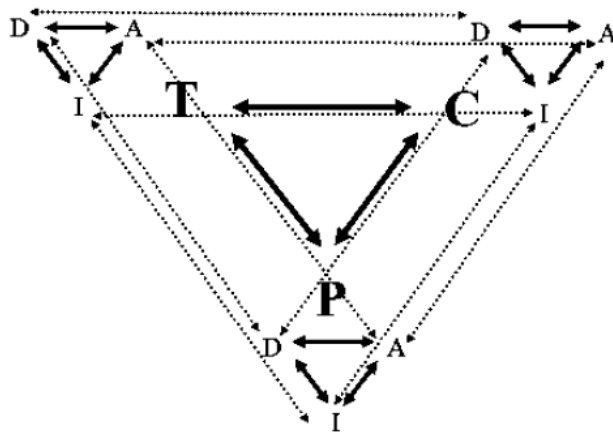
Intensive Transactional Analysis Psychotherapy (ITAP) is a therapeutic approach that integrates Transactional Analysis (Berne, 1961; Shiff, 1975; Goulding & Goulding, 1979) and brief psychodynamic psychotherapies (Malan, 1976; Davanloo, 1990; Fosha, 2000; Abbass, 2015). The main contact point between such approaches, which is the core of ITAP, is the close observation of the patient's verbal expressions, but also physical and non-verbal indicators of unexpressed emotions and needs in the psychotherapy process, which may be related to their emotional suffering. As in other brief dynamic approaches, patients are encouraged in the expression of their full experience of emotions (Frederickson *et al.*, 2018; Grecucci *et al.*, 2016).

In this moment-by-moment focus on the psychotherapy process, the therapist is guided by two theoretical tools coming from the psychodynamic tradition: the intra-psychic triangle and the interpersonal triangle. The intrapsychic-triangle, introduced by Menninger (1962), concerns the

regulation of emotions inside the person as results of psychological dynamic between: (1) *Impulse*, any spontaneous manifestation of the functioning of the person, such as a person's emotions and needs; (2) *Anxiety*, a negative emotional activation which emerges in the presence of an obstacle to the satisfaction of individual impulses; (3) *Defenses*, psychological processes which act distorting reality in order to avoid Anxiety and the related Impulse. The interpersonal triangle, described by Menninger (1958), considers the interpersonal manifestations of individual functioning that can be observed in repetitive relational patterns across different relational situations: *Current* relationships, the *Therapeutic* relationship, and *Past* relationships. As shown in Figure 1, the intrapsychic triangle and the interpersonal triangle are used together in the ITAP model to describe the psychic functioning as the interconnection of Impulse (I), Anxiety (A), and Defenses (D), which can be enacted in Current life situations (C), including the Therapeutic relationship (T), and which has been enacted in Past relationships (P) (see Sambin & Scottà, 2018 for a detailed description of ITAP model).

In the present paper, we describe a single-case study for the investigation of ITAP therapy effectiveness. This methodology offers several advantages, especially in early phases of new

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**Figure 1:** Representation of intra-psychic and interpersonal triangles in ITAP model. I = Impulse; A = Anxiety; D = Defenses. C = Current relationships; T = Therapeutic relationship; P = Past relationships.

treatments evaluations. First, it goes beyond pre-therapy and post-therapy comparisons, allowing the description of a longitudinal evaluation with a large number of observations, looking in detail at how change unfolds over time during the therapy of a specific patient. Second, single-case methodology is suitable for the inclusion of qualitative measures of therapeutic change for the examination of individual and contextual factors influences (McLeod & Elliott, 2011). This point is particularly important at early phases of treatments validation because it provides information concerning *how* therapy works. Third, although single-case methodology presents the disadvantage to do not allow generalization, the inclusion of pre-treatment and follow-up evaluations (ABA design) – as in the present study – fully qualifies this methodology as experimental (Borckardt *et al.*, 2008), even if it can be used to establish hypothesized causal relationships only within individual cases (Benelli *et al.*, 2015).

## METHOD

### Patient

The patient was a 25-year old female student. As reported by the therapist, she had a mixed anxious/depressive symptomatology and relational difficulties, with a high level of personality functioning (neurotic personality). She saturated the criteria for dystimic disorder and generalized anxiety disorder according DSM-5 (APA, 2013). In the definition of a therapeutic contract, she wished to become able to cope with relational problems caused by her difficulty in regulating emotions. Namely, she reported to be

aggressive with others and to have feelings of guilt as a consequence of this aggressiveness. She wanted to feel free to express herself with the members of her family and not to be involved in their bad decisions. An initial quantitative assessment of patients' well-being, symptoms, functioning and risk was obtained through the *Clinical Outcome in Routine Evaluation – Outcome Measure* (CORE-OM) (Barkham *et al.*, 2001; Evans *et al.*, 2002) that we also used to evaluate psychotherapy outcome (more detailed information about CORE-OM are provided in section 'Instruments'). In this first assessment, the patient reported CORE-OM scores within the clinical range (the exception of functioning aspects that were in the non-clinical range). See Table 1 for patients' baseline scores.

Before entering the treatment, the patient received detailed description of the research protocol. The therapy was provided free of charge and the patient was informed that she could withdraw from the study at any point, without any negative impact on her therapy. The research protocol was approved by the Ethical Committee of the University of Padua and the patient gave a signed informed consent for the use of sessions materials and self-reported questionnaires for scientific purposes.

## INSTRUMENTS

### Clinical Outcome in Routine Evaluation – Outcome Measure (CORE-OM)

The Italian version of CORE-OM questionnaire was used to quantitatively evaluate psychotherapy outcome (Palmieri *et al.*, 2009; Barkham *et al.*, 2001; Evans *et al.*, 2002). The CORE-OM comprises 34 items, organized in 4 subscales, addressing domains of Well-being, Psychological Problems (depression, anxiety, somatic problems, and trauma), Functioning (general functioning, functioning in close relationships and social relationships) and Risk (risk to self and to others). Items are scored on a 0–4 scale (from 0 = “Not at all”, 4 = “All or most of the time”). The Italian version of the CORE-OM showed good acceptability, internal consistency and convergent validity and the recommended cut-off between clinical and normal populations evaluated in an Italian sample for females were: 1.84 for subscale Well-being, 1.44 for subscale Psychological Problems, 1.31 for subscale Functioning, and 0.22 for subscale Risk (Palmieri *et al.*, 2009).

### Change Interview

In order to assess therapeutic change from the perspective of the patient, we used the Change

Interview protocol (Elliott *et al.*, 2001). This is a semi-structured interview which provides qualitative patient's descriptions of changes experienced over the course of therapy and her attributions for these changes (helpful aspects of her therapy, importance of changes and recognition of therapy as the cause of reported change). The patient was asked to identify most relevant changes she made during the therapy and to evaluate on a five-point scale: (a) if she expected the change (from 1 = *expected change* to 5 = *surprising change*); (b) how likely these changes would have been without therapy (from 1 = *unlikely without therapy* to 5 = *likely without therapy*), and (c) how important she feel these changes to be (from 1 = *slightly important* to 5 = *extremely important*). The Change Interview was conducted by an independent researcher at the end of the therapy.

## PROCEDURES

### ITAP Therapy

The patients received 16 sessions of ITAP therapy. The session were 50 minutes long, with weekly frequency, for total a time of 4-months treatment. The psychotherapist was a 32-year-old Italian man, with several years of clinical experience, expert in ITAP therapy. A detailed description of ITAP therapy is available in the manual published by the founder of ITAP model (Sambin & Scottà, 2018).

### Study Design

The patient was evaluated in 3 different phases: (a) Baseline phase included 5 weekly evaluations in 5 consecutive weeks before the beginning of the therapy (with last evaluation immediately before the first session); (b) Treatment phase included 15 weekly evaluations realized immediately before each session; (c) Follow-up phase included evaluations realized at 1 month, 3 months, and 6 months after the end of the therapy. For each evaluation the patients filled out the CORE-OM, whereas the Change Interview was carried out during the first follow-up (1 month after the end of the therapy).

### Statistical Analyses

In order to quantify change, we calculated Hedge's *g* value for a corrected Effect size (ES) of the change self-reported by the patient. The ES as calculated on the mean change in the individual test scores for each phase divided by the pooled standard deviations of the scores. The ES was calculated for Baseline phase

versus Treatment phase, Baseline phase versus Follow-up phase, and for Treatment phase versus Follow-up phase.

## RESULTS

### Quantitative Psychotherapy Outcome

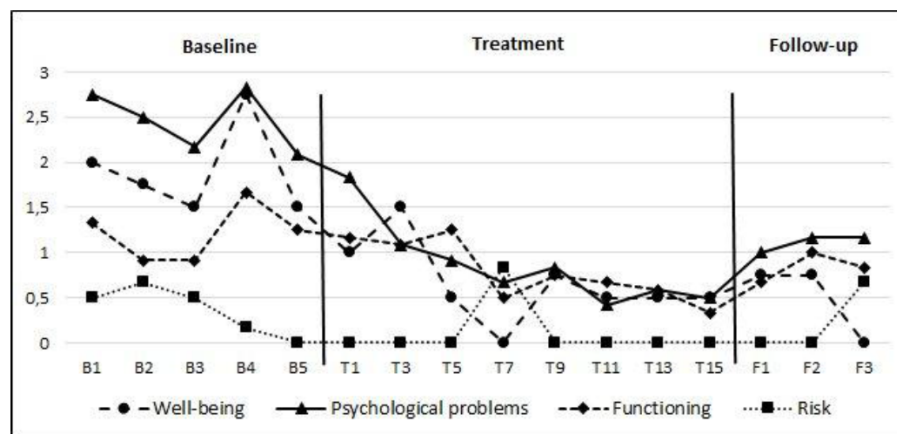
Mean patient's scores on CORE-OM subscales in Baseline phase (B), Treatment phase (T) and Follow-up phase (F) evaluations are shown in Table 1 and in Figure 2. Comparing patient's mean scores at Baseline phase with Italian normative data, they appear to be within the clinical range, except for the score Functioning that was in the normal range. As showed in Figure 1, there was no evidence of spontaneous recovery over a 5 weeks period before the beginning of ITAP therapy. Comparing Baseline phase and Treatment phase, we can observe an improvement of patient's score in all subscales of the CORE-OM, with scores that decrease at the non-clinical range for all subscales. Moreover, most of such improvements are maintained in the Follow-up evaluations (except for Risk subscale which is slightly increased in the last Follow-up evaluation). The statistical estimation of the size of changes showed that the ES comparing Baseline phase and Treatment phase was very large for subscale Well-being, Psychological Problems and Functioning, and large for the subscale Risk (see Table 1 for scores summary). Similarly, the ES of the comparison between Baseline phase and Follow-up phase was very large for subscale Well-being, Psychological Problems and Functioning, and small for subscale Risk. Finally, the ES of changes regarding the comparison between Treatment phase and Follow-up phase were small for subscales Psychological Problems, Functioning and Risk, confirming that the results were maintained in the Follow-up phase. An exception was the score of the subscale Well-being that showed a medium effect of improvement also after the therapy.

### Subjective Psychotherapy Change

Most relevant changes identified by the patients are listed in Table 2. Some of the changes were expected whereas others were not, depending on the definition of such changes as goals in the therapeutic contract or not. Interestingly, all changes reported by the patient were considered from very important to extremely important, suggesting a strong effectiveness of ITAP therapy. On the other hand, the patient recognized only relatively the therapy as the source of all the reported changes. For example, she clearly perceived her

**Table 1: CORE-OM Subscales Scores in Baseline Phase (B), Treatment Phase (T) and Follow-up Phase (F)**

	Baseline Phase (n = 5)		Treatment Phase (n = 15)		Follow-up Phase (n = 3)		Baseline versus Treatment	Baseline versus Follow-up	Treatment versus Follow-up
	Mean	SD	Mean	SD	Mean	SD	ES	ES	ES
<b>Well-being</b>	1.90	0.52	0.73	0.41	0.50	0.43	2.57*	2.48*	0.53
<b>Psychological Problems</b>	2.47	0.34	0.91	0.50	1.11	0.09	3.65*	4.19*	-0.41
<b>Functioning</b>	1.23	0.32	0.74	0.33	0.83	0.17	1.51*	1.25*	-0.27
<b>Risk</b>	0.37	0.27	0.13	0.24	0.22	0.38	0.94*	0.42	-0.33
<b>Interpretation of Effect Size (ES) in Hedge's g value:</b> >.02 = small effect; > 0.50 = medium effect; > 0.80 large effect; > 1.30 very large effect. * = large to very large effect.									

**Figure 2.** CORE-OM subscales scores in Baseline phase (B), Treatment phase (T) and Follow-up phase (F).

relational problems more associated to therapeutic work, whereas she considered more concrete changes (e.g. university results and weight loss) as relatively likely also without the therapy.

## DISCUSSION

In the present study we documented the efficacy of ITAP therapy using a single case time series design, with the inclusion of a mixed quantitative and qualitative methodology. Both qualitative and quantitative evaluations converged in providing evidence that ITAP therapy was very effective for the patient. This is an important step toward the validation of ITAP as an evidence-based treatment.

The quantitative data showed an improvement in all subscales. The patient moved from the clinical range to the non-clinical range of CORE-OM scores suggesting not only a general improvement, but also a recovery from her psychological difficulties. Moreover, it is interesting to observe that such results are also

maintained in the follow-up evaluations, although the increase of Risk subscale in the last follow-up suggests that it could have been useful to extend the follow-up evaluations to a longer period, in order to draw stronger conclusions about the patient's complete recovery.

These results are in line with previously reported benchmarks for studies that used low reactivity and low specificity outcome measures (such as the CORE OM). In the case of depressive disorder, Minami and colleagues (2007) estimated for patient that completed the therapy an efficacy benchmark of Cohen's  $d$  1.93 (95% CI: 0.85 – 1.01) and a natural history benchmarks of 0.15 (95% CI: -0.01 – 0.37). Similarly, in the case of generalized anxiety disorder, Cuijpers and colleagues (2014) estimated an outcome for self-report measures (as CORE-OM) a Hedge's  $g$  of 0.78 (95%CI: 0.66-0.90). Thus, confronting the effect size against overall benchmarks for depressive and anxiety disorders it appears that the effect is very large. Despite there are some methodological uncertainty in confronting standardized measure from RCT to effect size from

**Table 2: Change Interview**

Change	How much Expected the Change was	How Likely the Change would have been without Therapy	Importance of Change
<i>Management of my relationships: before therapy I felt anxious, my relationships were heavy and now they are lighter because now I am more focused on what counts for me.</i>	4 somewhat surprised	1 unlikely	5 extremely
<i>I feel calmer when I cope with things.</i>	1 Expected	4 somewhat likely	4 very
<i>I saw everything as white or black, whereas now I see shades of gray</i>	5 Surprised	1 unlikely	4 very
<i>I feel well with my body (weight loss)</i>	5 Surprised	5 likely	5 extremely
<i>I take care of myself, I take time to relax</i>	2 somewhat expected	4 somewhat likely	4 very
<i>Now I feel that I am a valuable person</i>	1 Expected	5 likely	5 extremely
<i>I can think about myself [and not only about others]</i>	5 Surprised	3 neither	5 extremely
<i>I am enjoying the fruit of my work, for example at university</i>	5 Surprised	5 likely	5 extremely
<i>I feel strong, I feel I have the power in my hands</i>	1 Expected	1 unlikely	5 extremely
<i>I accepted the separation from my dog</i>	1 Expected	3 neither	4 very
<i>I am still harsh with my friends; I have not modified this and in fact I still easily get angry with them I am often on a war footing. However, I have more instruments to manage it.</i>	1 Expected	1 unlikely	4 very

pre-post interventions, the magnitude of the effect suggests that the treatment was effective for the patient. These very large effects can be explained considering several aspects. First, the patient involved in the present study had a high level of personality functioning, which is a relevant prognostic factor for psychotherapy outcome (Norcross & Hill, 2004; Salustri & Messina, 2017). Second, patients with middle/moderate total CORE-Om scores are significantly more likely to achieve large improvements compared to patients with non-clinical scores (which

are already 'healthy') and to more patients with severe impairments (which require longer treatments to reach a complete recovery) (CORE Partnership, 2007). Future studies should test the generalization of the results of the present studies to other categories of patients.

Beyond the quantitative outcome data, evidence of patient's subjective perception of ITAP's effectiveness emerged from qualitative data. The patient reported numerous changes and she considered them from very

to extremely important. Thus, the therapy seemed to have a very strong impact on several aspects of patient's life, including intrapsychic regulation of emotions (e.g. *"I feel calmer"* or *"I am still harsh with my friends...however, I have more instruments to manage it"*), change in relational patterns (e.g. *"my relationships were heavy and now they are lighter"* and *"I can think about myself [and not only about others]"*) and several aspect of self-evaluation (e.g. *"Now I feel that I am a valuable person"* and *"I feel strong"*). The nature of such changes is in line with mechanisms of changes considered in the theory of ITAP therapy. According to patient's reported changes, ITAP therapy enhanced the awareness of intrapsychic emotion regulation, changes in relational manner, together with self-representation as an important component of both (if I represent myself positively I can manage better the relationships and I can feel free to express my emotions) (Messina *et al.*, 2016a; Messina *et al.*, 2016b). Despite such interesting consistencies between ITAP theory and the results observed as effect of ITAP therapy, the patient recognized the role of the therapy as source of some but not all of the reported changes. Namely, more concrete changes, such as the loss of weight or the university achievements, but also some aspects of self-perception, were considered likely also without therapy. This is an element that should be considered with attention, because it refers to a possible gap between the measurable changes and the subjective perception of the patient.

The results of the present study should be considered in the light of the limitations of the single case design. First of all, these results cannot be generalized to the general population. For example, the patient considered here had a high level of personality functioning, it is likely that a patient with lower level of personality functioning would have required a longer therapy to obtain a similar improvement. Future single case series and randomized controlled trials should be made to generalize the results of the present study about ITAP's efficacy.

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