Chapter 5
The Systemic Therapy Inventory of Change—STIC: A Multi-systemic and Multi-dimensional System to Integrate Science into Psychotherapeutic Practice

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The purposes of this chapter are to present the Systemic Therapy Inventory of Change (STIC) system and delineate the rationale for its use as a "one-stop shop" to scientifically investigate and empirically inform the practice of psychotherapy. More specifically, the STIC embodies a multi-systemic and integrative perspective that is consistent with the principles of family systems thinking and practice. As such, its use brings those principles to the broader practice of psychotherapy research and practice.

The STIC System

The STIC measurement and feedback system currently consists of three components.

The STIC Initial

The first is the STIC Initial, which is a questionnaire that clients fill out before the first session. It includes a detailed demographic questionnaire (that can be adapted to different national and cultural populations) and six system scales focusing on the different familial systems that comprise an adult or adolescent's intimate life context. The six system scales embody the multi-systemic component of the STIC. The Individual Problems and Strengths (IPS) Scale measures individual adult or

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adolescent symptoms and well-being on eight factors. The Family of Origin (FOO) Scale taps on six factors' adult clients' recollection of what their family was like and when they were growing up. The Relationship with Partner (RWP) Scale assesses partnered adults' (or adolescents) couple functioning on seven factors. Family/household (FH) targets parents' or adolescents' experience of their current family or household on eight factors. Child Problems and Strengths (CPS) delineate a parent's perception of a child's functioning on seven factors. Lastly, the Relationship with Child (RWC) Scale asks a parent about his/her relationship with their child on three factors. The STIC Initial takes a partnered parent about 45 min to fill out.

As evident in the above paragraph, each system scale contains dimensions or factors that constitute subscales for their scale. These factors can be thought of as the assessment or diagnostic criteria for each scale. For instance, The RWP Scale includes a trust subscale and commitment subscale that, respectively, measure the extent to which the partners trust each other and are committed to their relationship. Each system subscale uses a five-point Likert-type scale and can be thought of as a continuous variable. The STIC scales generate scores for each of their subscales as well as a total score (the average of the subscales) for the scale.

The STIC Intersession

The second STIC system component, the STIC Intersession, consists of briefer versions of five of the six system scales. The FOO Scale is currently only part of the STIC Initial and is used primarily as a set of moderator variables to predict the course of certain therapies (our goal is to include a briefer version of it in the next iteration of the Intersession, because we hypothesize that it may be a mediator as well). The Intersession also contains three alliance scales that, respectively, measure alliance in individual therapy (The Individual Therapy Alliance Scale), in couple therapy (The Couple Therapy Alliance Scale), and in family therapy (The Family Therapy Alliance Scale). These three scales derive from the Integrative Therapy Alliance Perspective (Pinsof 1994; Pinsof and Catherall 1986; Pinsof et al. 2007), which brings a family systems' perspective to the theory and measurement of the therapeutic or working alliance. The STIC Intersession takes a partnered parent seven to nine minutes to complete.

Clients fill out all demographically appropriate system scales in both the Initial and Intersession formats, regardless of the type of therapy in which they are engaged. Thus, a partnered father in individual therapy would fill out all of the system scales, whereas a husband without children in couple therapy would only fill out IPS, FOO, and RWP on the Initial, and IPS and RWP on the Intersession. The rationale for this procedure is that in designing the STIC, we wanted to bring an integrative and multi-systemic perspective to the study of family, couple, and individual therapy. This permits testing hypotheses such as to what extent does individual therapy with a depressed spouse affect her marriage, her family, her

children, and her relationship with her children. Clients only fill out one alliance scale in their Intersession—the one that fits the kind of therapy they are in. Thus, a partnered adult in individual therapy would just fill out the Individual Therapy Alliance Scale.

The STIC Online Data Collection and Feedback System

The STIC online feedback system, the third component, presents the "clinical intelligence" of the STIC System. It is designed to give therapists relevant and usable information that can influence their clinical decision-making and be shared directly with clients. To facilitate this process, the STIC has been normed, which means that a signal value is attached to any client factor or subscale score that tells the therapist whether that score is in the normal or the clinical range. It also tells the therapist how far (in standard deviation units) it is into the clinical or normal range. Thus, a husband's score on the partner positivity factor (intimacy, fun, friendship, love) on the RWP Scale may be two standard deviations into the normal range, which means he is as happy with his partner as he can possibly be (the top score in the normal range). In contrast, it may be four standard deviations into the clinical range, which means he is about as unhappy with his partner as he can be (the lowest score in the clinical range for the factor). The therapist can tell at a glance whether or not this aspect of the couple's relationship is problematic from the husband's perspective. At the simplest level, the normed score tells therapists whether or not and how much they need to worry about and attend to this aspect of a couple's relationship.

The continuous nature of the STIC scales reflects the STIC developers' commitment to the concept of a multi-factorial and multi-dimensional, as opposed to a categorical assessment system. Each targeted system (individual, couple, family) has a STIC profile that constitutes their "assessment" or "diagnosis" at that moment. The fact that the STIC has been normed and that a client's score on a scale or subscale can be conceptualized as falling in the normal or clinical range is purely a heuristic or shorthand device to tell the therapist whether something is a problem for the client. It is not meant to be a label or categorical assignment device. The STIC developers have debated many times the use of terms other than normal and clinical (like problematic/non-problematic) but ultimately settled on normal and clinical distinction due to the fact that the clinical cutoffs were determined by the intersection of the normal and clinical (help-seeking) sample score distributions on that scale or factor.

The online feedback system collects data from the clients and feeds it back to therapists in real time. The client portal offers the STIC to clients in English, Norwegian, or Spanish, whereas the therapist portal only offers STIC feedback to therapists in English or Norwegian. Potentially, both STIC portals can be configured in any language.

A unique set of features comprise the therapist portal and feedback system. First, therapists receive a notifying e-mail from the system the moment the clients complete their STIC. In this sense, the data are "hot." If the client has endorsed a risk item (homicide, suicide, physical/sexual abuse), the e-mail indicates "high priority." Second, when therapists open the e-mail that includes a link to the therapists' website, the first thing that they see is the Feedback Report, which was designed to provide therapists with "everything they need to know in 90s" (determined in user studies) about significant changes in any major factor (system or alliance) since the previous session or since the beginning of therapy. The Feedback Report especially focuses on the current status of the "Big Six," the six most clinical (furthest into the clinical range) factors for the case at the beginning of therapy. The idea of the Big Six came out of our own clinical experience as well as the feedback we received from initial users of the STIC that six was probably the maximum number of problems that a therapist could consistently track with a case. Delineating the Big Six at first and then presenting them at the front of every Feedback Report maximizes the likelihood that the therapist never loses track of the current status (better, no change, worse) of the major presenting problems from the beginning of therapy. Therapists can also add new factors to the Big Six list for regular tracking as well as other critical problems that become clear over the course of therapy. If therapists have time, they can go further into the case material and explore any changes or domains not mentioned in the Feedback Report.

An Evolving Measurement and Feedback System

The STIC system, like all modern information technologies, is an evolving measurement and feedback system (Bickman et al. 2012). STIC v1 was a paper and pencil set of questionnaires that clients filled out on Scantron forms before every therapy session. STIC v2 presented the STIC as an online questionnaire that clients could fill out on virtually any information technology platform (mobile phone, tablet, computer). In addition to the changes in data collection format (paper and pencil to online) and the sophistication of the scales (norming, etc.), we have "discovered" various uses of the STIC that were not initially envisioned when we started this research program. Below we detail the various functions or roles that the STIC has taken on over the course of its development. Specifically, we discuss the STIC system as a research tool and as a clinical tool.

The STIC as a Research Tool

As well as a measurement and feedback system to provide therapists with useful data about their clients, the STIC v2 is a research tool that can be used to address a wide variety of questions and hypotheses. At the most basic level, the STIC can be

used to evaluate the outcome of therapy from a multi-systemic perspective. It can evaluate two types of distal outcome questions. The first is the extent to which clients in therapy changed on the five STIC scales. Did the clients improve on the five STIC scales, which, respectively, measure individual, couple, and family functioning, as well as child functioning and the quality of the parent's relationship with the child? More specifically, did the clients change on the specific dimensions or factors on each of the five scales?

The second distal outcome question concerns whether the STIC scales and factors in the clinical range at the beginning went into the normal range at the end. The first question asks did the clients improve—did they get better? The second asks did they return to normal or non-distressed functioning—did they recover?

In regard to the validity of the STIC scales and factors, a recent study found that they correlated highly with well-established, gold-standard measures such as the Beck Depression Inventory (Beck et al. 1961), The Beck Anxiety Inventory (Beck et al. 1988), the Dyadic Adjustment Scale-Revised (Busby et al. 1995), The Family Assessment Device (Epstein et al. 1983), and the Strengths and Difficulties Questionnaire (Goodman 1997), a measure of child functioning (Zinbarg et al. in press). These data suggest that the STIC scales together constitute a valid outcome battery not only for the multi-systemic and multi-dimensional evaluation of psychotherapy, but also for the evaluation of the extent to which treatment has effectively addressed specific disorders such as depression; anxiety; and couple, family, and child distress.

The STIC has a virtually unlimited capacity to test hypotheses about the moderators and mediators of therapy. STIC data can be used to address a host of moderator questions like to what extent does initial client status on a variety of demographic and system variables predict outcome in different systems. For instance, to what extent does the degree of disturbance in a child predict the outcome of his/her parents' couple therapy or to what extent does paternal depression predict the outcome of family therapy.

In regard to therapy mediators, STIC data can be used to address the extent to which therapeutic alliance ruptures (sudden and significant drops in a client's alliance with the therapist or a significant other) predict or are associated with poorer outcomes and the extent to which ruptures that are subsequently repaired are associated with better outcomes. In this regard, using STIC couple therapy data, Goldsmith (2012) found that, among other things, alliance ruptures occurred in over half of all cases in a sample of cases in couple therapy and that when ruptures were repaired those couples had better outcomes than couple cases in which ruptures had never occurred. In regard to non-alliance mediators, the STIC can be used to address questions like to what extent does improvement in wives' depression predict the outcome of couple therapy or to what extent is amelioration in adults' depression in individual therapy associated with improvement in their marital functioning.

We are currently in the process of examining a sample of over 1000 complete cases to see whether we can determine change trajectories for particular types of clients on particular scales and factors. We are using latent growth curve analytic

techniques to identify distinct trajectories linked to particular groups or classes of clients. Our ultimate hope is to be able to use STIC Initial profiles and/or early change trajectories (e.g., first three sessions) to identify predicted change trajectories for each case at the beginning of therapy. Not only are such data useful to show the shape and timing of change for different clients on different dimensions, but they can ultimately be used to inform clinical planning and decision-making. For instance, cases with predictors' scores that place them in a poor trajectory class can be offered additional and/or specialized services with potential to move them into a change class with a better trajectory.

The STIC as a Clinical Tool

In developing the STIC, our initial goal was to create a research instrument that could illuminate how clients change in therapy and a clinical tool that could be used to give therapists, over the course of therapy, specific data about which of their clients' problems were getting better, worse, or not changing at all. Over the last ten years, our clinical research group at The Family Institute at Northwestern University and our Norwegian colleagues have been exploring and elaborating the STIC system's utility as a clinical tool. Specifically, we have begun to elaborate the use of the STIC as a clinical tool to facilitate collaborative assessment, treatment planning, progress evaluation, and termination assessment/planning.

The Collaborative Use of the STIC

A major evolution with the STIC system has occurred in regard to its use as a tool to facilitate collaboration and alliance building between the therapist and the clients. Initially, we imagined that therapists would receive STIC feedback and use it to evaluate their clients' progress in therapy. In other words, the STIC feedback would inform therapists' clinical decision-making. The therapist, after receiving the feedback, would decide how to use the feedback. Sharing the feedback with the clients was an option, but something that we thought should be done under certain very carefully and judiciously selected circumstances.

Approximately five years ago, I was consulting on a case with my colleagues at the Modum Bad Psychiatric Center in Vikersund, Norway. For several years, they had been using the STIC system in their inpatient family program in which whole families come to Modum Bad for three months of intensive, multi-systemic treatment (see Chap. 9). In preparing for the live consultation interview with the parents from one of their families, the staff asked whether I would show the couple their STIC data during the interview. I said "sure," not knowing what exactly I was agreeing to. After some initial getting-to-know-you conversation with the couple, I invited them to look at some of their STIC data with me. I had my laptop computer

in front of me linked to a projector that displayed their STIC data on a large screen we could all easily see. I began by showing them a change graph depicting the wife's deterioration on the Negative Affect factor (depression and anxiety) over the last three weeks, since they had arrived at Modum Bad. After explaining what Negative Affect meant and clicking on one of the data points which showed them the actual questions with the wife's answers for that date, I asked the wife how she understood her change on this factor.

The wife responded by saying, "Since I arrived at Modum, I have felt like I could finally feel my feelings. I have been sad for so long, but I felt that because of my husband's problems and the need for me to be strong, there was no room in our life for me to be sad. But being here, I have felt relieved that my husband is finally getting the help he needs and there is room for my sadness." As she said this, she started to cry softly. Through her tears, she added, "that line on the screen shows the journey into my heart."

At that moment I asked the husband how he was feeling, seeing his wife's tears and hearing her story. He said that he felt sad too, sad that he had made her sad as well as their children with all of his problems. I asked him, "Was it you or your problems that made them so sad?" He said he did not see any difference between who he was and his problems. I asked his wife what she thought about that and she turned to her husband and said, "You are not your problems. You are the man I love, but I hate your problems." I asked him, "So how are your problems going at this point?" He responded, "I think better, but I am not sure." I asked whether we could look to see what the STIC data had to say about that and he replied "Sure."

At that point, I went back to the website and clicked on the line graphs for his IPS Negative Affect and IPS Open Expression, two of his factors that were furthest into the clinical range when he came into therapy at Modum. Negative Affect had gone from +3 into the clinical range to −0.5 into the normal range, and Open Expression had gone from +3.5 to +1 in the clinical range. Both factors had changed significantly ($p < 0.05$) and Negative Affect had even gone just over the clinical cutoff into the normal range. I asked him what he thought about that. He replied, "I guess I am doing better." I then asked what he thought the graphs were saying about him. He said, "That one says I am less depressed and the other says I can speak up for myself when I need to." I asked, "Does that feel right to you? Is it accurate?" He responded, "Since I just filled it out, it's better." We all laughed at that moment. I then asked his wife whether she thought his line graphs were accurate and she concurred.

What this experience taught me was that I could use STIC data with couples as a powerful therapeutic intervention and that I could treat them as co-investigators into their data. I did not have to interpret it for them, but we could interpret it together. It also taught me that seeing STIC data could evoke powerful emotions in clients. Lastly, it showed me that STIC data could also be used to validate change and inspire hope.

Since that time, my colleagues and I have perfected various strategies for using STIC data with clients, a number of which will be elaborated below. But the important breakthrough of that moment was that I did not have to be the STIC

expert, nor did I have to be the center of STIC decision-making. The STIC data could be shared with clients and used as a collaborative tool to facilitate the co-creation of a new empirically informed reality (Weingarten 1991). I have come to believe that this collaborative use of STIC data with clients also increases and strengthens the therapeutic alliance.

Collaborative, Empirically Informed Assessment

The STIC has great potential as a tool and multi-systemic assessment. The STIC provides two "clinical profiles." The first pertains to all of the scales for a particular client or case that are in the clinical range. For instance, a partnered husband, the most demographically loaded client, may be in the clinical range on 10 of the 39 factors or subscales on the six STIC Initial scales. A wife with no children may be in the clinical range on 8 of the 21 subscales on her three STIC Initial scales (IPS, FOO, and RWP). For each client, the specific scales in the clinical range constitute his/her full clinical profile. For each case, the clinical profiles of the clients in that case constitute the case's full clinical profile. The individual client or case's clinical profile can be thought of as their unique clinical fingerprint or signature. Clinical experience suggests that there is a high correlation between a client's full clinical profile and their description of their presenting problems. However, the STIC clinical profile should never be thought of as a complete or definitive clinical picture of the client or the case and must always be supplemented and informed by the clients' personal narratives. This belief is at the core of the clinical use of the STIC in which the clients and therapist co-interpret and co-define the meaning of their scores.

The Big Six and the Big Three

As discussed above, in order to simplify the clinical picture for therapists and clients, the Feedback Report that therapists get as soon as the clients submit their STIC form does not initially present the full clinical picture for each client. Instead, it presents the Big Six, the clinical subscales for each client that are furthest into the clinical range. When therapists look at the full case (after they have confirmed seeing each client's Feedback Form), they are presented with the Big Six for the case, which for a couple presents the top three (the three most clinical subscales) of each partner's Big Six. The therapist can move from that case, a conjoint data display presenting the Big Three for each partner, to looking at the data for each partner and seeing his/her Big Six. In other words, the website is layered, and therapists can dig down as far as they want and have time to.

Individual Versus Couple Versus Family: Whom to See?

A major assessment function of the STIC is the determination of what is conventionally thought of as the modality of therapy. Instead of "modality," which tends to imply as set of practices and inclusion criteria, our group prefers the term "contexts of intervention" (Breunlin et al. 2011; Pinsof 1994; Pinsof et al. 2011; Pinsof et al. in press). A context of intervention specifies who is directly involved in therapy at any particular time, but does not prescribe or connote any practices or interventions. To exemplify this function, think of a partnered female who presents for individual therapy. In examining her initial STIC data, the therapist sees that she has more couple (RWP) subscales than individual (IPS) subscales in the clinical range. This means that she is reporting relatively more distress in regard to her partnership than her individual functioning.

These data lead the therapist to hypothesize that couple therapy may be more appropriate for this woman than individual therapy. The therapist further hypothesizes that the couple problems may be causing her individual problems or vice versa. In the first session, the therapist mentions to the client that she has more subscales in the clinical range on her couple as opposed to her individual scale and asks what she thinks about that. She says that her marriage is terrible and she is thinking of leaving her husband. The therapist then asks her whether she and her husband have tried couple therapy. She responds that they have been in couple therapy for ten months, her husband is refusing to attend, and things have gotten worse between them. Together, the therapist and client decide that at this moment, seeing her individually makes the most sense.

However, if she had told the therapist that they had not tried couple therapy because her husband refused to, the therapist might suggest that she tell her husband that she has decided to consult with a family psychologist who said that he would like him to come in for a conjoint session so that he could understand his perspective on his wife's problems and their relationship issues. In other words, the invitation is not for "couple therapy," but for him to join them so his perspective could be factored into their work. Frequently, when this occurs and the husbands realize that what they think is important and that the therapy is not going to be husband-bashing, they agree to participate in couple therapy.

If the partnered female above, who presented for individual therapy had two children, a 12-year-old son and a 10-year-old daughter, she would also have filled out FH, CPS, and RWC. Let us assume that three of the eight FH subscales were in the clinical range and that most of the seven CPS and three RWC subscales for the daughter were also in the clinical range. In contrast, none of the CPS and RWC subscales for the son were in the clinical range. This picture would lead the therapist to ask about the children, with particular emphasis on the problems with the daughter. If the mother said that she and her husband could not agree about what to do with their daughter (reflected in the FH clinical subscales), who had always struggled in school and had few friends (reflected in the CPS clinical subscales), the therapist might recommend family therapy with the husband and the children as a

first step. That therapy, if successful, might lead eventually to couple work to help the parents get aligned in regard to their children, which might ultimately position them to address their marriage.

Creating an Empirically Informed Problem Narrative

The STIC Initial data, in addition to influencing the decision about who to include in the therapy and, correspondingly, which systems to focus upon, also can be used to influence the decision about what to work on in what order or sequence. The Big Six for each client in a case usually track well on to each client's verbal presentation of his/her primary presenting problems. We recommend that therapists share the initial Feedback Report with the clients and use it as an opportunity to both identify their major problems as targets of treatment and to also plan the order of intervention—what will be addressed first, etc. We focus below on identifying the targets of treatment and will address collaborative planning in the next section.

The first thing that the Initial Feedback Report presents is the Big Six for each client who filled out the STIC Initial. The Feedback Report also presents risk (homicide, suicide, abuse, etc.) items that any client in the case reported initially. Figure 5.1 presents the STIC Initial Risk Items and Big Six for Tom (blue) and Sarah (red-pink), who presented for couple therapy.

The Big Six for the couple (case) includes the three most clinical subscales for each member. Figure 5.1 shows that Sarah endorsed a suicidal thought risk item from the Negative Affect subscale on IPS. In terms of the Big Six, Sarah's score on Negative Affect is the furthest into the clinical range (the Big Six is rank ordered from the most to least "clinical"), followed by Tom's Open Expression. Both of these scales come from their Initial IPS Scale which is presented in Fig. 5.2. The

Risk Items Endorsed

Client	Scale	Subscale	Question	Answer
F/Jul 1, 1953	Individual Problems/Strengths	Negative Affect	Thought about ending your life	Rarely (2)

Initial Subscales furthest into the Clinical Range (Big 6)

Subscales furthest into the clinical range (from most to least severe).

Client	Subscale
F/Jul 1, 1953	Negative Affect - IPS
M/Sep 15, 1950	Open Expression - IPS
F/Jul 1, 1953	Trust - RWP
F/Jul 1, 1953	Sexual Satisfaction - RWP
M/Sep 15, 1950	Self-Misunderstanding - IPS
M/Sep 15, 1950	Negative Affect - IPS

Fig. 5.1 Initial Risk Items and Big Six to Tom and Sarah

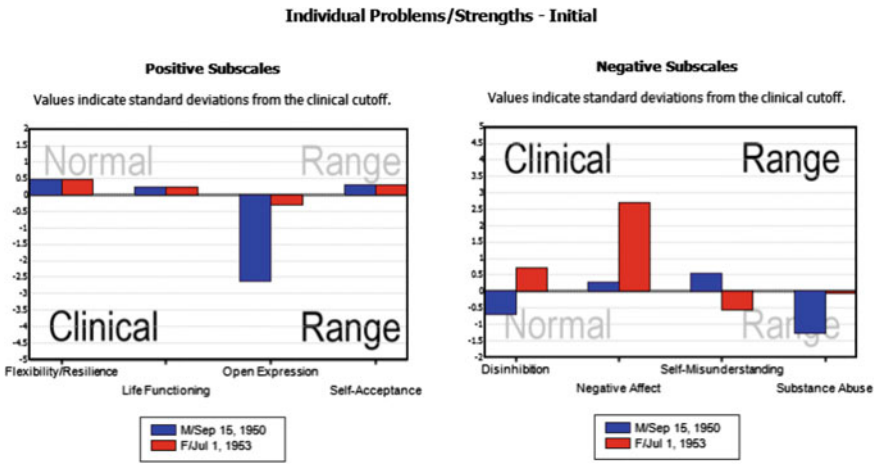

Fig. 5.2 Tom and Sarah's Initial Scores on Individual Problems and Strengths

bar graphs for each of the Initial Scales are part of the Feedback Report and can be scrolled down to from the Big Six. Figure 5.2 graphically depicts what the Big Six reports; that is, Sarah is very depressed and Tom feels that he cannot express himself or his feelings. It also shows that Tom experiences problems primarily in regard to himself as opposed to his marriage—his IPS Self-Misunderstanding and Negative Affect are number five and six in the Big Six. In terms of couple functioning, two of the Big Six (numbers three and four) come from the Sarah's RWP Scale: Trust and Sexual Satisfaction. Figure 5.3 presents Tom and Sarah's Initial RWP scores.

These two graphs complete the Big Six or major problem overview for Tom and Sarah, telling us that they are most troubled at this moment individually, but that relationship problems are the other area in which they are struggling. In working with Tom and Sarah, the therapist showed them the Initial Feedback Report in the second session. In the first session, Sarah linked her depression and suicidal thoughts to a recent crisis in their marriage that had to do with a trust rupture. Tom said that he had always had terrible trouble expressing his thoughts and feelings and that the trust rupture had to do with confiding in their adult daughter that he was unhappy in the marriage. Their daughter had come to Sarah and told her about Tom's unhappiness and Sarah felt very betrayed that he had not spoken directly to her. Sarah and Tom agreed that his difficulty expressing himself directly to the person that he was angry at or displeased with was a major problem for him and their relationship. They also agreed that his communication with their daughter behind Sarah's back was very disturbing, if not traumatic to Sarah. As Sarah looked at the graphs in the second session, she started talking about how violated she felt about Tom's failure to be honest with her and also about the fact that he was unhappy with her. She said that she also felt that he had withdrawn from her sexually in the recent months and that had left her feeling even more abandoned. In

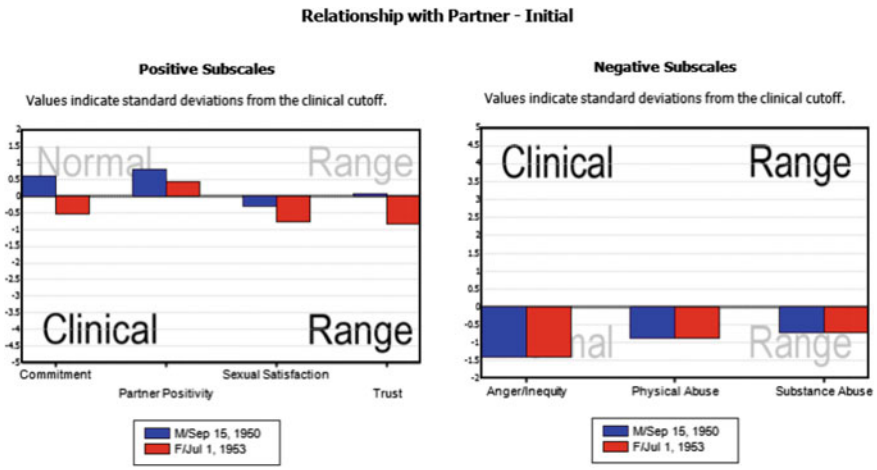

Fig. 5.3 Tom and Sarah's Initial STIC Relationship with Partner (RWP) Scores

talking about what should be addressed, Tom and Sarah both felt that his lack of honesty and openness was the biggest problem that had created this crisis, and that his marital unhappiness also needed to be addressed. They both acknowledged that the covert communication with the daughter had left Sarah feeling great disappointment and despair, and that those feelings needed to be addressed as well. The conversation with the therapist used their descriptions of their problems from the first session with their STIC data to weave an empirically informed problem narrative in their second session.

Creating an Empirically Informed Intervention Plan—What to Address When?

After creating an empirically informed problem narrative, the next step delineates an empirically informed intervention plan. In the last half of the second session, the therapist moved from problem description to intervention planning. Sarah and Tom felt that Sarah needed to talk to Tom about the trauma of his betrayal and he needed to understand and take responsibility for it. This would entail Sarah talking and Tom listening openly and non-defensively. Ideally, this work might alleviate her depression and begin restoring trust. Next, Tom would need to address the factors in himself and his marriage that prevent him from expressing feelings honestly and directly. Tom acknowledged this had been a problem for him and that it had more to do with himself than his relationship with Sarah. Tom, Sarah, and the therapist discussed that perhaps Tom should pursue individual therapy for this problem, but everyone thought it best to do the work with Sarah. If that did not work, it could be

pursued in individually. They also agreed that pursuing the sexual problems should wait until Sarah's depression and anxiety diminished and some trust had been restored in their relationship.

Empirically Informed Progress Evaluation

As well as using STIC data to inform assessment of the system and the planning of therapy, STIC Intersession data can inform progress evaluation and, and if necessary and appropriate, the replanning of therapy. Figures 5.4 and 5.5 present Intersession data for Tom and Sarah from their 11th session. On IPS (Fig. 5.4), Sarah's Negative Affect has gone into the normal range and Tom's Open Expression has improved significantly. Also, not surprisingly, Tom's Self-Misunderstanding has increased, which reflects his growing curiosity and appreciation of his lack of understanding about himself. This is an example of how on certain subscales (e.g., Self-Misunderstanding), getting worse actually reflects progress, a not uncommon finding. When shown these data, Tom commented that he felt he had just begun to understand himself and why he did what he did.

In seeing his improvement on Self-Expression, Tom acknowledged that, while he was more comfortable being himself, he still found it hard to express anger or critical feelings to Sarah (or anybody else for that matter). That led into a conversation about his catastrophic expectations about what would happen if he got angry at Sarah. Initially, he said that he was afraid she would fall apart. The therapist encouraged him to check that out with her, to which she replied: "You

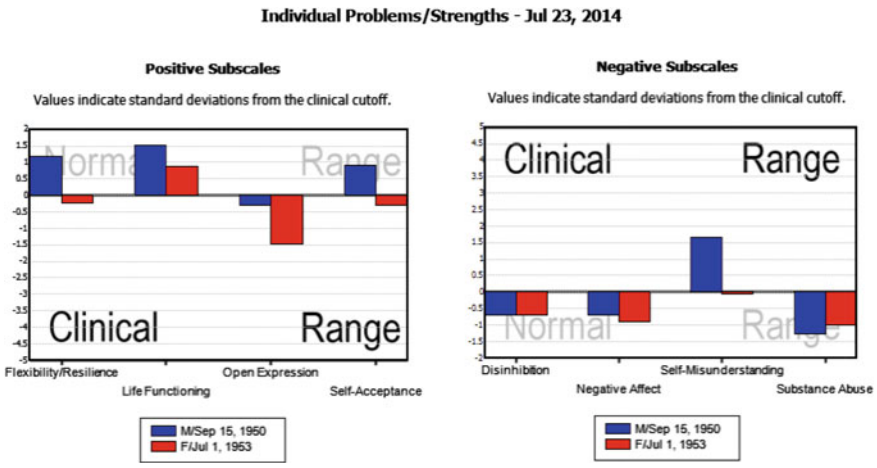

Fig. 5.4 Tom and Sarah's IPS Intersession Data from their 11th session

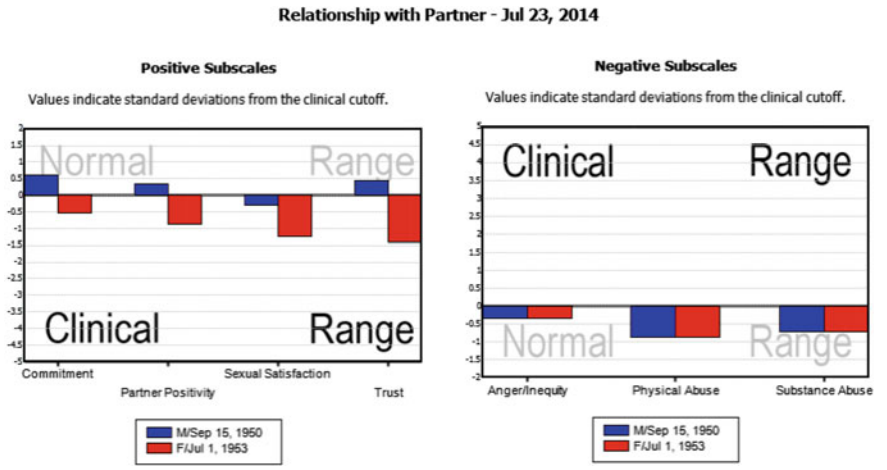

Fig. 5.5 Tom and Sarah's RWP Intersession Data from their 11th session

don't have to worry about me falling apart. I might get defensive, but I'd much rather have your anger at me out there than you talking to other people about me." At that point, Tom said: "I don't really get angry at anybody. I hate getting angry at people. My dad was a scary screamer, angry all the time."

This led the therapist to ask Tom about his relationship with his father, which ended with Tom saying that at the age of 14 he decided that he would do everything he could to never be like his dad. This led into a conversation about how Tom had cut off his awareness and expression of anger as a way to reject and differentiate himself from his father, but that maybe he had "thrown out the baby with the bath water." The conversation turned to the destructive versus the constructive use of anger, as opposed to getting rid of anger altogether. Sarah even said, "I want you to get angry at me. I'd prefer that to the alternative." All three agreed that Tom would try before the next session to be aware of his anger and to express it in a non-destructive way to Sarah.

Before the next session, the therapist saw each of their Feedback Reports. Tom's Anger/Inequity on RWP had gone a standard deviation into the clinical range (another "deterioration" that is a sign of progress) and his Open Expression went into the normal range. Interestingly, Sarah's trust and commitment both improved significantly as well. In the session, the therapist commented on these changes and briefly showed them their data. Sarah's commented, "He did his homework. He got angry at me about how I came home from work in a bad mood and yelled at him. He told me that it pissed him off and wasn't fair. I told him you're right and told him about my problems with a colleague at work. I felt closer to him because he got angry, we talked about it and then he really listened to me."

Collaborative, Empirically Informed Termination Assessment/Planning

Tom and Sarah continued their progress. The more expressive he became to her (including anger), the safer she felt. Without even addressing the sexual intimacy, their Sexual Satisfaction Score on RWP for both went into the normal range, reflecting their sexual reconnection. After several sessions of continued progress and consolidation of the changes, Tom and Sarah found that they did not have that much to talk about in their sessions, because they were now talking about their issues with each other outside of therapy. Most of their clinical subscales at the beginning of therapy were now either in or approaching the normal range. After the therapist showed them their STIC progress and discussed his sense of increasing superfluousness, Sarah and Tom both said, "maybe we should stop for now—we are in the best shape we've ever been in." The therapist said that he agreed with them, they had made great progress, and that his sense was that their relationship was now stronger than it had ever been. "You're more honest with each other, more direct and much more connected. It is a pleasure to see the two of you together." Sarah said that their daughter even said their relationship seemed much better and that they had made lemonade out of lemons. Tom, Sarah, and the therapist agreed to one more session, a check-up, six weeks down the line. If the gains were persisting and they were still connected, it might then be time to end this episode of therapy.

At that check-up session, Tom reported that in the past six weeks they had had several fights and that after each one they felt closer and more connected. He said that he really understood the difference between good and bad anger and that he felt that he could be "good angry" with Sarah and she loved him (not necessarily at the moment) more for it. Sarah said that she felt more trusting and committed to Tom and their marriage after this crisis than before. It had made them stronger. The therapist verified and supported their progress and desire to stop for now. As they left the session, he assured them that if they got in trouble in the future, his door would always be open to them. Tom and Sarah hugged him as they walked out the door.

Empirically Informed Multi-systemic Therapy

The story of Tom and Sarah's therapy illustrates the use of the STIC as a clinical tool to empirically inform assessment, treatment planning, progress evaluation, and termination decision-making. The STIC data are used collaboratively to inform, but not dominate the therapeutic process. The use of scientific data in this way creates a new form of therapy that continually integrates scientific data from the beginning to the end of therapy. The fact that the STIC is multi-systemic ensures that each client's experience is seen, addressed, and integrated into the decision-making process that plays out between and within the clients and the therapist. That the

STIC is a client-focused, as opposed to a therapist-focused measurement and feedback system, reflects its prioritizing of client experience (quantitative and qualitative) as "the bottom line" of therapy.

The Clinical-Research Loop

The description of the clinical use of the STIC, presented above, constitutes what we consider to be the optimal use of the STIC as a clinical tool. We believe (hypothesize) that using the STIC in this way improves both the efficiency and effectiveness of the therapy. Toward that end, we are in the process, at the time of this writing, of concluding a four year randomized clinical trial (RCT) in Chicago and Norway, comparing cases in which therapists use the STIC as a clinical tool versus cases in which the same therapists do not use any form of feedback. The study looks at individual and couple therapy and uses (along with the STIC Initial) a set of gold-standard measures (described in Zinbarg et al., in press) to assess outcome for both groups. All cases are randomly assigned to one of the two treatment groups. The same groups of therapists work in both treatment groups. The results of this study should be available in the coming years. This RCT illustrates the confluence of the clinical and research use of the STIC.

The STIC System as a Comprehensive Clinical and Research Tool

This chapter has illustrated how the STIC system can be used as a valid and reliable research tool to illuminate the change process and evaluate therapy. It has also shown how the STIC system can be used as a clinically meaningful tool to facilitate empirically informed collaboration between therapists and clients over the entire course of therapy. It also illustrates how a multi-systemic and multi-dimensional instrument can be used to inform and study family, couple, and individual therapies. No longer do therapists and clients have to rely on empirically supported manualized therapies that were validated in a laboratory and then prescribed as "best practice." With comprehensive systems like the STIC, they can bring science into practice in a way that enhances their creativity and collaboration and makes their clients stronger and more confident in the process.

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