

Report on the Systemic Therapy Inventory of Change (STIC) Feedback System

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THE FAMILY
INSTITUTE

at Northwestern University

Northwestern

The Center for Applied
Psychological and Family Studies

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of Change (STIC) Feedback System

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Executive Summary

Over the past decade, empirical feedback has emerged as a key area of focus for improving clinical outcomes in psychotherapy. Empirical feedback systems collect data from clients and feed it back to therapists to aid in decision making in therapy. The Systemic Therapy Inventory of Change, or STIC, is the first *systemic* feedback system—the STIC is the first tool to assess change across multiple relationships and multiple domains of functioning, so it can be used in individual, couple, and family therapy.

Working within an Integrative Systemic Therapy framework and rooted in relationship-based behavioral health, The Family Institute at Northwestern University's research team initially developed the STIC as a research-focused, paper-and-pencil questionnaire given to clients. The first version of the STIC was completed in 2000. Over time, what began as a research measure was expanded into a web-based system that includes not only an electronic version of the questionnaire, but also a feedback tool that provides clinicians with accurate empirical data that they can flexibly integrate into their work with clients to improve outcomes.

The STIC Randomized Clinical Trial (RCT) was developed in 2012 to assess whether providing feedback to therapists, and the integration of STIC data into practice, improves treatment. Although previous research suggests that empirical feedback does improve therapy outcomes, no such studies have been conducted in systemic therapy. The results of the RCT provide strong support that using a systemic measure and providing feedback to therapists improves client outcomes. That is, clients who completed the STIC measure and whose therapist received feedback about how they were progressing in therapy had stronger outcomes than clients who received therapy without completing that STIC measure and whose therapist did not receive feedback.

A secondary benefit of the RCT was that it allowed for in-depth study of the quality of the STIC as a tool for research and clinical use. Because the STIC is designed to assess a broad range of issues with a relatively small number of questions (to reduce burden on clients), and to do so reliably over the course of weeks of treatment, it is crucial that the instrument itself be statistically sound. RCT analyses of the STIC measure demonstrated that the instrument accurately measures what it is meant to measure, and, furthermore, that it accurately captures change that occurs in therapy.

Richard E. Zinbarg, PhD, Chief Scientist
Jacob Goldsmith, PhD, Principal Investigator

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Bill Pinsof was the lead developer of the STIC, and principle investigator for all STIC research until 2015. This work represents his original vision, as carried forward by a team of dedicated researchers at The Family Institute. Anthony Chambers and Jana Jones, in their respective roles as Chief Academic Officer and Chief Executive Officer, shepherded and supported the project within The Family Institute. Tara Latta served as administrative director on the project throughout the creation of the STIC website and was instrumental in the planning of the RCT. Jay Lebow and Doug Breunlin were tireless motivators and served as consultants to the STIC team on both research and clinical issues. Nathan Hardy and Kelley Quirk contributed to the design of the RCT and to RCT analyses during their time as post-doctoral fellows at The Family Institute. Robert Leuger, Professor of Clinical Psychology at the Wisconsin School of Professional Psychology, generously consulted and aided in RCT analyses. Terje Tilden, and his colleagues in the Norwegian STIC-Consortium, were invaluable consultants and collaborators throughout the project. Data collection throughout the Chicago area would not have been possible without the support of Catholic Charities, Chicago C4, and Jewish Child and Family Services.

It is particularly important to recognize the contributions of the current members of the STIC team without whom this project would not function. Simply put, project coordinator Lesley Fisher and research administrator Krishna Patel were vital to the day-to-day operation of the RCT. Postdoctoral fellows Yaliu He and Allen Sabey were invaluable as the project moved from a data collection phase into active analysis, driving data management and overseeing major portions of analyses.

STAFF AND FELLOWS

Donna Baptiste
Douglas Breunlin

Nancy Burgoyne
Anthony Chambers

Rachel Diamond
Steve Du Bois

Adam Fisher
Lesley Fisher
Greg Friedman
Jacob Goldsmith
Adia Gooden
Nathan Hardy
Heidi Hayden
Jayne Kinsman

Lynne Knobloch-Fedders
Mark Lynn
Gustavo Medrano
Anna Sara Morrow
Julie Peterson
Jessica Pryor
Kelley Quirk
Cheryl Rampage

Reggie Richardson
Chaaaze Roberts
Lesley Seeger
Tamara Sher
Hannah Smith
Christina Stiff
Autumn Williams-Hertz
Laura Willig-Dink

STUDENTS

Steven Affinati
Adaora Aguoji
Kara Anderson
Dena Berman
Aniko Blake
Molly Blazak
Allison Bozovsky
Jonathan Brown
Madeleine Bruce
Cynthia Bullinger
Natalie Callen
Cathy Chec
Xiaodi Chen

Haylee Daggett
Kelly Dunleavy
Jordan Dunmead
Ryan Earl
Kim Ferguson
Kimberly Gould
Ellen Groble
May Han
Eleanor Herzberg
Shazia Imran
Yuko Ishikaw
Clea James
Kathryn Kadleck

Sara Klein
Juliana Lockwood
Alexis Meade
Lauren Miceli
Grace Norberg
Elizabeth Okunroumu
Jason Peruchini
Shay Reeves
Moiria Shiels
Devon Spencer
Neil Venketramen

Introduction

ABOUT THE FAMILY INSTITUTE AT NORTHWESTERN UNIVERSITY

The Family Institute at Northwestern University is grounded in systemic theory, a belief that psychological conditions cannot be understood or treated in isolation from an individual's family. We define family the way our clients define family in an ever-changing world; family takes many diverse forms and is not limited by the boundaries of biology, intentionality and/or law. We are empirically informed, theoretically grounded, and culturally responsive. Our therapies stress behavioral health as an integral part of the whole health of an individual and family.

The Family Institute at Northwestern University's mission is to strengthen and heal families, couples, and individuals from all walks of life through clinical service, education, and research.

The Family Institute traces its start to Drs. Charles and Jan Kramer's kitchen table in Oak Park where they organized a monthly study group for the most experienced teachers and practitioners of family therapy in the Chicagoland area. Out of this study group, The Family Institute of Chicago was founded and incorporated in 1969, with Chuck Kramer established as its first Director. From its earliest days, The Family Institute was dedicated to clinical service, training, and research where focus is directed in a collaborative approach to strengthen family functioning and resilience. Founder Chuck Kramer was committed to "searching creatively for new knowledge and breakthroughs in understanding and perhaps changing the human condition."

Today, through our affiliation with Northwestern University, under the umbrella of The Center for Applied Psychological and Family Studies, The Family Institute engages in research that investigates interventions to better understand the therapeutic process and improve treatments, educates graduate students, and mentors postdoctoral fellows. Our most significant research to date, launched by former President and CEO Bill Pinsof, has led to a measurement and feedback tool designed to track the change process. Our research findings inform what we teach our students and how we treat our clients; what happens in our therapy offices further refines our research.

The Family Institute is grounded in Integrative Systemic Therapy (IST), a unifying framework that enables practitioners to integrate specific models of therapy—behavioral, analytic, emotion focused, etc.—with a set of practical and flexible guidelines for what to do with whom, and when to do it. IST encourages a focused and efficient approach to problem-solving. It offers the means to continually assess the full complement of factors—psychological, biological, interactional, and cultural—that impact clients and their concerns.

The Family Institute is an independent, not-for-profit organization—with its own governance, programmatic, and funding autonomy—that benefits from the academic richness of a major research university. The Family Institute operates Northwestern University's Center for Applied Psychological and Family Studies in cooperation with Northwestern's Office of Research and three graduate programs with the Graduate School. The affiliation also provides faculty appointments through Northwestern's Departments of Psychology for The Family Institute staff members involved in academics.

BACKGROUND

Rooted in their work with Integrative Systemic Therapy, the research team at The Family Institute at Northwestern University, spearheaded by Dr. William Pinsof, began the development of a new measure

in the early 1990s to study client change in individual, couple, and family therapy. The result was the Systemic Therapy Inventory of Change, or STIC, an instrument designed to efficiently and accurately assess clients' functioning on a range of personal and relational issues, all on one system.

Previous measures focused on only one area of functioning, such as a client's personal symptoms, or one system, such as the quality of a marriage or the quality of family functioning overall. The STIC, on the other hand, is multisystemic—it treats the individual as part of multiple interconnected systems, such as romantic relationships and child and family relationships. For example, a client who is married with children and coming in for individual therapy will be asked to complete questions about herself, and also about her marriage and children. Thus, what is particularly innovative about the STIC is that clients fill out questions/measures based on demographics (i.e., relationship status, children, etc.) not just to the modality of therapy.

Over time, what began as a pure research tool and a simple paper-and-pencil questionnaire was expanded into a clinical feedback system. The measure itself was transformed into a web-based questionnaire in 2005, housed on a secure website that clients could access from wherever they chose. The research team designed a proprietary website for therapists, supervisors, and researchers, as well.

From the STIC feedback website, therapists can access their clients' data in real-time, as soon as clients submit their questionnaires. This unique feedback system provides information that therapists may integrate into treatment in order to help conceptualize their cases, shape decision making in therapy, monitor progress, and assess outcomes. Data can even be shared with clients in session to create a feedback loop, underscoring change and helping clients' feel empowered in their treatment.

The STIC has been subject to constant study and improvement throughout its development, culminating in 2012 with the launch of the STIC Randomized Clinical Trial (RCT) to test whether using the STIC Feedback System improved therapy outcomes. The STIC RCT used a broad battery of popular, well-validated instruments to judge outcomes of therapy and the STIC was compared to “gold-standard” outcome instruments. The trial was completed in 2016 with initial analyses taking place in 2017.

The STIC Measure

The STIC Feedback System includes two client-report measures, completed online through a proprietary client portal, and a website for therapists to access their clients' STIC feedback. Before therapy begins, clients complete the “STIC Initial,” a lengthier version of the instrument that provides a more comprehensive assessment. Between each therapy session, the “STIC Intersession” is completed by clients, which provides therapists with a brief, reliable snapshot of client functioning over the course of treatment and less time-burden to clients. Anyone over 12 may complete the STIC, and each member of a couple or family completes the instrument separately.

CAPTURING THE CLIENT'S VOICE

To build a measure that was relevant to both therapists and their clients, researchers at The Family Institute began developing the STIC by asking expert therapists to generate large lists of therapy-relevant questions related to each target area (individual functioning, marriage, family, etc.). Those question banks were given to large groups of clients and factor analysis, a statistical technique, was used to boil down the cumbersome question lists into a much briefer form. The factor analyses showed which questions were

most powerful—the best indicators of one specific problem or strength in one area. These questions were included in the STIC.

The factor analyses also determined the overall structure of the STIC, including which questions naturally grouped together to form subscales. The researchers did not specify which subscales they hoped to find,

SYSTEM SCALES IN THE STIC

The STIC is made up of six major system scales, each with many subscales or dimensions:

Individual Problems and Strengths (IPS) assesses a client's own functioning and includes subscales such as negative affect, self-misunderstanding, and substance abuse.

Example question: "How easy is it for you to generally overcome difficulties?"

Relationship with Partner (RWP) assesses the quality of a client's romantic relationship. It includes subscales such as anger/inequity, commitment, and sexual satisfaction.

Family-Household (FH) assesses the functioning of a family unit, including subscales measuring dimensions such as mutuality of expectations, abuse, and family pride.

Example question: "We feel loved and supported by each other?"

Child-Problems and Strengths (CPS) is completed by parents or caregivers about a child's functioning. It includes subscales such as social/academic, impulsivity, and parent/child alliance.

Example question: "My child confides in his/her parents?"

Relationship with Child (RWC) is also completed by parents or caregivers, and focuses on the quality of parent-child relationships, and measures the parent's felt sense of efficacy, positivity, and negativity.

Family of Origin (FOO) assesses the adult's experiences in their families prior to age 18. It includes subscales such as intrusiveness. The FOO scale is given once at the beginning of therapy, as part of the STIC initial packet and does not appear in the STIC intersession.

Example question: "Rules and Expectations were clear in my family?"

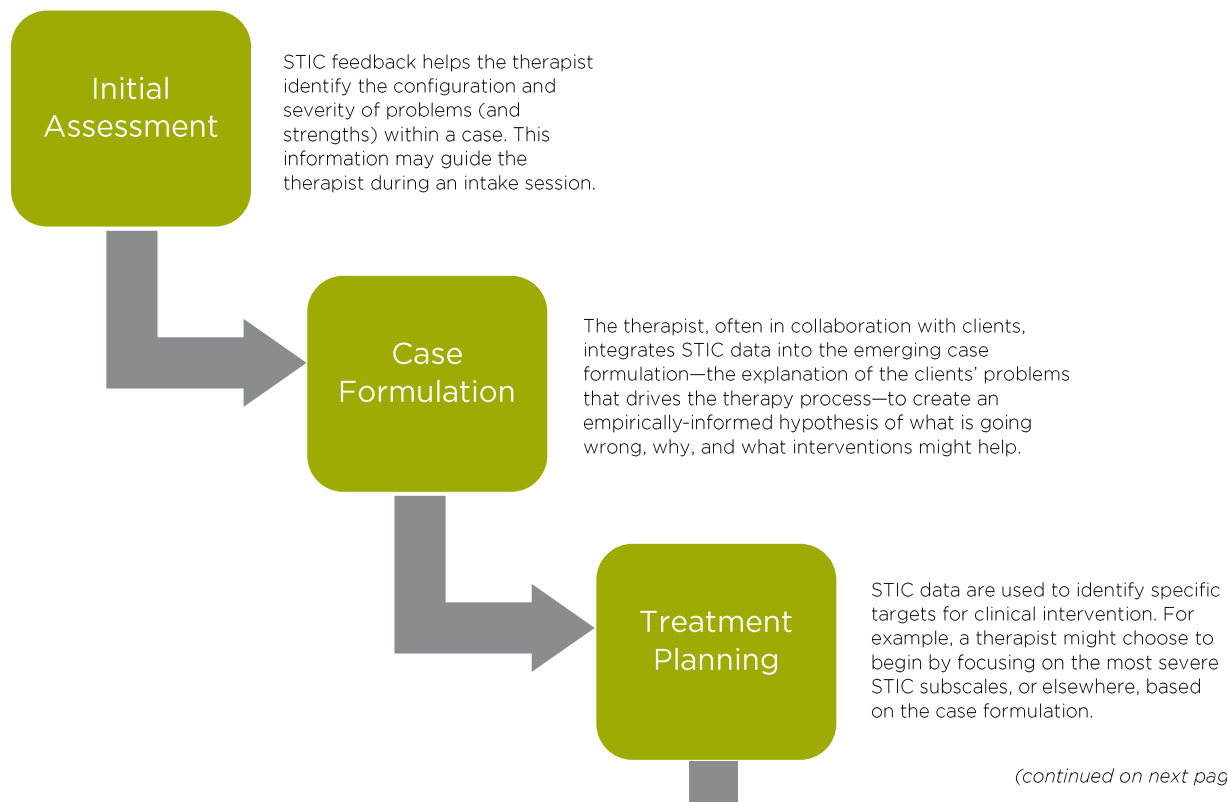
but rather allowed the factor analysis to illuminate the hidden structure in the clients' responses. The analyses revealed the ways that clients themselves parsed out their experience, showing which questions naturally grouped together to form which subscales. The result is a set of subscales within each scale that capture the clients' voice by measuring the types of things that are relevant to clients.

With the basic meaning or structure of the STIC established, subsequent research conducted from 2000 to 2008 examined whether STIC measurement is stable, meaningful, and consistent within different populations. By administering the STIC to clients both in therapy and not in therapy, the team established clinical norms for the instrument. These are cutoff points used to differentiate clinical scores from non-clinical (or normal population) scores. Additional validity studies compared specific STIC scales and subscales to established instruments in the field. These studies were the first step in showing that the STIC actually measured what it was designed to measure. The result of this work was a valid, reliable paper-and-pencil instrument that was later transformed into an online feedback system.

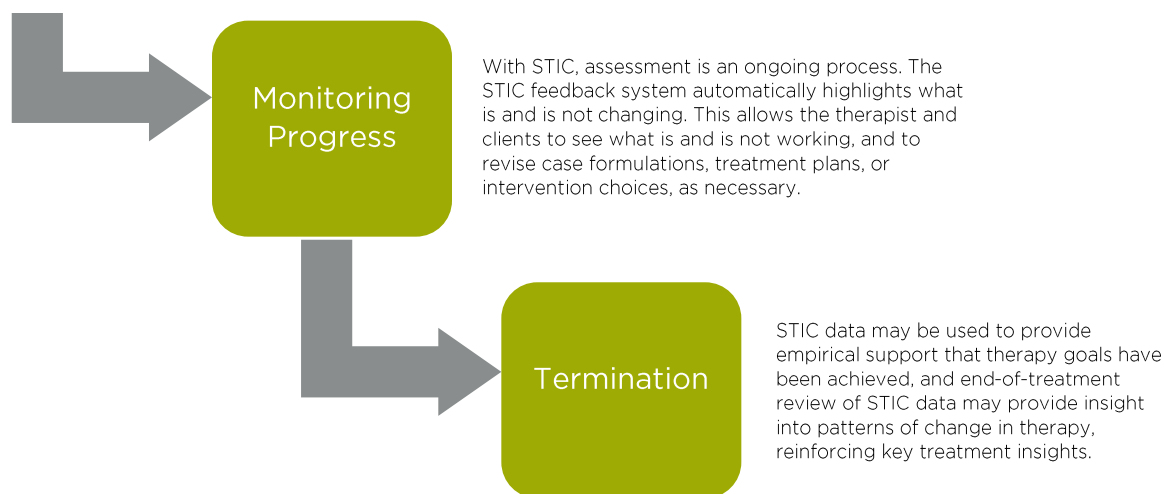
EMPIRICALLY INFORMED THERAPY WITH THE STIC

The STIC system was designed to be integrated flexibly into whatever type of therapy a clinician practices. The system itself provides empirical feedback (i.e., numbers and graphs) that tells a clinician what sorts of problems and strengths exist in each case, where change is happening, and, just as importantly, where change is not happening. This feedback may be integrated throughout the therapy process. At the heart of empirically-informed therapy is the idea that feedback helps clinicians and clients make better decisions. The information provided by the STIC is not prescriptive, it does not tell the clinician what to do, rather the information offered is descriptive, it provides a clearer, data-driven picture of the situation.

Below are the different modes of integrating STIC feedback into therapy:



(continued from previous next page)



Randomized Clinical Trial

To test the effectiveness of the STIC Feedback System as a clinical tool, the research team at The Family Institute undertook a Randomized Clinical Trial (RCT) beginning in 2012. This type of experimental study design ensures that two comparison groups—in this case therapy with the STIC and therapy without the STIC—can be compared cleanly and accurately. The study was conducted at four sites in the Chicago area and at three sites in Norway. (See Appendix A for more information about the RCT sample.) Therapists ranged from early trainees to experienced veterans and practiced a wide range of different types of therapies, with the only common factor being competence in the STIC system.

STUDY DESIGN

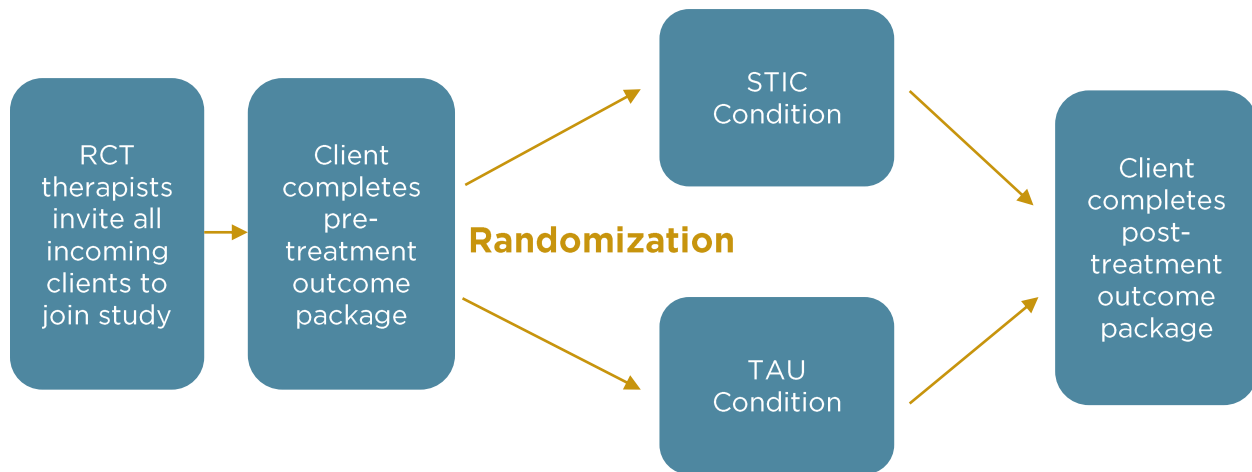
Therapists in the study asked every new client to participate in the RCT, and clients were randomly assigned to one of two conditions. In the first condition—TAU Condition—clients would receive “treatment as usual,” exactly the therapy that they would have received from their therapist, regardless of participation in the study. Clients in the second condition—STIC Condition—would receive treatment as usual with the addition of feedback from the STIC feedback system. Therapists thus had clients in both the STIC and TAU conditions. Given the randomization of condition, the study ensured that the only difference between STIC and TAU was the presence of STIC feedback (described in detail below). Any differences between the STIC and TAU conditions could then be attributed wholly to the presence of that feedback, allowing the research team to assess clearly and directly the impact of the STIC system.

The STIC Randomized Clinical Trial enrolled over 1,200 clients in the United States and Norway

Over a three-year period, 116 therapists at seven sites participated in data collection

All RCT therapists received clinical training in the STIC, and demonstrated competence through carrying a caseload of STIC clients and discussing them during STIC consultation sessions with experienced consultants. The “STIC Initial” is designed to be completed before the first session of therapy, and all clients in the RCT completed the STIC before therapy began. The “STIC Intersession” is designed to be completed in the 24 hours before each subsequent session. Clients in the STIC RCT

were asked to complete the “STIC Intersession” between each therapy session, and therapists were asked to look at the STIC data each week. The suggested protocol for integrating STIC data during therapy was as follows:



Outcome in the RCT was judged with a battery of “gold-standard” measures, administered to every client regardless of assigned condition at the beginning and end of therapy as part of the pre- and post-treatment outcome packages. These are well-established tools already in use in the field. The two outcome packages also contained the “STIC Initial” questionnaire.

CHALLENGES

The team encountered some significant challenges during implementation. First, the study itself required a very high level of buy-in from both therapists and clients. The design required clients to complete the initial battery before the first session to accurately establish each client’s level of functioning before therapy began. This meant training a diverse group of therapists, most of whom had no research experience and were not accustomed to working in a data-driven environment, to act as research liaisons, guiding clients through a sometimes-complicated workflow. For clients, the primary challenge was obtaining post-treatment data; many clients did not initially fill out the post-treatment questionnaire.

The original study design called for an outcome measurement immediately after therapy, followed by two subsequent follow-up measurements, one at six months and the other at a year. To encourage completion of the post-treatment questionnaire, the research team decided to take the money provided to clients that was earmarked for the three separate administrations as incentive for participation in the study, and offer it as one lump sum for filling out the post-treatment questionnaire. This meant that clients received \$90 for filling out the post-treatment battery. In addition, the research team developed and implemented an intensive protocol for reaching out to clients after treatment. This effort was highly successful, and resulted in a marked increase in completion of post-treatment questionnaires, allowing the team to gather enough complete data to run the analyses described herein.

RCT FINDINGS PART 1: BUILDING A BETTER CLINICAL TOOL

To be an effective tool for both research and clinical practice, the STIC must accurately and reliably measure a broad swath of personal- and relationship-experiences as they change over time, with as little burden to the client as possible. Assessing the quality of that measurement required the study of the statistical properties of the instrument, or psychometric research. For the analyses below, the research

team looked at a subsample of 583 clients in individual, couple, and family therapy pulled from all RCT sites.

Validity

To build a strong research measure and clinical tool, it is crucial to establish validity—to know statistically that the instrument is measuring what it is intended to measure. For example, if the STIC Negative Affect subscale is valid, it should accurately measure a client’s sadness and anxiety. To assess this, researchers compared the STIC with other “gold-standard” instruments. The gold-standard measures included:

- The Beck Depression Inventory II (BDI-II), a measure of depression
- The Beck Anxiety Inventory (BAI), a measure of anxiety
- The Outcome Questionnaire 45 (OQ45), a general measure of individual functioning
- The Revised Dyadic Adjustment Scale (RDAS), a measure of romantic relationship functioning
- The Family Assessment Device (FAD), a measure of family relationship functioning

Each of these devices measure one part of what is assessed by the STIC, and each contain many more questions than the STIC uses to measure the corresponding issue. The analyses revealed that each of the STIC scales not only held up statically against the gold-standard measures, but in some cases, was an even better measure.

Sensitivity to Change

The STIC is designed to track clients’ progress over the course of therapy and to assess clinical outcomes. Therefore, it is crucial to both clinicians and researchers that the instrument accurately detect any improvement or degradation that is actually happening, a statistical quality called “sensitivity to change.” Instruments with high levels of sensitivity to change will accurately reflect real change, while instruments with low sensitivity to change may miss change that is actually occurring.

The design of the RCT allowed for a rigorous assessment of the STIC’s sensitivity to change, by comparing it to the rest of the outcome battery. The results suggest that the STIC is either *as sensitive* or *more sensitive* to change when compared with the other measures. This finding should be heartening both to researchers and clinicians, as it suggests that the change they work hard to produce in therapy will actually show up in the data. Notably, in many cases, the STIC has fewer questions than the comparison measures, meaning not only is the STIC as good or better at measuring change, but it does so quite efficiently.

KEY RCT FINDINGS

Results show that the STIC is an accurate measurement tool with strong ability to detect real change in therapy.

Using the SITC feedback system improves outcomes in therapy.

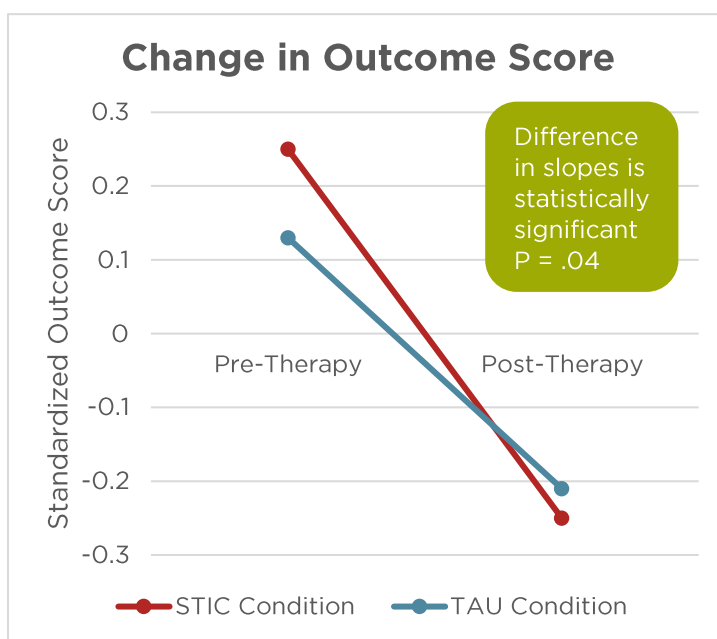
The impact of STIC data can be seen across all types of therapy and all measures of outcome.

RCT FINDINGS PART 2: FEEDBACK IMPROVES TREATMENT

Ultimately, the STIC RCT was designed to answer whether or not the STIC Feedback System is an effective intervention—does using the STIC improve treatment? To answer this question, researchers began by looking at how clients changed over the course of therapy. All clients in the study completed the “gold-standard” outcome measures before and after therapy, allowing the research team to calculate how much scores on each of these instruments changed during treatment. By comparing a client’s report of depression, marital functioning, or family cohesiveness pre- and post-therapy, the team derived a “change score,” showing in simple terms how much a client got better or worse on each scale. Upon completion of the RCT, change scores for clients in the TAU Condition were compared with change scores for clients in the STIC Condition.

The results of the RCT analyses show that all clients in the study, regardless of whether they were in the STIC or TAU condition, showed improvement; their scores on each of the outcome measures improved over the course of treatment. Clients in the STIC Condition, however, improved more than clients in the TAU Condition—clients whose therapists received STIC feedback had better change scores than clients whose therapists did not. STIC Condition clients’ depression scores went down more, their marital satisfaction and relationships with their children improved more. Therefore, we can conclude that STIC feedback was an effective intervention.

In practice, the RCT analyses were more complex and rigorous than simply comparing the change scores of each and every instrument for each and every client. The research team constructed a statistical model of client outcomes that took into account change scores for all of the different gold-standard measures. This omnibus outcome score is a broad indicator of psychological health not just of the client, but also the various relationships in his or her life. This is the most powerful, and also the most conservative, possible analysis, since it does not elevate a particular area of functioning, but rather looks for the broadest possible scope of improvement in therapy. The results of that analysis are illustrated in the graph above. The lines represent the amount of change from pre- to post-therapy on the overall outcome score. The steeper slope of the STIC line indicates a greater overall change and improvement over the course of therapy.



The results of that analysis are illustrated in the graph above. The lines represent the amount of change from pre- to post-therapy on the overall outcome score. The steeper slope of the STIC line indicates a greater overall change and improvement over the course of therapy.

Research relies primarily on statistical evaluation to determine whether groups receiving different treatment (i.e., STIC condition vs. TAU) result in reliably different outcomes. The level of confidence that researchers use to determine that the two groups are in fact different is .05 and .01 ($p < .05$; $p < .01$). $p < .05$ means there is less than a 5% risk of mistakenly concluding that there are group differences when in actuality the groups are not different, and $p < .01$ means there is less than a 1% risk of mistakenly concluding that the groups are different when the groups are not different. The RCT results had a p value of .04, which is less than .05 and thus means that we are confident that the STIC condition and the TAU condition are indeed different.

After determining that the groups are reliably different, researchers often compute the effect size to determine the magnitude of that difference. The effect size is simply the magnitude of the difference (STIC vs. TAU) in standard deviation units. Effect size (referred to in the literature as Cohen's d) has general guidelines for determining a small effect ($d=.20$), a medium effect ($d=.50$), or large effect ($d=.80$). The results of our study show that therapists receiving STIC feedback had a small but statistically significant effect ($d=.16$) on client outcome. This finding is consistent with the effect size found in other studies examining the impact of feedback on client outcomes. Hundreds if not thousands of studies have shown that clients improve in psychotherapy, and our study is not different as we found that clients in both the TAU and STIC conditions improved. Thus, this study took on the relatively ambitious task of seeing if feedback improves outcomes above and beyond TAU. The fact we found a statistically significant effect is meaningful; however, it is also important to acknowledge that the effect is still small as there are many factors that contribute to clients improving and therapist feedback is just one of those factors.

RCT FINDINGS PART 3: BROAD CLINICAL IMPACT

Perhaps most strikingly, the impact of STIC feedback generalizes across measures of individual, couple, and family functioning and across individual, couple, and family therapy. Improvement in STIC Condition clients was not limited to the type of therapy received, meaning individuals showed improvement on measures of couple and family functioning, and clients in couple therapy improved on individual measures. Further, regardless of what kind of therapy a person received, or how their outcome was measured, clients in the STIC Condition improved more than clients in the TAU Condition.

For example, consider a married person who seeks individual therapy for depression. This client's depression symptoms are likely to change more if his therapist uses feedback from the STIC. Moreover, not only does his depression improve, but he is also likely to see improvement in his marriage, as well. For a couple or family therapist, the STIC system provides concrete information about the complex web of issues that clients bring to therapy.

STIC feedback comes in a form that underscores principles central to conjoint work (working with couples and families) and in particular to the Integrative Systemic Model at The Family Institute. The feedback is itself systemic, simultaneously displaying information about multiple clients and their interconnected relationships; it is temporal and change-focused, showing therapists what is changing and why, and allowing therapists to quickly spot patterns or cycles that occur over the course of therapy. And the STIC system does the same for therapists working with individual clients, highlighting problems and changes in clients' romantic and family relationships that may otherwise be overlooked in one-on-one treatment.

The experimental design of the RCT, coupled with the rigor of client selection, therapist training, and data collection procedures, means that the results of the study are generalizable, so it is possible to draw conclusions about the utility of the STIC beyond The Family Institute and the other RCT sites. In the RCT, the STIC was used by a wide variety of therapists to treat a wide variety of clients using diverse models of treatment. In other words, the study conditions were a good proxy for real-world therapy practice. Thus, when applied in real-world settings, the STIC feedback system should improve therapy outcomes.

Future Directions

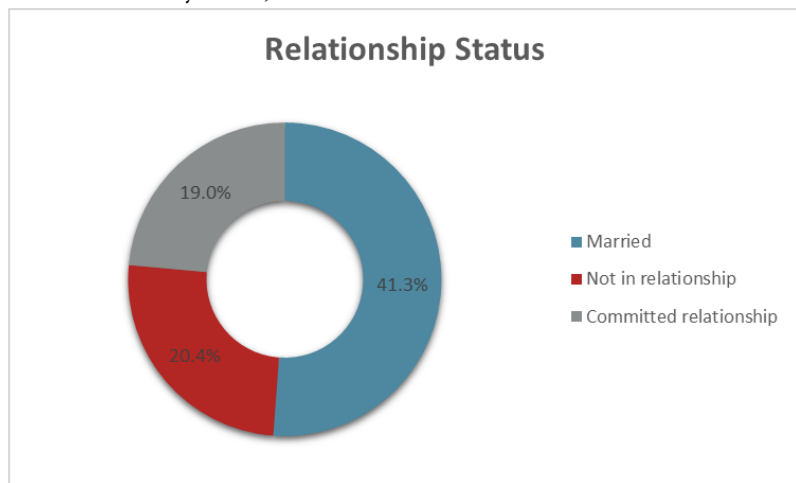
Looking ahead, the research team at The Family Institute will work in several ways to improve the STIC as a clinical tool. The current version of the STIC signals to therapists when clients report certain sorts of change, such as a large improvement or a large drop in functioning. As the STIC continues to be refined, it will be crucial to develop more specific, and more clinically powerful, signals for the therapist. For example, the team plans to develop the ability for the system to determine when a case is on-track versus off-track, so in cases where it is critically needed, therapists are directed to STIC feedback. At the same time, the team will continue to delineate a set of best-practices for integrating the STIC into treatment. In addition, the STIC measurement tool will be integrated into the organization's new electronic health record so that important data will be collected on a consistent basis across all clients for future research purposes.

Future research will look for patterns of change in various client population groups, to better understand how different types of clients typically change in therapy. The STIC team is currently preparing five articles and chapters based on RCT data for publication, to be completed over the next year. These include papers on the major findings about the impact of STIC feedback, as well as studies of the statistical properties of the STIC measure.

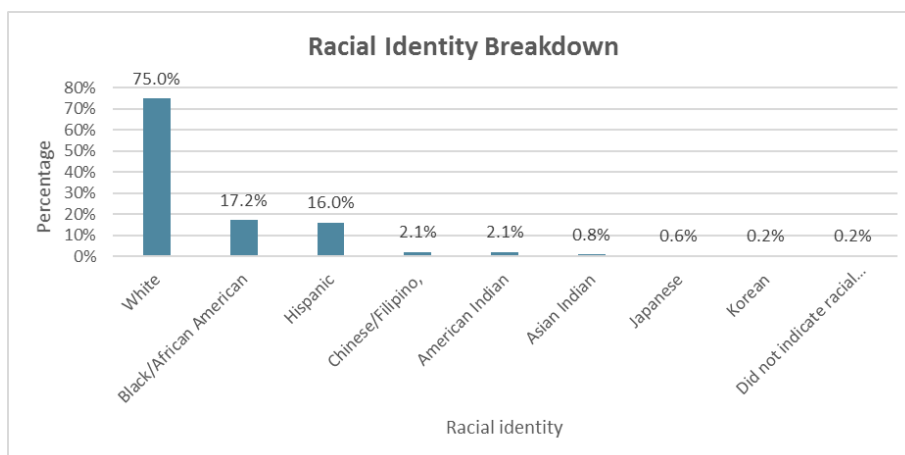
Appendix A: The RCT Sample

The STIC RCT was implemented at four sites in the Chicago area as well as three partner sites in Norway. The United States’ sample was collected at The Family Institute, Catholic Charities, Chicago C4, and Jewish Child and Family Services which captured a broad range of the treatment-seeking population in Chicago. In Norway, clients were enrolled at The Family Unit at Modum Bad Psychiatric Center, an intensive inpatient center treating whole families; The Dept. of Child/Adolescent, Sørlandet Sykehus HF in Kristiansand, a somewhat less intensive center providing both inpatient and outpatient care; and The Family Counselling Agency in Drammen – Kongsberg, an outpatient treatment center.

Across all seven sites, 116 therapists enrolled over 1,200 individual, couple, and family therapy clients. The outcome analyses described in this report focus on the United States’ sample, the demographics of which are described below. Across the four Chicago RCT sites, 93 therapists participated in the project. They included experienced veteran clinicians, newly licensed practitioners, and relatively novice trainees. Over the three years of data collection at the four Chicago locations, a total of 943 clients enrolled in the study. The majority were women (61%) and most received either individual therapy (56.2%) or couple therapy (39.1%). Due to low early enrollment of family cases, the decision was made to focus on individuals and couples, so no new families were enrolled after the first six months of the study; as a result, only about 5% of total cases were in family therapy. In order to account for possible data dependence issues—statistical problems due to members of couples or families being related—the analyses described below only include one member of each couple or family, reducing somewhat the overall number of clients in the analysis.



The sample was primarily Caucasian, with African American and Hispanic clients also comprising significant percentages of the population. Most clients were married. The average age in the sample was 39, although age varied widely within the group from 18 to over 80. About 90% of participants were heterosexual, 5% gay or lesbian, and about 5% bisexual.



Appendix B: Selected Publications

RESEARCH INSTRUMENTS

Pinsof, W. M., Lebow, J. L., Zinbarg, R., Mayberry, M., Chambers, A., Goldhaber, K., Knobloch-Fedders, L. (2010). *The Integrative Therapy Session Report (ITSR)*. The Family Institute at Northwestern University.

Pinsof, W. M., Zinbarg, R. E., Lebow, J. L., Knobloch-Fedders, L. M., Durbin, E., Chambers, A., Latta, T., Karam, E., Goldsmith, J., & Friedman, G. (2009). The STIC® (Systemic Therapy Inventory of Change). *Initial and Intersession, V.2.0*. The Family Institute at Northwestern University.

Pinsof, W. M. (2005). *The Integrative Psychotherapy Alliance: Family, Couple and Individual Therapy Alliance Scales: Revised-Short Form*. The Family Institute at Northwestern University.

Pinsof, W. M. (1997). *The Integrative Psychotherapy Alliance: Family, Couple and Individual Therapy Alliance Scales: Revised*. The Family Institute at Northwestern University.

BOOK CHAPTERS

Goldsmith, J. Z., Pinsof, W. M., Lebow, J. L., & Chambers, A. L. (2016). Family and relational diagnosis: Toward multi-systemic assessment. In J. C. Norcross, G. R. VandenBos, & D. K. Freedheim (Eds.). *APA Handbook of Clinical Psychology, Vol. 4: Psychopathology and Health*. Washington, DC: APA

Pinsof, W. M., Tilden, T., & Goldsmith, J. Z. (2016) Empirically informed couple and family therapy: Past, present and future. In T.L. Sexton and J. L. Lebow (Eds.). *Handbook of Family Therapy: The Science and Practice of Working with Families and Couples* (2nd edition) (pp. 500-516), New York: Routledge.

Russell, W. P., Pinsof, W. M., Breunlin, D. D., & Lebow, J. L. (2016). Integrative Problem Centered Metaframeworks (IPCM) Therapy. In T.L. Sexton and J. L. Lebow (Eds.). *Handbook of Family Therapy: The Science and Practice of Working with Families and Couples* (2nd edition) (pp. 530-544), New York: Routledge.

Pinsof, W. M., Breunlin, D. C., Chambers, A. L., Solomon, A. H., & Russell, W. P. (2015). Integrative, multi-systemic and empirically informed couple therapy: The IPCM perspective. In A. Gurman, J. Lebow, & D. K. Snyder (Eds.), *Clinical handbook of couple therapy* (5th ed.) (pp. 161-191). New York, NY: The Guilford Press.

Pinsof, W. M., & Chambers, A. L. (2009). Empirically informed systemic psychotherapy: Tracking patient change and therapist behavior during therapy. In J. Bray & M. Stanton (Eds.) *Handbook of Family Psychology*. Oxford: Blackwell Publishing.

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Zinbarg, R., Pinsof, W., Quirk, K., Kendall, A., Goldsmith, J., Hardy, N., He, Y., Sabey, Al., Latta, T. (2017). Testing the convergent and discriminant validity of the Systemic Therapy Inventory of Change Initial scales. *Psychotherapy Research*, 1-16.

Pinsof, W. M., Zinbarg, R. E., Shimokawa, K., Goldsmith, J. Z., Latta, T. A., Knobloch-Fedders, L. M.,

- & Chambers, A. L. (2015). Confirming, validating and norming the factor structure of the STIC Initial and Intersession. *Family Process, 54* (3), 464-484.
- Pinsof, W. M., Goldsmith, J. Z., & Latta, T. A. (2012). Information technology and feedback research can bridge the scientist-practitioner gap: A couple therapy example. *Couple and Family Psychology: Research and Practice, 1:4*, 253-273.
- Breunlin, D. C., Pinsof, W. M., Russell, W. P., & Lebow, J. L. (2011) Integrative problem-centered metaframeworks (IPCM) therapy 1: Core concepts and hypothesizing. *Family Process, 50*, 293-313.
- Pinsof, W. M., Breunlin, D. C., Russell, W. P., & Lebow, J. L. (2011) Integrative Problem-centered metaframeworks (IPCM) therapy 2: Planning, conversing and reading feedback. *Family Process, 50*, 314-336.
- Pinsof, W. M., Zinbarg, R. E., Lebow, J. L., Knobloch-Fedders, L. M., Durbin, E., Chambers, A., Latta, T., Karam, E., Goldsmith, J., & Friedman, G. (2009). Laying the foundation for progress research in family, couple, and individual therapy: The development and psychometric features of the initial systemic therapy inventory of change. *Psychotherapy Research, 19*(2), 143-156.
- Pinsof, W. M., Zinbarg, R. E., Knobloch-Fedders, L. M. (2008). Factorial and construct validity of the revised short form integrative psychotherapy alliance scales for family, couple, and individual therapy. *Family Process 47*, 281-301.

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