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Old Wine in New Bottles:

Decanting Systemic Family Process Research in the Era of Evidence-Based Practice[†]

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Abstract

Social cybernetic (systemic) ideas from the early *Family Process* era, though emanating from qualitative clinical observation, have underappreciated heuristic potential for guiding quantitative empirical research on problem maintenance and change. The old conceptual wines we have attempted to repackage in new, science-friendly bottles include *ironic processes* (when “solutions” maintain problems), *symptom-system fit* (when problems stabilize relationships), and *communal coping* (when we-ness helps people change). Both self-report and observational quantitative methods have been useful in tracking these phenomena, and together the three constructs inform a team-based family consultation (FAMCON) approach to working with difficult health and behavior problems. In addition, a large-scale, quantitatively focused effectiveness trial of family therapy for adolescent drug abuse highlights the importance of *treatment fidelity* and qualitative approaches to examining it. In this sense, echoing the history of family therapy research, our experience with juxtaposing quantitative and qualitative methods has gone full circle – from qualitative to quantitative observation and back again.

A few years ago, when editor Evan Imber-Black asked me to speak at the 50th Anniversary Family Process celebration in Santa Fe, NM, her email invitation said “Michael, we’d like you to share your ideas about *truly systemic research* (italics added) ...especially in the context of evidence based practice. I am hoping you will help us consider how NOT to chop a family/couple ecology, but rather to take a truly systemic perspective on complex research.” I agreed to give it a try.

Regardless of what we mean by “truly systemic” – and I will return to that shortly – it is important to distinguish *what* we study (systemic ideas about human problems and change) from *how* we study those things. I want to suggest that doing (or decanting) systemic research in the era of evidence-based practice virtually *requires* at least some attention to what Alan Gurman (1983) called “old hat” quantitative methods of doing that research – and while some may find this annoying, it is not altogether a bad thing.

The irony, of course, is that the systemic ideas we (or at least I) hold near and dear evolved almost exclusively from qualitative, ethnographic clinical observation, without *any* help from randomized clinical trials, multiple regression, actor-partner interdependence models, or any of the other quantitative methodologies we employed in the research I will summarize below.

Perhaps reflecting this history, there has been an unfortunate tradition of antipathy to old hat quantitative methods in some sectors of our field. Bateson once said we can’t count double binds, and some took that to mean we cannot, or should not, try to count anything. Years later, describing therapy as “an art of lenses,” Lynn Hoffman (1990) reinforced this idea by suggesting that good systemic work has more in common with literary criticism than with the conventional methods of social science. In some ways that may be true, but I would also suggest that post-modern influences have in other ways handicapped the advance of systemic research in the helping professions. Times have changed – and ascendancy in the mental health marketplace of ideas depends now more than ever on empirical evidence, especially the kind based on counting and measuring things (like therapy outcome), even if the value of this evidence is ultimately more rhetorical than truth finding.

In this essay I will propose that social cybernetic (systemic) ideas from the early *Family Process* era retain untapped heuristic potential for guiding quantitative empirical research on problem maintenance and change. To make the point, I will give several examples of old, vintage conceptual wine Varda Shoham and I have attempted to repackage in newer, more science-friendly bottles over the past two decades. Together these wines form the conceptual foundation (or cellar) of a team-based family consultation (FAMCON) format applicable to difficult health and behavior problems in in the framework of stepped care (Rohrbaugh, Kogan & Shoham, 2012; Rohrbaugh & Shoham, 2011; Shoham, Rohrbaugh, Trost & Muramoto, 2006). Later in the essay, to address the crucial issue of treatment fidelity in systemic and other forms of psychosocial intervention research, I will complete the mixed methodology circle by showing how qualitative analyses provided valuable insights about what happened in a large, quantitatively focused clinical trial of structural/systemic family therapy for adolescent drug abuse.

What Does “Systemic” Mean?

So what does “systemic” mean? As Imber-Black’s charge implies, many in the field might include ideas like comprehensiveness and complexity in the definition of systemic – think “bio-psycho-social” – but my own socialization as a narrow band “systems purist” (Beels & Ferber,

1969) pulls more toward ideas like clinical focus and explanatory simplicity, which sometimes require a bit of ecology chopping. For me, the systemic paradigm is about understanding human problems and change in a framework defined by the core themes of *circularity*, *context*, and *pattern interruption*:

Circularity means attending to how a symptom or problem both maintains, and is maintained by, the system of close relationships in which it occurs. We look for repeating sequences: When one person has (or better, *does*) a problem, what do other people do in response, and how does that feed back to help keep the problem going?

The *context* theme means taking relationships rather than individuals as the primary unit of analysis. It means that, to understand a problem, we look around it; see what it is part of; pay attention to the social processes that keep the problem going; and when stuck, we add people – both conceptually and in the therapy room.

The third theme, *pattern interruption*, represents the main mechanism of clinical change. We assume that identifying and interrupting current interpersonal patterns of problem maintenance will be sufficient to alter the trajectory of a problem and open the way to progressive therapeutic developments. Importantly, this view does *not* assume that successful interruption does depends on skill acquisition, corrective emotional experience, or even client understanding.

If all this sounds antiquated, narrow, and mechanistic, it probably is: These are ideas from the early days of the family therapy movement – error-activated systems, escalating positive feedback cycles, conflict detouring triangles, confused organizational hierarchies, and so on – shades of Bateson, Jackson, Weakland, Haley, Minuchin, Sluzki, Fisch, and many others.

Together the themes of circularity, context, and pattern interruption imply that how problems *persist* is more important to systemic analysis and intervention than how problems originate. The process of problem maintenance, including the course of chronic medical illness, is more relevant than etiology or antecedent cause – and what people *do* with each other is more relevant than internal processes such as what they think and feel. To sharpen the point, internal or dispositional constructs like attachment style, biological temperament, trauma residue, and even social learning history do not fit terribly well with my version of the systemic paradigm – and in fact they may handicap systemic analysis by drawing us into the individual or back to the past. (A related implication is that attempting to integrate systemic and individualistic ideas risks dilution and confusion. Near the end of his career, founding *Family Process* editor Jay Haley wryly observed that people who try to do this may not understand what a systemic perspective is about [Wylie, 2007]).

Old Wine, New Bottles

The old wines we have attempted to repackage in science-friendly bottles include ironic processes (when “solutions” maintain problems), symptom-system fit (when problems stabilize relationships), and communal coping (when we-ness helps people change). In cybernetic terms, ironic processes represent *positive*, or deviation amplifying, feedback loops, whereas symptom-system fit implies *negative*, or deviation minimizing feedback circuits. [And of course positive and negative feedback in this context has nothing to do with praise or criticism.] Actually, just these first two bottles contain real social cybernetic wine; with apologies to Mr. Haley, bottle 3 (communal coping) comes from interdependence theory with individualistic trappings (Lewis, McBride, Pollak, et al., 2007), but we think it adds an important dimension to relationship-focused intervention.

With the help of many talented students and colleagues, Shoham and I have studied these constructs and applied them clinically since the mid '90s. Our research at the University of Arizona focused mostly on couples coping with chronic health problems and/or addictions (e.g., alcohol abuse, heart failure, smoking despite heart or lung disease). To extend the wine metaphor, I will offer some quick tastings of the methodologies we employed to do that research.

Bottle 1: Ironic Processes

An ironic process occurs when well-intentioned, persistently applied attempts to solve a problem feed back to keep the problem going or make it worse (Shoham & Rohrbaugh, 1997). For example, in couples, urging one's spouse to eat, drink, or smoke less may lead him or her to do it more (an ironic cycle), or walking on eggshells to avoid conflict or hide negative feelings can lead to more partner distress (an ironic protection cycle). Similarly, cajoling or reasoning with a difficult child may intensify temper tantrums; or attempting to resolve a disagreement through frank and open discussion may serve only to intensify the conflict. Although psychologist Dan Wegner (1994) originally coined the term to describe ironic effects of attempted thought suppression on mental control, *ironic process* captures a much broader range of intra- and interpersonal ironic phenomena introduced decades earlier by family therapists at Palo Alto's Mental Research Institute (Watzlawick, Weakland, & Fisch, 1974; Weakland, Fisch, Watzlawick & Bodin, 1974: cf. Rohrbaugh & Shoham, 2001).

Ironic processes persist because problem and attempted solution become intertwined in a vicious cycle, or positive-feedback loop, in which more of the solution leads to more of the problem, leading to more of the same solution, and so on. In the clinic, ironic process formulations are useful because they tell us where to look to understand what keeps a problem going (look for persistent solution patterns) and what has to happen for things to change (someone has to do less of the same). If pattern interruption happens, even in a small way, virtuous cycles can develop, leading to further positive change (Rohrbaugh & Shoham, 2001).

We have employed a variety of self-report and observational methods to study ironic influence and protection processes in couples coping with health problems and addictions. For example, one relatively straightforward self-report approach involved modifying Cohen & Lichtenstein's (1990) Partner Interaction Questionnaire, a widely used measure of smoking-specific partner "support" (cf. Roski et al., 1996), to capture bi-polar perceptions of whether a partner's net influence attempts make it easier or more difficult for smokers to approach abstinence (Rohrbaugh, Shoham & Dempsey 2009). As the quotes around "support" imply, partner behaviors intended to promote cessation do not always have supportive consequences in the sense of helping the smoker quit – and our assessment of perceived effects improved prediction of smoking outcomes over and above whether support attempts were a priori positive (e.g., encouragement) or negative (e.g., criticism, nagging). Similar bi-polar self-report items have proven useful in assessing helpful vs. ironic consequences of partner influence attempts in couples coping with heart failure, using the patient's adherence to medical regimen as a dependent (criterion) variable (Kellough, Knight, Rohrbaugh & Shoham, 2012). In addition, by administering these scales to both partners in the couple (rather than to just the patient, as most studies have done), it was possible to estimate inter-partner agreement (observer reliability) and take this into account in evaluating later health outcomes.

We used another, *daily process* self-report methodology to study ironic correlates of protection attempts in couples coping with heart failure (Butler, Rohrbaugh, Shoham, Trost & Ewy, 2004). Every morning for at least two weeks, the patient and spouse phoned in ratings of (a) their attempts to protect the partner by avoiding conflict and/or hiding negative feelings the previous day, as well as (b) their own level of distress (negative affect). Statistical actor-partner

analyses (Kenny, 1996) revealed not only within-person actor effects, where daily levels of protective buffering correlated with ones own negative affect, but also significant partner effects, where one partner's protection attempts predicted levels of same day distress reported by the other partner. As predicted, the latter partner effects were asymmetrical, with stronger day-to-day associations between spouse protection and patient distress than between patient protection and spouse distress. On the other hand, because the two ratings were concurrent, our analysis lacked temporal precedence that could distinguish whether protection led to distress (an ironic effect) or vice versa (a responsive effect). Interestingly, and contrary to our expectation, a two-year follow-up suggested that day-to-day statistical associations between spouse protection and patient distress were, if anything, related to *positive* patient health and survival. This suggests that spouse protection, on average, probably did not have "ironic" consequences in any long term sense, but rather was responsive to patient distress in ultimately helpful ways.

The strongest links between ironic couple patterns and health problems seem to come from methodologies involving direct observation. For example, in semi-structured interaction tasks administered either in the laboratory or the patient's home, we have asked couples to discuss topics such as health-related disagreements, stressful situations they faced together, and the identified patient's use of alcohol or tobacco. Using videos of these brief (5-15 minute) behavior samples, trained teams of raters are able to reliably code ironic patterns such as demand-withdraw interaction, where one partner pursues, criticizes, or pressures for change, while the other distances, defends, or passively resists. In studies of couples coping with heart disease, alcoholism, and change-resistant smoking, observers' global ratings of demand-withdraw patterns – particularly spouse-demand/patient-withdraw – have predicted criteria such as future symptom course, adherence to medical regimen, readiness to change, and alcohol or smoking relapse (Rohrbaugh & Shoham, 2011). An intriguing incidental finding in this research has been that patient-spouse role tends to override biological sex in predicting who demands and who withdraws. In other words, although women more often demand and men more often withdraw in couple conflict generally (Christiansen & Heavey, 1990), we find the demand and withdraw roles tend to reverse when partners focus on problematic health behavior of a female patient.

Another observational study of demand-withdraw patterns illustrates how well intentioned *therapeutic* efforts can themselves have ironic consequences. Prior to a randomized comparison of two treatments for couples in which the husband abused alcohol (Shoham, Rohrbaugh, Stickle & Jacob, 1998), we obtained observational measures of how much each couple engaged in demand-withdraw interaction, focusing on the pattern of female demand and husband withdrawal during a discussion of the husband's drinking. The two treatments, cognitive-behavioral therapy (CBT) and family-systems therapy (FST), differed dramatically in the level of demand they placed on the drinker for abstinence and change. Although drinking was the primary target in both approaches, CBT took a firm stance about abstinence from alcohol, using adjunctive breathalyzer tests to ensure compliance, whereas FST employed only indirect strategies (e.g., restraining, circular questioning) to manage client resistance. The retention and abstinence results were striking: When couples with high pre-treatment demand-withdraw scores received CBT, they attended fewer sessions and tended to have poorer drinking outcomes – whereas for FST, levels of this spouse-demand/drinker-withdraw made little difference. Thus, for high demand-withdraw couples, CBT may have ironically provided "more of the same" ineffective solution: The alcoholic husbands appeared to resist a demanding therapist in the same way they resisted their demanding wives. A similar pattern of results emerged in a recent study of family therapy for adolescent drug abuse, where pre-treatment parent-demand/adolescent-withdraw moderated the relationship between observed therapist

demand and clinical outcome (Rynes, Rohrbaugh, Lebensohn-Chialvo & Shoham, 2014).

A less developed but finer grained approach to studying ironic processes involves having partners observe and rate themselves after video-recorded interaction tasks. This *stimulated recall* procedure helps us grapple with conceptual/methodological problems like intentionality and temporal precedence. For example, data in one study came from continuous, moment-to-moment joystick ratings of each partner's negative (-100) vs. positive (+100) mood and of his or her intention to protect (-100) vs. engage (+100) the other partner during the recorded interaction. (The partners watched the video twice to make these independent ratings.) A pattern of increased intended protection by one partner in a given (e.g., 10-second) interval followed by increased distress or decreased positive affect in the next interval precedes increased reports of distress by the other partner in the next interval would be consistent with the ironic pattern of protective buffering, especially if increased distress leads to more protection, and so on. We have used such on-line stimulated-recall ratings in both exploratory single-case designs, where the aim was to document ironic patterns for particular couples, and with group designs, such as Butler, Hollenstein, Shoham and Rohrbaugh's (2014) dynamic systems analysis of interpersonal emotion regulation represented in state-space grids.

What have we learned from this research? One observation is that ironic interpersonal processes are not only ubiquitous but can take different, even opposite forms across cases involving similar complaints (e.g., nagging vs. protecting a spouse who smokes, overeats, or shows distress). Thus, it should not be surprising that one-size-fits-all instructional interventions are often ill-suited to pattern interruption, particularly when ironic patterns are well entrenched. In addition, across studies at the group level, we see tentative evidence of moderation by gender: Negative health consequences of ironic influence and protection cycles (e.g., poor compliance with medical regimen, failed smoking cessation, exacerbated symptom course) seem more pronounced for female patients than for men.

Apart from simply documenting ironic patterns, a difficult and largely unmet research challenge is to show how interrupting ironic processes leads to symptom change. Given the inherently case specific (idiographic) nature of these processes, we are increasingly attracted to study ironic patterns with quantitative time series data at the level of the individual case. The central idiographic research questions are (a) whether fluctuations over time in relevant "solution" patterns (e.g., influence or protection attempts) correlate as predicted with fluctuations in complaint behaviors within any given case, and (b) whether change in these problem-solution patterns from before to after intervention is demonstrable in any given case. To date, we have had only modest success pursuing such questions with couple daily diary data and interval-to-interval stimulated recall and observational analyses of couple interaction in the laboratory (Rohrbaugh & Shoham, 2011).

Bottle 2: Symptom-System Fit

A second social cybernetic pattern we call *symptom-system fit* reflects deviation-minimizing negative feedback cycles, where a problem or symptom appears to preserve some aspect of relational stability for the people involved. Highlighted in the writings of family therapy pioneers such as Jackson, Haley, and Minuchin (Hoffman, 1981), this form of maintenance relates to the interpersonal functions a problem may serve, not for the problem bearer as an individual, but for the current close relationships in which she or he participates. In other words, a problem may persist because it provides a basis for the restoration or preservation of some vital relationship parameter (e.g., marital cohesion, conflict reduction, engagement of a disengaged family member) in a kind of interpersonal homeostasis. For example, in couples where both partners smoke, drink, or overeat, such shared indulgences might create a context for mutually supportive interactions or help partners remain connected, even when they disagree.

Because one can only hypothesize about what interpersonal function a problem might serve from observing the interaction sequences in which it occurs, identifying symptom-system fit typically requires more inference than identifying an ironic process. Formulations of symptom-system fit are nonetheless useful because they suggest approaches to pattern interruption that target this aspect of problem maintenance directly (e.g., by helping a couple disagree or stay connected without smoking, drinking, focusing on health concerns, or detouring conflict through a third party). Therapists can accomplish this via in vivo homework assignments or even enactment interventions in the consulting room.

We first studied symptom-system fit through content analysis of video-recorded interaction segments in an intervention project for alcohol-involved couples (Rohrbaugh, Shoham, & Racioppo, 2002), and later did so more systematically in a laboratory smoking experiment prior to a couple-focused intervention for health-compromised smokers. The latter studies show that single- and dual-smoker couples had very different experiences when someone actually smoked, based on measures of recalled positive and negative affect (Shoham et al., 2007), affective synchrony (Rohrbaugh et al., 2009), and linguistic markers of couple connectedness (Rohrbaugh et al., 2012). These differences may help to explain why smokers whose spouse or partner also smokes have a particularly hard time quitting and remaining abstinent.

Before using the stimulated-recall procedure, couples in which one or both partners were smokers discussed a health-related disagreement before and during a period of actual smoking. Immediately afterwards, the partners independently rated their continuous, moment-to-moment emotional experience during the couple interaction task using joysticks, while watching themselves on video. (Joystick ratings ranged from +100, very positive, to -100, very negative.) Participants in dual-smoker couples reported increased positive emotion contingent upon lighting up, while in single-smoker couples both partners (non-smokers and smokers alike) reported the opposite. Strikingly, changes in individual partners' emotional experience from baseline to smoking depended almost entirely on a couple-level variable (partner smoking status), with no apparent contribution from a partner's individual characteristics or even (in the case of single-smoker couples) whether he or she actually smoked during the assessment (Shoham, Butler, Rohrbaugh & Trost, 2007).

In addition, to examine symptom-system fit for the couple as a dynamic, interacting unit, we re-analyzed the same data to see if the coordination or *synchrony* of partners' moment-to-moment emotional experience also changed coincident with active smoking. The results showed that a couple-level index of *affective synchrony*, operationalized as correlated moment-to-moment change in partners' reported emotional experience, tended to increase during smoking for dual-smoker couples and decrease for single-smoker couples. This effect was independent of the parallel mean-level changes in emotional valence, suggesting that couple-level synchrony represents a different aspect of partners' immediate response to smoking than simply how positive or negative they feel as individuals (Rohrbaugh, Shoham, Butler, Hasler & Berman, 2009).

Finally, as a transition to the next section on communal coping, I should note that a linguistic analysis of pronoun use during the smoking experiment found that dual-smoker couples engaged in more first-person plural pronoun use (*we-talk*) than single-smoker couples did (Rohrbaugh et al., 2012). Taken together, the symptom-system fit results suggest that emotional correlates and consequences of change-resistant smoking have an important social dimension, depending not only on biological or psychological characteristics of the individual smoker, but also on the specific relational context in which smoking occurs.

Bottle 3: Communal Coping

Communal coping refers to people viewing a stressful condition or situation as ‘our’ problem rather than ‘yours’ or ‘mine’ and taking cooperative action to deal with it (Lyons, Mikelson, Sullivan & Coyne, 1998; Lewis et al., 2007). This idea has been around a long time, and we first began to examine it systematically almost as an afterthought, based on the prognostic significance for survival of “useful discussions” in a longitudinal study of couples coping with heart failure (Rohrbaugh et al., 2004, 2006). With the fortuitous arrival in Arizona of Matthias Mehl, a German social psychologist who had worked with Pennebaker’s Linguistic Inquiry Word Count (LIWC) software during his post-doc at the University of Texas (Pennebaker, Mehl & Niederhoffer, 2003), we became increasingly attracted to a methodology for measuring implicit psychosocial processes in ways not dependent upon self-report. We focused on first-person plural pronoun use (*we-talk*) as a potential marker of the communal coping construct, applying the LIWC software to existing transcripts from samples of couples coping with heart failure and other health problems. In one study, *we-talk* by a heart-failure patient’s spouse (but not by the patient him- or herself) predicted the course of the patient’s symptoms over the next 6 months (Rohrbaugh et al., 2008). A second study with health-compromised smokers found essentially the same thing: *we-talk* by the patient’s spouse before a family consultation (FAMCON) intervention began predicted the patient’s cessation success a year later. Even more striking was that *both* partners’ *we-talk* in the later couple sessions predicted cessation success as well, after controlling for *we-talk* levels at baseline (Rohrbaugh et al., 2012). This latter finding raises the possibility that communal coping marked by *we-talk* might function as a “common factor” change mechanism across some forms of couple-focused intervention.

Systemic (and Strategic) Family Consultation

Ironic processes, symptom-system fit, and communal coping are at the heart of a team-based family consultation (FAMCON) approach we use to help couples and families cope with difficult health problems and addictions in the framework of stepped care, after other interventions do not succeed (Rohrbaugh & Shoham, 2011). The FAMCON format, typically spanning up to 10 sessions over 3-6 months, consists of (a) a semi-structured assessment phase followed by (b) a focused feedback (opinion) session designed to directly or indirectly initiate pattern interruption, and (c) follow-up sessions to adjust intervention strategies, address reluctance, and amplify interpersonal change. Interventions focus on interrupting case-specific ironic interaction sequences and patterns of symptom-system fit while simultaneously building or reinforcing communal (*we-focused*) coping by the people involved. To date we have applied the FAMCON format most systematically with couples in which one partner continued to smoke cigarettes despite having heart or lung disease (Rohrbaugh et al., 2001; Shoham et al., 2006; Shoham & Rohrbaugh, 2011), but applications have also helped couples and families cope with problems ranging from heart disease, cancer, chronic pain, and pediatric obesity to alcoholism, anxiety and depression. For example, a recent case report describes how FAMCON helped an older couple coping with the husband’s kidney cancer and diabetes resolve severe communication difficulties (Rohrbaugh et al., 2012).

The Crucial Place of Treatment Fidelity in Intervention Research

Beyond old conceptual wines and new research bottles, it is worth highlighting the crucial role of *treatment fidelity* in studying, evaluating, and disseminating an organized systemic intervention (or for that matter *any* psychosocial intervention) to community settings. As evidence-based couple and family treatments gain traction, cutting edge research moves beyond randomized efficacy trials to address questions such as how these treatments work and how best to disseminate them to community settings. Central to this research is *treatment fidelity* (also known as treatment integrity), which refers to implementing an intervention in a manner

consistent with an established manual, as the treatment developers intended (Perepletchikova, Treat, & Kazdin, 2007). In contrast to pharmacotherapy, the integrity of psychosocial interventions like family therapy depends entirely on highly variable clinician behavior, and careful assessment of fidelity is necessary to establish that therapists indeed provide a treatment's presumably essential components. Ideally, the measurement of address (a) the quality or competence of relevant interventions, in addition to their frequency or quantity as captured by adherence check-lists; (b) proscribed as well as prescribed therapist behavior (what the therapist should and should not do); and (c) components that are unique and essential to the treatment, as well as those that are essential but not unique. Although most treatment fidelity research is quantitative, there are also good reasons to examine qualitative aspects, as our experience with a large effectiveness trial of Brief Strategic Family Therapy (BSFT) for adolescent drug abuse attests.

Over 10 years ago Shoham and I had the opportunity to join Jose Szapocznik, Michael Robbins and other investigators at the University of Miami and elsewhere in a multi-site study of BSFT implemented by frontline practitioners at 8 community treatment programs in the National Institute on Drug Abuse Clinical Trials Network (Robbins et al., 2011). We were attracted to this project because BSFT, grounded in structural theory and therapy (Minuchin, 1974; Haley, 1987), embodies a relatively pure model of systemic intervention compared to more integrative evidence-based approaches to youth problems such as Multi-Systemic Therapy, Functional Family Therapy, and Multidimensional Family Therapy (Waldron & Turner, 2008). Although ironic processes, symptom-system fit, and communal coping are not part of the BSFT/structural family therapy lexicon, there are many points of conceptual connection (e.g., negative feedback, or symptom-system fit, informs structural formulations of problem maintenance), and we hoped through this project to investigate relationships between treatment induced structural-systemic change and symptom change.

As it turned out, this large clinical trial revealed more about the vicissitudes of disseminating a complex systemic treatment to community settings than it did about outcomes and mechanisms of the treatment itself. Unlike earlier BSFT efficacy trials in tightly controlled academic research settings, the CTN effectiveness study involved training volunteer community therapists to administer this intervention in their own agencies, where quality control conditions were less than ideal – and where clinicians had been randomly assigned to provide either BSFT or treatment as usual (TAU). The main outcome results were ultimately disappointing in that monthly assessments of substance use revealed few consistent differences between youths receiving BSFT and those receiving TAU (Robins et al., 2013).

When all treatment was complete, an independent panel of auditors led by Shoham and me used therapy videos and case notes to rate 125 cases on quantitative fidelity scales grounded in the BSFT manual. The modal quality of BSFT was less than ideal: Less than a third of the cases received what the expert panel considered minimally “adequate” BSFT (fidelity ≥ 3 on a 1-5 scale). Treatment fidelity scores *within* the BSFT group did, however, correlate with most outcome measures at most follow-up intervals, suggesting that treatment quality made a difference (Shoham & Rohrbaugh, 2010).

The panel then re-reviewed all low-fidelity cases *qualitatively* to identify emergent types or categories of fidelity failure. We identified 9 relatively distinct failure categories altogether, the most prevalent categories concerned therapist omission (e.g., failure to engage key family members, failure to think in threes) rather than commission (e.g., therapist centrality; off-model, non-systemic formulations and interventions). Of these, *failure to think in threes* appeared most basic and problematic – as when a therapist neglected triangulation of the identified patient into adult relationships or focused on dyadic communication (e.g., “emotional connection”) at the

expense of structural dynamics (Lebensohn-Chialvo, Rohrbaugh, Shoham & Hasler, under review). In our view, this reflects the central place of triadic processes in structural theory and therapy.

Qualitative results like these provide what quantitative analyses cannot: Even detailed a priori scales are limited in their ability to capture patterns of therapist-client interaction that especially embody, enhance, or undermine principles of therapeutic change. A bottom-up, qualitative analysis of what therapists do and don't do – particularly in regard to *failures* of fidelity – can illuminate which aspects of a treatment may be most difficult for therapists to learn and implement. This has obvious relevance to dissemination, as such qualitative findings can highlight likely stumbling blocks in exporting a complex family treatment like BSFT to community settings.

Coda

The idiosyncratic vision of “truly systemic research” I have outlined has both ideological and methodological aspects. The narrow, pure-form identification of “systemic” with the social-cybernetic themes of context, circularity, and pattern interruption offers an antidote to our cultural preoccupation with the individual, which reaches almost caricature proportions in the prevailing paradigms of psychology and psychiatry. When undiluted by integration, these systemic ideas challenge individualistic explanations of problematic behavior and behavior change by shifting attention from individuals to relationships and offering alternatives to medication, psycho-education, and cognitive-behavioral intervention.

On the methodological side, I have proposed that seminal social cybernetic ideas, which grew from exclusively qualitative observations in the early days of family therapy, retain untapped heuristic potential for quantitative clinical research on problem maintenance and change. Finally, commenting on an excursion into large-scale systemic intervention research in the era of evidence-based practice, I highlighted the importance of treatment fidelity and qualitative approaches to examining it. In this sense, echoing the history of family therapy research, our experience with juxtaposing qualitative and quantitative methods has gone full circle – from qualitative to quantitative observation and back again.

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