Idiographic Self-Monitoring Instruments to Empower Client Participation and Evaluate Outcome in Intensive Family Preservation Services

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Intensive Family Preservation Services seek to reflect the values of focusing on client strengths and viewing clients as colleagues. To promote those values, Intensive Family Preservation Programs should include a systematic form of client self monitoring in their packages of outcome measures. This paper presents a model of idiographic self-monitoring used in time series, single system research design developed for Family Partners, a family preservation program of the School for Contemporary Education in Annandale, Virginia. The evaluation model provides a means of empowering client families to utilize their strengths and promote their status as colleague in determining their own goals, participating in the change process, and measuring their own progress.

Criticism of Intensive Family Preservation Services (IFPS) has been fueled by claims in the popular press of harm to clients (Murphy, 1993). More scholarly objections have argued that the rate of placement alone is not an adequate outcome measure for such programs (Wells, K. & Biegel, D., 1992), and that broader measures such as family functioning should be used in conjunction with placement rates (Scannapieco, M., 1993). There is little controversy over the necessity for basing intervention on effectiveness determined through empirical data (Benbenishty, 1988). However, neither empirically derived placement outcome nor standardized measures of functioning specifically reflect two fundamental values in IFPS - focus on client strengths (Saleebey, D., 1992), and clients as colleagues (Kinney, J. Haapala, D, Booth, C., & Leavitt, S., 1991). To truly maintain those values, programs must rely more heavily on client strengths and abilities to play a larger role in their own change process.

Purpose

The purpose of this paper is to suggest that the ideal measure of outcome in Intensive Family Preservation Services is a broad package of instruments that includes systematic client self-monitoring. The paper will present a model of idiographic self-monitoring in time series, single system research design, developed for Family Partners, a family preservation program in Virginia. The evaluation model not only provides a means of practice evaluation, but also...
empowers client families to utilize their strengths to determine their goals, enhance their participation in the change process, and measure their own progress.

Practice Evaluation in IFPS

The appeal to evaluate practice has been a theme in the social work profession from Richard Cabot's 1931 entreaty to, "measure, evaluate, estimate, appraise your results, in some form, in any terms that rest on something beyond faith, assertion, and 'illustrative cases,'" to the 1991 Conference, "Research and Practice: Bridging the Gap," (Cheetham, 1992; Mattaini, 1992), in which the need for an empirical base for practice was argued once again. Competent practice evaluation conforms to research principles (Thyer, 1989), including well proceduralized interventions; authentic systems rather than analogue samples; multiple measures from multiple sources; use of time series designs; and the production of knowledge of practical, meaningful importance rather than statistical significance alone. However, such idealized research is often impossible in many settings where intensive family preservation services are provided. Small programs have neither the resources for formal research nor the numbers of clients for group designs. If practice evaluation procedures in small IFP programs are to be successful, they must follow designs that are "worker friendly", that is, capable of being developed and carried out by overburdened line workers who can practice as "personal scientists" (Blythe, 1990, p. 148).

An ideal package of outcome measures in IFPS would reflect varied perspectives and rely on both standardized and idiographic measures to augment the simple tracking of placement outcome. Such a package should replace pre-post measurement designs with single system research designs of multiple measures in time series (Thyer & Thyer, 1992).

Multiple perspectives reflect the views of at least client, practitioner, and referrer. Standardized scales that measure practitioners' perspective on risk and family functioning further enhance determination of successful outcome. Follow-up satisfaction surveys bring the subjective perception of client and referrer to the process. However, none of the above instruments supports the value of clients as colleagues; nor does comparing a family's functioning against norms on standardized instruments respect the value of "starting where the client is" - rather it starts where someone else has determined that the client should be. An ideal package should take into serious consideration what the members of the client family think the problems are from their individual and cultural perspectives and to what extent the family thinks those problems are abating. Respect for the client family's view suggests a system that includes idiographic self-monitoring instruments in a single system research design. Unfortunately, social workers have not made extensive use of such systems of measurement.
Idiographic Self-Monitoring Instruments

Idiographic self-monitoring instruments are individualized measures of change in a client-chosen target as determined by client-chosen criteria. Created by worker and client to be unique to that client situation, they are intended to be intrusive by requiring members of the client family to be the monitors of change over time. Progress is monitored via a time series, single system research design (SSRD).

Idiographic self-monitoring instruments include self-anchored scales (Bloom & Fischer, 1982), but may also be simple frequency counts. Unlike the similar Goal Attainment Scale (Kiresuk & Garwick, 1974; Compton & Galaway, 1989), these instruments are simpler, are monitored by the client and not the worker, and are used in a time series rather than a pre-test/post-test design.

Potential Resistance to Evaluation through Self Monitoring

The practice of using idiographic, self-monitoring, single system research designs is not yet commonplace. Despite the emphasis placed on practice evaluation in graduate programs of social work and the utility of SSRD for that purpose, LeCroy and Tolman (1991) found that social workers in the field did not use the more rigorous inferential ABA or ABAB designs, but relied on the more flexible and descriptive B only or AB designs. Although most respondents were highly favorable towards practice research integration, more than two thirds of those surveyed used no inferential designs in their last year of practice. The authors concluded that the majority of social workers do not use SSRD's because it is only the minority of social workers with a behavioral orientation who tend to use inferential designs, and because workers still do not have adequate training in practice evaluation either from academia or agency.

Social workers have been resistant to systematic measurement systems in part because measurement interferes with their sense of practice as art (Frieband, Jayaratne, Talsma, & Tommasulo, 1993). Instead, they have simply assumed that they were effective with clients, while empirical documentation was absent (Blythe & Brian, 1985).

Social workers believe strongly that they should be practitioners rather than researchers. Gingerich (1990) attempted to settle this debate by making the distinction between practice research and practice evaluation. While research is aimed at knowledge development, evaluation determines whether the practitioner is being effective in work with the client as well as guides the practitioner in deciding if the intervention is effective. Gingerich proffered that direct practice should involve evaluation rather than research.

In addition to discomfort with systematic evaluation of practice, workers have resisted the concept of client self-monitoring, because they see it as too burdensome for clients. Yet, in spite...
of anecdotal concern expressed among practitioners that clients dislike formalized study of their progress, Campbell (1990) found that clients accept the procedure of single subject evaluation procedures more readily than they do nonsystematic data gathering procedures.

Intrusive measures, such as self-monitoring, are also seen as contributing to measurement reactivity. When a subject is aware of being measured, particularly if he or she is involved in self-measurement, the validity of the outcome variable is compromised by the process. Client related reactivity is exacerbated by client self-monitoring as the client recognizes the occurrence of a behavior and systematically records that observation (Kopp, 1988). The phenomenon of reactivity makes it difficult to know how much of the change in the outcome variable is due to intervention and how much may be due to the measurement process itself (Bloom & Fischer, 1982).

Reframing Reactivity in Self-Monitoring: Clients as Colleagues in their Change Process

Bloom and Fischer (1982) maintain that while reactivity may compromise outcome, it also contributes to the intervention process. With a type of reactivity known as "measurement as change agent," the measurement process stimulates change in attitude or behavior, or the act of repeatedly practicing through measuring induces learning. Kopp (1988) says, "the belief that one can change may be enhanced through the worker empowering the client to self-record. The commitment to monitor is a commitment to act on a presenting issue, and implies a commitment to change" (p. 15).

Therapeutic reactive effects of self-monitoring have been well documented in behavioral treatment where the outcome is objective, observable, overt behavior (Gingerich, 1979; Kopp, 1988). More recently Applegate (1992) studied the influence of self-monitoring in psychodynamic treatment where the outcome variable was more subjective - the intensity of feelings such as anxiety, depression, and self esteem measured by a set of standardized scales. He hypothesized that particularly in psychodynamic intervention, where increased insight is the key to change, reactivity would be especially welcome. However, results suggested that those in the group that self monitored showed no greater improvement on the subjective measures than those in the non-self-report group. Significantly, though, the self-monitoring subjects did report that the monitoring process had a positive effect on their experience of the therapeutic process - noting in anecdotal comments that the process made them more aware of their feelings, more involved in the process, and contributed to their participation in organizing their process of treatment.

Although Applegate's (1992) findings do not appear to directly support earlier claims that the reactivity of self-monitoring positively affects outcome measures (Gingerich, 1979; Kopp, 1988), the measures chosen were standardized scales of general feeling responses rather than
reflections of the clients' presenting problems or of other client-chosen goals. Since the clients did find that the self-monitoring process increased their awareness and participation in treatment, had the variables measured been those that the clients actively chose to change, measurable changes in outcome might have resulted.

The phenomenon of reactivity in idiographic self-monitoring may be reframed from being detrimental to the validity of the measurement of outcome to being therapeutic by playing an integral part in the treatment process. In developing an idiographic measure with which a particular family may monitor its own progress in IFPS, a worker should acknowledge that this measure, unlike those of an observer, is indeed intrusive and thus prone to client-related reactivity. So "measurement as change agent" reactivity stimulates change through enhanced client commitment to the change process, through the repeated practice of the time series design, and through the client participation in the choice and definition of targets to measure. Thus, worker and client can welcome reactivity and fold it into the intervention process.

If part of the change agent system is the measurement itself, and the client designs and carries out the measurement, the client then takes a collegial role with the practitioner. "Client as colleague" is also expressed in the concept of "stakeholder" (Frieband, et al, 1993; Guba & Lincoln, 1989) in the therapeutic process. In research, the major stakeholder is the researcher or the profession in general, interested in generating knowledge; in practice evaluation, the major stakeholder is the practitioner, interested in the efficacy of his or her therapeutic efforts; but in client self-monitoring, the major stakeholder is the client family, interested in facilitating its own change. Thus the purpose of the idiographic self-monitoring measurement system is not only to determine the effectiveness of the intervention, but also to utilize the client's strengths to affect his or her treatment through the self-measurement process. The client as stakeholder should be heavily involved in the intervention process from determining target behaviors to creating appropriate instruments, to monitoring progress.

The Family Partners Model of Self-Monitoring Practice Evaluation

Family Partners is a small family preservation program of the School for Contemporary Education, a private, non-profit special education school in Annandale, Virginia. The program provides intensive services to families with one or more children at risk of placement in foster care, residential treatment, psychiatric hospitalization, or juvenile detention.

In its first eighteen months of operation, Family Partners served 24 families of whom 18 were white, two African American, one Hispanic, one Asian, and two of mixed racial background. Most referrals (33%) were made through Special Education; while 21% came from the Department of Social Services; 17% from Mental Health; 13% from Juvenile Court; and the remaining 16% from other sources. The presenting problem for 20 of the families was coping
with difficult child behavior, for two it was coping with child's mental disorder, and for the last two was child physical abuse.

Family Partners includes idiographic self-monitoring instruments in its evaluation package for each client family. The process of developing these instruments is intended to be both "client friendly" and "worker friendly." That is, the process was designed neither to interfere with the intervention process nor to become such a burden on client or worker that they fail to systematically carry it out. The system is simple, directly related to client-identified problems and client-chosen goals, and easy to monitor. Unlike standardized scales that may have been developed through use with families with ethnic, racial, or cultural backgrounds different from those of the families referred, idiographic self-monitoring instruments reflect the experience and needs of each family, defined in their own individual and cultural terms.

The process of developing idiographic self-monitoring instruments at Family Partners begins with family and worker determining specific, observable, and culturally relevant targets for family change. Targets flow from goals, and goals from problems. Client families come to the attention of IFPS programs because of a presenting problem - usually one related to risk of some form of child placement. The presenting problem - risk of placement - can be converted into the major goal of the IFP work - "prevention of placement."

Presenting problem and goal are usually recognized and determined by the institution that referred (child protective services, the schools, the courts, the mental health system). So, for a family to engage as colleagues in the process initiated by a system external to the family, it must translate the goal of preventing placement to target behaviors that the family owns. Targets may either be related or unrelated to the presenting problem and goal. For example, if a mother's substance abuse contributes to her neglecting her children, the target behavior of "avoiding substance use" relates to the overall goal of prevention of placement. If a mother was concerned that her home and yard were full of trash and in desperate need of cleaning, but the reason for referral was unrelated to the home environment, "keeping the home clean" might still be a target behavior that the worker and family would pursue in addition to those that did relate to the presenting problem.

The target behaviors chosen for measurement at Family Partners have three characteristics. First, they may be either overt or covert. "Yelling at the kids," "completing chores," and "following curfew" are examples of overt target behaviors, observable to others. Other targets involve covert behaviors, observable only to the client experiencing them. Feelings of "depression" or "anger," or attitudes such as "self esteem" are examples of covert target behaviors.

Second, target behaviors may be individual or they may be interactive, involving dyads or whole families. "Completing chores" or "following curfew" represent individual targets, while "using 'I messages,"" giving clear directions," or "following directions" all involve interaction.
Finally, strengths-based, solution-focused target behaviors attempt to maintain a positive focus. Positive targets follow the "Dead Person's Rule" (Spiegler and Gueveremont, 1993, p. 55) - that one should never expect a client to do what a dead person could do (i.e. "stop talking," "don't argue"). However, some problems, such as an uncomfortable emotion is best measured as a negative target to be decreased in intensity, rather than as a contrived positive such as "feel good". Much of the time, the client may "feel good." It is the times that he is depressed or she lets her anger get out of control that are problematic.

Target behaviors should not be confused with tasks or series of tasks. A task is accomplished at once, while target behaviors involve a process. A mother's applying for food stamps occurs only once and is clearly a task. If a family needs to find a new house, a series of tasks may need to take place. These sort of targets do not lend themselves to self-monitoring scales.

The scales are designed to measure clients' mastery of target behaviors over the course of intervention. Clients monitor targets that they wish to increase or decrease in their duration, severity, or frequency. How long do the child's tantrums last; how severe is the father's anger; how frequently does the adolescent attend school?

Although worker and client select target behaviors by beginning with problems, they develop and meet targets through the mobilization of strengths and abilities. Often families have been so focused on problems that they are unable to see solutions, or to recognize strengths they may have to find solutions. Berg's (1994) solution-focused approach offers several useful techniques to focus worker and client on strengths and solutions, rather than on deficits and problems.

A worker may ask the client the "miracle question" (Berg, 1994, p. 97) to envision what it would be like if a miracle happened overnight and the problem was solved. She would direct her client's thinking to what in his behavior would be different then, and how others would respond differently to him. Another fundamental tenet of Berg's method involves constant use of action questions: what can you do to make it better; what have you done in the past; what have you done since I last saw you? A third type of question involves positive, strengths perspective. What has gone well; or even - why isn't it worse? Both directly and more subtly, these kinds of questions move the client to strengths and solutions rather than on deficits and problems and thereby help to reveal appropriate targets for change.

Once client and worker have identified strengths-based targets, they turn to developing the self-monitoring practice evaluation instruments. At Family Partners, workers and clients construct a self anchored or similar self-monitoring scale for each appropriate target (Gingerich, 1979). Some targets, such as school attendance or doing daily chores lend themselves to daily charts of the presence or absence of a target behavior (see Figure 2). The daily charts can later be translated into simple frequency counts by week.
Those targets whose level of duration or severity are better reflected in a self anchored scale. Self anchored scales are self-report instruments, devised by worker and client together, that measure the severity or duration of a client-defined target behavior (Fischer & Hudson, 1983). Each scale measures one target via a numerical range of equal intervals, usually 9 or fewer points. The target behavior should have only one dimension. For example, a client measures sadness on a scale from "very sad" to "not sad at all," rather than from "very sad" to "happy." All or some of the numerical points representing the client's subjective impressions of each target are "anchored" by way of concrete indicators of his or her thoughts, behaviors, or feelings. The indicators are assumed to co-vary with the target (Sheldon, 1983).

Nugent (1993) notes that self anchored scales have advantage over standardized scales, because the client provides the meaning to the construct that is measured, and anchors the points on the scale with descriptors that reflect his or her own meaning. Therefore, these instruments have a strong face validity compared to standardized scales. He attempted to fill a gap in the practice literature by studying the construct validity of a 200 point (-100 to +100) self anchored scale of self esteem against standardized scales of self esteem, depression, and demographic variables. Scores on the self anchored scales were correlated with those of the standardized scales. He found that the self anchored scale provided a valid measure of self esteem, based on convergent and discriminant validity.

Self anchored scales (see Figure 1) can be as simple as a "feeling thermometer" in which a subjective feeling target such as anger, anxiety, or depression is measured with a scaling question (Berg, 1994) - "On a scale of 1 to 10 with 1 being the most depressed that you could be and 10 being the least depressed, how are you feeling now?" A more complex example is the Subjective Units of Distress Scale (SUDS) (Wolpe, 1969), generally a 100 point range to measure how distressed one feels at the moment.

The Design

Ideally, the measurement of change in a target behavior may take place within an inferential ABA design. Such a design requires a baseline measure. In intensive home based programs, where a crisis may have precipitated the referral, a worker cannot wait to make a baseline measure of the outcome variable before beginning intervention. Therefore, she may construct a retrospective baseline, or the baseline may be only a single measure of where the client is at the beginning of intervention. This limitation precludes some statistical analysis of change, but reflects the reality of IFPS.

Following the baseline period (A), observations may be recorded by the client hourly, daily, or weekly to provide multiple measures in a time series during the treatment period (B). Family Partners has the advantage of a less intensive building phase that follows the intensive phase, so that the worker may take a follow-up measure after completion of the intensive phase. Thus
the follow-up constitutes the second A phase. Since the building phase involves additional treatment, the design is better characterized as ABCA, if follow-up measurement is again taken after completion of the building phase.

The Analysis

Data from self anchored scales is easily graphed and visually analyzed. When there is adequate baseline data, procedures such as the Shewart Chart can determine statistical significance of the change (Bloom, Fischer, & Orme, 1995). In the Shewart Chart, baseline and intervention observations are graphed, a mean for the baseline period is calculated, and two bands representing two standard deviations from the mean are drawn through the intervention area of the chart. When two successive intervention points fall outside the bands, statistically significant change is assumed.

Client Example

The Thomas family was referred to Family Partners, because Samantha, age 16, was at risk of return to psychiatric hospital unless changes in her family environment could help her maintain control of her behavior. Ms. Thomas defined as her own problem that she felt very uncomfortable when she attempted to set limits with Samantha and her sister. Intervention was aimed at increasing her comfort in limit setting, rather than in actually building the skill. So, rather than attempting to measure the mother's success in setting limits (which she could have chosen to do), the family worker devised a simple 10 point comfort scale in which the mother monitored her chosen target - "feeling of comfort in setting limits." The father constructed a similar scale to monitor his target of comfort in spending time with his daughters. These scales are examples of measuring a covert behavior, comfort, the severity or intensity of which the parents desired to increase. Although parents and worker could have chosen to measure "discomfort," that they wished to decrease.

It is important in helping clients to devise feeling thermometers not only to choose a point scale, but also to attempt to "anchor" the points (see Figure 1). For example, a five point anger scale might be anchored by "feeling in control, calm" at the zero end, and "feeling very angry, feel like hitting." The same parent working on learning to discipline appropriately might "anchor" the high end of the scale on that emerging skill with, "very appropriate, give warning, give consequence, ignore back talk," and the low end with, "not at all appropriate, no follow through." Anchors are entirely idiosyncratic and must have meaning only to the client.
**Figure 1**

1. **Level of anger**
   - 0: no anger, feel in control, calm
   - 1: Moderately angry, feel “hot,” raise voice
   - 2: very angry, feel like hitting

2. **Ability to discipline appropriately**
   - 0: very appropriate, give warning, give consequence, ignore back talk
   - 1: moderately appropriate, shout consequence, no warning, anger shows, can’t ignore
   - 2: not at all appropriate, no follow through

**Figure 1.** Two item scale measuring mother’s ability to manage anger and apply appropriate discipline, measured each time child misbehaves.

In the Thomas family, the daughter, Samantha, sought to increase two overt target behaviors. She monitored progress on the targets of "attending school" and "taking medication" by simple daily frequency counts, recorded on a chart (see Figure 2). No anchors would be needed with a frequency count self-monitoring instrument.

**Figure 2**

<table>
<thead>
<tr>
<th>Samantha’s Targets: Week of (date)</th>
<th>Su</th>
<th>M</th>
<th>T</th>
<th>W</th>
<th>Th</th>
<th>F</th>
<th>S</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Attends School</td>
<td>xxx</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Takes Medication</td>
<td>xxx</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

**Figure 2.** Example of chart to monitor an adolescent’s progress on complying with target behaviors.

In addition to severity and frequency, self-monitoring scales may also measure duration of target behaviors. The mother might choose to monitor the duration of arguments with Samantha, keeping track of the time and length of arguments over a period of weeks.
Conclusion and Implications for Family Preservation Practice

Family Partners is too new to be able to make definitive conclusions about the impact of its use to date of self-monitoring scales. More data and further analysis will be necessary. Future study might attempt to test the hypothesis that reactivity plays a beneficial role in the treatment process, or that use of self-monitoring enhances clients' sense of empowerment in the process of change.

This paper presents idiographic self-monitoring in a time series design as a means of intervention with and practice evaluation of an individual client. However, these instruments may also be used in program evaluation by aggregating the pre and post score data across clients and comparing means. Individual measures would have to use the same numerical scale (9 point, 100 point, etc), or data from differing pre and post scores may be converted into standard scores and aggregated.

Idiographic self-monitoring is a powerful tool for use not only in evaluation, but also in the intervention process itself. It is yet another way that family preservation programs may enhance client strengths to increase client participation as colleagues in the process of change.

References


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