Theory-Based Evaluation


Theory-Based, Participatory Evaluation:

A Powerful Tool for Evaluating Family Support Programs

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For the past several years, we have been engaged in evaluating community-based family support centers. These programs present many challenges to evaluators, due to the complex nature of the services delivered, the programs’ philosophy of family-driven and individualized services, and the broad range of outcomes that such programs are designed to impact. To address these challenges, we have combined two evaluation approaches: (1) theory-based evaluation, which is based on careful articulation of the program model and use of this model as a guiding framework for evaluation; and (2) participatory evaluation, which involves close collaboration between evaluators and program administrators, staff, and families in developing, implementing, and interpreting the evaluation. We believe that these two methods, used in combination, represent a powerful tool for developing valuable, program-friendly evaluations. In this paper we will begin by describing the nature of these two approaches to evaluation. We then provide examples of how we have worked with family support centers to develop and articulate their program “theories” and to use these theories as the basis for evaluation.

What is a Theory-Based Approach to Evaluation?

In the field of program evaluation, it has long been acknowledged that it is important to understand the intervention process, including the type, nature, and intensity of services delivered, how services are experienced by program participants, and how services are expected to lead to outcomes. Unfortunately, program evaluation that focuses on the intervention process, sometimes called “process
evaluation,” often takes a back seat to evaluations focusing solely on program outcomes. Often, evaluations focus only (or primarily) on participants’ status on some measure or set of measures (such as knowledge of child development) both before and after the program, and not at all on what happens to participants during the program. While this outcome-focused approach can be useful for demonstrating that a program “worked” or “didn’t work,” such evaluations don’t provide any information about why and how an outcome was achieved (or not achieved). In order to understand why a program worked or didn’t work, the evaluation has to be informed by an understanding of what happened during the intervention.

One method of doing evaluation that is based on developing a clear understanding of the intervention process is called theory-based evaluation (Chen & Rossi, 1983; Weiss, 1972). Theory in this usage doesn’t always mean a grand theory in the traditional social science sense (e.g., “attachment theory”), but instead simply refers to a program logic model, or “theory of change” that represents a “plausible and sensible model of how the program is supposed to work” (Bickman, 1987). Theory-based evaluation involves identifying the key service components and expected program outcomes, and working with programs to make explicit the underlying assumptions about how these service components will lead to the desired outcomes. These services, outcomes, and the hypothesized links between them are the basis for developing a program model or theory. This program theory becomes the framework to guide the development, implementation, and interpretation of the evaluation.

**What is a Participatory Approach to Evaluation?**

The description of theory-based evaluation provided above implies that program theory is developed in close collaboration with program administrators, staff, and families. Not all theory-based evaluations, however, rely extensively on this collaborative process (Chen & Rossi, 1983). To promote
this collaboration, we have explicitly incorporated aspects of another powerful evaluation method, called participatory evaluation, into our evaluation approach (Greene, 1987). Participatory evaluation involves active collaboration between key stakeholder groups in designing, implementing, and interpreting the evaluation. Stakeholder groups include all those who have a vested interest in the program and its evaluation, such as funders, program directors, line staff, families, and community members. Our use of participatory methods has evolved directly from our ongoing evaluation work with family support programs, which we describe below.

**Understanding and Evaluating Family Support Programs**

The family support programs that we have worked with share a loosely defined conceptual basis, but differ substantially in the specific kinds of services that they deliver. Generally speaking, these programs are physically located in the communities that they serve, are open to the entire community but targeted to families with young children (age 5 and under), provide a combination of center-based and home-visiting services, and offer a comprehensive array of services tailored to individual family needs, such as case management, information and referral, parenting education and support, child development services, health services, transportation, adult education and employment services, and recreational activities. Although the specific services may differ in nature, intensity, and mode of delivery, family support programs do share an explicit value system—an approach to service delivery that is guided by a shared service philosophy. This philosophy suggests that services are collaborative (characterized by staff and families working in equal partnership to address family goals); family-centered and driven (focused on the family as a whole and allowing family members to choose the specific services they will receive); strengths-based (focused on building on family members’ strengths, rather than on identifying their problems); and comprehensive and flexible (offering an array of services focused on family’s
individual goals). We will refer to this set of beliefs about how services should be delivered as the “family support principles” (Kagan & Shelly, 1987).

In developing evaluations for these programs, we have tried to address several problems that we identified in past evaluations of family support programs (Green, Mulvey, Fisher, & Woratschek, 1996). First, many evaluations used methods and approaches that violated the family support principles described above. Second, these evaluations often failed to account for program comprehensiveness and for the dynamic nature of services and families. Finally, many past evaluations were simply not very useful to programs, researchers, or policy makers for increasing our understanding of how these programs function (Weiss & Jacobs, 1988).

In response to this, we have taken the stance that evaluations will be more useful if the evaluation shares the program value system (Green et al, 1996). A family support program evaluation, therefore, should include the following features:

1. **Collaboration** among researchers, program administrators and staff, and family members, with all parties contributing equally to development of the evaluation;

2. **A family centered and driven approach**, in which family members have decision-making power in regards to the evaluation;

3. **A Strengths-Based orientation**, focused on building the program’s strengths and continuous program improvement;

4. **Comprehensiveness and flexibility**, to capture the programs’ multifaceted nature and ongoing changes in program goals and services.

The use of participatory and theory-based evaluation techniques provides a useful framework for translating these principles into evaluation methods. For example, the use of participatory methods...
facilitates collaboration and family-decision making power. The theory-based approach provides a way to capture the comprehensive nature of the program within an organizing framework, and facilitates flexibility by outlining the likely developmental sequence of program changes. Using a theory-based approach combined with participatory methods thus provides a means for organizing collaborative efforts aimed at building consensus about the program’s theory, and for translating this theory into evaluation activities. Below we outline the key steps towards implementing a participatory, theory-based approach to evaluation.

**Conducting a Participatory, Theory-Based Evaluation**

**Step On: Developing the Program Theory.**

There are many different ways that we have worked with individual programs to develop program models. Whatever the process used to develop the theory, however, the end product should answer the following questions: (1) What are the important program goals? (2) What are the program services offered? (3) What are the implicit or explicit assumptions about how program services will lead to program outcomes? This last question is key to developing a program theory, as it addresses the question of why and how the services provided are expected to lead to change in families.

One successful method we have used to develop the program theory relies on a “grounded theory” perspective (Miles & Huberman, 1995). In this approach, our goal was to represent the perspectives and implicit understandings of participants and staff, rather than imposing our own research theory onto the program. This is critical to the development of a truly useful theory-based evaluation that is rooted firmly in the way that participants and staff understand and interpret the program goals, services, and outcomes. This approach also clearly reflects the family support principles that we use to guide the evaluation.
In one evaluation, we conducted separate focus groups comprised of program participants and staff to address a series of “framing questions”. Our goal in this process was to gain an understanding of the specific outcomes program families and staff viewed as most important, and what steps they believed were important in facilitating these changes. We asked parents questions such as “How have you (or your child) changed since being in the program?” and “What are the most important things that this program has done for you”? We asked staff questions like “What kinds of changes have you seen in participating families” and “What are the most important things the program does to help support families?” We took extensive notes during each meeting, and organized these notes around key issues. When possible, we then returned to the group with this synthesis for more discussion, verification, and revision of the synthesis, until eventually we reached some consensus about the program model.

Another approach, which is helpful for programs that lack available staff or families for participating in this process, involves starting with the program’s written proposal, which will often have explicitly stated goals and a description of the program services. After initial examination of these documents, we derive a tentative program theory. We then use feedback from “key informants” (e.g., proposal writers, funders, other program administrators) who have knowledge about the program to verify and modify the theory. In order to remain consistent with the family support principles, however, it is critical in these situations to involve program staff and families as soon as possible, and to work with them in a manner which does not imply that we are telling them what the program should be. Rather, we come to such discussions ready to abandon completely the theory that was previously developed, if necessary.

Involving staff and families as early as possible after program start-up is not simply a matter of consistency with our principles, but also helps ensure that the program model is an accurate reflection of
how the program unfolds in the “real world”, which is often quite different from the original proposal. It is quite possible for major changes in program models to occur between the time proposals are written and the time services are implemented. Program theories developed solely on the basis of initial proposals cannot adequately reflect these changes. While this method (starting with written program documents) is frequently used for developing or inferring program theory, we think this should be done with caution.

Regardless of how the initial model is developed, the program model should not be assumed to static. Programs often change and adapt to political and social contexts, policy changes, and to the demands and needs of constituents. For program theories to be useful they must keep up with these changes. Thus, we prefer to think of any program theory as a “working model,” that is, one which is constantly scrutinized, evaluated, and modified as needed.

Figure 1 presents a simple model of one program’s understanding of how their services might lead to a set of positive program outcomes. This model suggests that through implementation of services using the family support principles, parents and children will experience two important changes: (1) an enhanced sense of mastery, control, and competence; and (2) improved relationships, including both formal and informal social support, intra-family relationships, and parent-child attachments. These two intermediate outcomes are seen as key changes that families experience en route to other kinds of positive outcomes, such as healthy child development, improved parenting, improved physical health, and economic self-sufficiency.

It is important to note that this is just one way of depicting the program’s theory of change, and represents a very simple description of basic program assumptions, intended outcomes, and program services. We have also developed other, more complex models, using the basic program model as a
starting point, in order to more specifically understand specific outcomes and to make more specific decisions about evaluation procedures. We should also make it clear that although our priority as researchers is to surface the implicit understandings of program staff and families, we also shared our knowledge of social science theory and research during this process. The key in this process is developing a partnership between researchers and other stakeholders so that no one perspective is seen as “true” or “right” but that all perspectives could contribute equally to development of the program theory.

**Step Two: Using the Program Theory to Design the Evaluation**

Although the process of developing a program theory is worthwhile in and of itself, we are particularly interested in using the program theory to guide the evaluation. Consistent with the participatory approach, we have relied on extensive collaboration among evaluators, program staff, directors, and families throughout the evaluation process, typically in the form of an “evaluation oversight committee” (Green, et al, 1996). This committee works together to make central evaluation decisions based on the program theory.

*Using the model to develop the evaluation questions.* One of the most important functions of a theory-based evaluation is to provide a basis for generating and prioritizing evaluation questions (Weiss, 1995). For example, key questions that emerged from the program theory depicted in Figure 1 included: “Do the family support services lead to increases in parents’ feeling of mastery?” and “Does this mastery then lead to improved parenting? Improved self-sufficiency?”

Further, development of the theory often surfaces important differences of opinions between stakeholders about how the program functions. Such disagreements can be parlayed into key evaluation questions. For example, one question that emerged regarding Figure 1 was “are mastery and
relationships really stepping stones to other outcomes, or can families reach desired outcomes without experiencing these changes”? For purposes of the working model, the group decided to assume that mastery and relationships were, indeed, stepping stones; however, we as evaluators were able to facilitate this decision by suggesting that this could be a central evaluation question.

**Using the model to develop evaluation methods.** Once questions about the program are generated, the model can facilitate discussion of how to gather information to address these questions. In one program, discussion with staff and families led to the decision to focus on three sources of information, which we have found to be extremely valuable and have used in other family support evaluations. First, to assess changes in participants on key intermediate and longer-term outcomes, evaluation staff conducted face-to-face interviews with families at baseline (program entry) and annually. Second, staff used contact summary records to document the nature and content of services received by families on an ongoing basis. Finally, families and staff develop individualized goal plans and used these to plan services and document families’ progress towards their goals.

Methods for assessing individual goals were designed to address a common issue that emerged during conversations with families and staff, which was that in family support programs, not all families have the same goals. Therefore, focusing solely on over-arching program goals would overlook an essential component of the service program. For example, not all families might identify adult education as a goal, so looking at overall program effectiveness in increasing the level of adult education could mask program effectiveness. However, a more sensitive set of analyses could be conducted on the subset of families who identified a goal in this area. The documentation of individual goals is, therefore, an essential component of family support evaluations, as it allows us to address the question of “what works for whom” based on the individualized goals set by families. This also made us realize that an
important part of a theory-based evaluation of family support programs is the ability to develop
individualized, family-specific “theories of change”.

**Using the model to develop evaluation measures.** After determining the basic evaluation
methods, the model can be used to help guide decisions about the specific measures. In one program,
we spent a considerable amount of time developing a tool that would record the nature and content of
services delivered (the “contact summary”). To do this, we started with a particular desired program
outcome, for example, parenting competency. Then, using the program model that outlined how
services were expected to lead to this outcome, an extensive list of all services relating to parenting
competency was generated. This list was then used to ensure that the contact summary would reflect all
relevant services. The process was then repeated for other program outcomes. In this way, we
ensured that all services that were believed to relate to key program outcomes could be easily coded in
the contact summaries. Such decisions, about how to assess service delivery, are critical to a theory-
based model that aims to understand the intervention process.

In another program, there was a strong interest in looking not just at what kinds of services
were delivered, but instead at whether services were, in fact, consistent with the family support
principles. This challenged us as evaluators to develop ways to assess the program’s approach to
service. To do this, we worked closely with program staff and administrators to develop the Family
Support Practices Instrument (FSPI, Green & McAllister, 1998), a measure of families’ perceptions of
staff’s behavior and attitudes.

Another example of how the theory-based participatory approach, has facilitated decisions
about evaluation measures concerns how decisions were made about instruments to include in the
interview protocols. We (the evaluators) had suggested that the program include the Parenting Stress
Index (PSI, Abidin, 1986) to assess reductions in parenting stress. The evaluation oversight committee, however, reacted strongly to the PSI’s negative wording. As parents said, “it’s everything about how bad and hard it is to be a parent, and nothing about what makes a good parent or a happy relationship—this program focuses on what’s good so, let’s measure that”. The program theory, in this situation, had included improved parenting as a key outcome, and although reducing parenting stress was an important way to enhance parenting, these parents urged us to follow the program values and focus on measuring family strengths.

**Step Three: Continuous Program Improvement**

The program model has also served as an important framework for sharing information with these programs and for guiding continuous program improvement. Often, too, changes and improvements in the program have led to changes in the evaluation. This iterative process helps to ensure that the evaluation remains integrally tied to the program, and helps to maximize the usefulness of evaluation information.

The program model can guide program improvement because it serves as a reference point for understanding information generated by the evaluation. For example, in one program, early descriptive data detailing the kinds of services that were being delivered indicated that while many recreational and social activities were being provided, there were fewer services related directly to parenting. Comparison of this information with the program model led to discussions of the importance of social/recreational activities, as well as the realization that more parenting services were needed if desired parenting outcomes were to be achieved. Thus, the program began to integrate recreational activities with parenting information (for example, hosting card parties which included a guest speaker, and developing games that could be both recreational and educational).
In another program’s model maternal depression was seen as something that was a significant barrier to a broad range of positive outcomes. This led to the inclusion of measures of depression in the parent interview. Initial baseline data suggested that the program had been correct in assuming that depression was a significant problem, but had underestimated the extent to which this was true; baseline data indicated that upwards of 60% of the mothers interviewed had near-clinical levels of depression. The program responded by hiring an on-site mental health specialist.

As we stated above, sometimes changes in the program can result in changes in the evaluation. For example, in one program, although the original program model didn’t mention support groups for parents as a way to enhance parenting, support groups were added about a year after program start-up, and were quite successful in attracting large numbers of participants. Because of our ongoing discussions with program staff about the program model, we were able to capture this change in the evaluation by incorporating this service into our measures.

All of these programmatic activities were a natural part of the evolution of the program which were not part of the original program model: this underscores the importance of continued dialog around the program model and accompanying evaluation activities to ensure a “match” between the program and its evaluation. Moreover, we have not only modified assessments, but also added new evaluation questions as programs have evolved. Changes in the program model have changed the focus of the evaluation questions as appropriate, and the evaluation has attempted to be responsive to the needs of the program in by producing timely, useful information.

Step Four: Disseminating Evaluation Findings

Finally, it should be mentioned that the program theory can serve as an important conceptual framework for disseminating evaluation results. The model can be used to focus on specific questions,
as we mentioned above, and then brief, timely reports can be generated based on a particular aspect of the model. Such reports are often much more useful than long, complicated summary documents produced at the end of the evaluation period.

**Benefits of Theory-Based, Participatory Evaluation**

In sum, we believe that using a theory-based, participatory evaluation approach results in a number of immediate benefits to service providers and evaluators, including the following:

1. Providing a format for evaluators, practitioners, and family members to share their assumptions about how and why a program is supposed to work;
2. Development of evaluations that more accurately reflect actual program processes and intended outcomes;
3. Providing a systematic, commonly understood method for prioritizing evaluation activities and allocating limited evaluation resources;
4. Providing a framework for sharing information with programs for continuous program improvement and for dissemination of evaluation findings.

In addition to these benefits, we believe that theory-based, participatory evaluations further our understanding of program functioning at a broader level. These kinds of evaluations foster the exchange of ideas, information, and assumptions among researchers, practitioners, and parents, which can lead to a richer and more complex understanding of how and why these programs work. Further, by definition, theory-based evaluations focus directly on understanding the mechanisms underlying program functioning and thus can address complex conceptual questions about the nature and effectiveness of interventions. Finally, Weiss (1995) suggests that, because theory-based evaluations focus on explanation of program effects (rather than just documentation) an increased use of this method may
lead to an improved ability to integrate evaluation results into a larger body of theoretical and program knowledge (Weiss, 1995). Thus, using a theory-based, participatory approach has both immediate benefits to the program, as well as enhancing usefulness of evaluation results on a broader level.

**Challenges in Theory-Based, Participatory Evaluation**

Despite these benefits, evaluations using theory-based and participatory approaches are still less common than more traditional outcomes-focused evaluations. We have identified several factors that may contribute to this fact: Time and cost, control and power, lack of appropriate methods, and questions of evaluator objectivity.

**The challenge of time and cost.** It is probably clear that this method of evaluation involves a large time commitment from evaluators, program staff, and families. Because of this time commitment—especially the initial time spent developing the model—both programs and evaluators have to be committed to the benefits of this approach. A common compromise in many participatory evaluations is to involve stakeholders in the initial model development and evaluation design, and to decrease their involvement over the course of the evaluation. We believe, however, that one of the most important and valuable aspects of the evaluations we have conducted has been the continued, long-term involvement of stakeholders in generating changes in the program model, refining data collection systems, and interpreting and using the information collected. Thus, to maximize the benefits of this approach, a commitment to work together throughout the course of the evaluation is needed.

Related to time are issues of cost. Bickman (1989) suggests that theory-driven evaluations are almost always more expensive than less comprehensive approaches, and indeed, a participatory, theory-based evaluation, can be quite expensive in terms of purchasing services from an evaluator. Such costs can be minimized, however, to the extent that theory-based evaluations result in better
prioritization of a small number of focused research questions, rather than in full-scale comprehensive evaluations that attempt to test a program model in its entirety. Thus, although theory-based evaluations can result in extremely comprehensive, complex, and expensive evaluations, we do not think this is necessarily the outcome of adopting this approach.

**The challenge of control and power.** At its best, a participatory evaluation approach can help to mitigate the power differentials that exist between researchers, program staff and administrators, and program participants, and facilitate true sharing of decision-making power among stakeholders. This power sharing, however, this doesn’t happen automatically - bringing stakeholders to the table is necessary but not sufficient for building collaboration. Evaluators are challenged in this approach to resist being the “experts” – to share expertise when asked or as appropriate, but to let final decisions be made by the group. This is often a bitter pill for evaluators to swallow, but we believe that the benefits of obtaining significant and meaningful input from program staff and families about the intervention process far outweigh any costs resulting from lack of evaluator control over methodological decisions.

**The challenge of methodological inadequacies.** Programs are not stable, and neither are their theories of change. Therefore, the evaluations of these programs have to be able to adapt to evolving program processes. Most researchers, however, especially those trained in quantitative research approaches, are not used to measuring “moving targets.” In using a participatory, theory-based approach we have continually struggled with this issue. Proposed changes are frequent, and each requires a consideration of the costs and benefits of that particular change, in light of the goals of the evaluation. For example, adding questions is minimally intrusive to a research protocol; changing the way questions are asked, for example, is more problematic, although at times we have done so, often sacrificing standardization in order to make sure that the data were meaningful.
Finally, we should note that in order to fully understand programs’ intervention processes and how they relate to program outcomes, the use of both quantitative and qualitative data is required. Qualitative methods, in particular, are much better able to adapt to constantly changing program contexts. In the evaluations we have conducted, we have always relied on a combination of these methods, and we believe our evaluations have benefited from systematic integration of both kinds of data.

**The challenge of the objectivity of the evaluator.** A frequent concern about using participatory evaluation methods relates to the perception of the evaluator as being an advocate for the program, rather than an “objective” evaluator. However, we would suggest that the problem lies in our understanding of the term “evaluation”, which is too often defined as a judgment about whether a program works or doesn’t work. The theory-based evaluation approach does not work well for programs that want an evaluation to “prove” to their funders that they are doing a good job. Rather, because it is explicitly oriented towards explanation and program improvement, theory based evaluation relies on an objective, open, reflective, and self-critical approach to the evaluation process. We would suggest that the close working partnership we have discussed can lead to greater objectivity and openness in addressing program strengths and weakness than does a traditional, hierarchical evaluation approach.

**Summary**

We have presented just a few examples of how a process of working collaboratively with program staff and participants to develop a program’s working model can be a powerful mechanism for furthering our understanding of family support programs. Clearly, it is not an approach that can be used indiscriminately for any evaluation—it requires a commitment to depth of understanding, sometimes
at the expense of breadth, and a willingness to sacrifice tight methodological control and to be flexible in data collection. It is, however, an extremely useful approach when the goal of the evaluation is to gain a richer, more complete understanding of how the intervention process works, and to collect data that is useful and meaningful to researchers, program practitioners, and families.

References


