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Integrating participatory elements into an effectiveness evaluation

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ABSTRACT

This article describes an effectiveness evaluation of an intensive case management intervention coordinated by a non-profit organization in a midsize Midwest City. As an effectiveness evaluation, the primary evaluation question was causal in nature; the key task of the evaluative study was to establish and probe connections between the intervention and positive psychosocial outcomes for youth and families. The evaluation process described in this article differs from most effectiveness evaluations in that participatory evaluation elements were integrated into the evaluation design, so that stakeholders provided practical knowledge to guide study decision-making. Therefore, in this evaluation, stakeholder contributions represent substantive ones that directly shaped the conduct of the effectiveness evaluation. The article employs a first-person evaluator narrative to retrospectively detail the process of involving stakeholders and ends with a discussion of issues relevant to involving stakeholders in an effectiveness evaluation and highlights areas in need of further study.

In practice, most evaluations are conducted at the request of a client. The impetus for this project, however, was in part driven by research interests within a university-based evaluation research center. The evaluation approach undertaken in this evaluation process was conceptualized in response to cause probing evaluations that are undertaken devoid of meaningful understandings of the complexities of programs and with a hugely oversimplified vision of how change occurs. The solution to the above shortcomings typical of most large-scale effectiveness evaluations is seemingly simple to those evaluators with an orientation towards collaborative approaches to evaluation—involve stakeholders throughout the evaluation process. Stakeholders are a source of practical knowledge regarding a program, the community within which a program operates and range of diversity within program participants.

Perhaps more than any other type of evaluation, however, effectiveness evaluations are not typically designed to be collaborative. Yet, decisions of effectiveness hinge upon comparisons between two groups on particular outcome measures. Decisions must be made about what outcomes to measure, how to measure those outcomes, when to measure the outcomes, and who is the appropriate comparison group. Who possesses the most intimate knowledge able to inform the answers to these critical questions? This author and practicing evaluator argues it is the stakeholders. And fortunately, two evaluation theories exist that provide prescriptive guidance and opportunity for improved effectiveness evaluation practice. Furthermore, new developments in statistical modeling are permitting closer relationships between a theoretical model from which research hypotheses are derived and the statistical model that is used to test the hypotheses empirically (Bollen & Curran, 2006; Curran & Muthén, 1999).

The evaluation work detailed in this article was conducted from September 2006 to September 2007. One feature of this evaluation is geographic distance between the evaluator and the evaluand. Thus, the paper also provides insights into how to deal with stakeholders from a distance. The evaluator resided in Los Angeles, California and traveled "on-site" three times prior to data collection. All correspondence during data collection occurred electronically or via conference call.

The essentials of Participatory, Theory-driven Effectiveness Evaluation (PTBEE)

This section highlights the building blocks of what I am tentatively calling a Participatory, Theory-Based Effectiveness Evaluation (PTBEE). A PTBEE combines two specific evaluation models, *participatory evaluation* and *theory-based evaluation*, with a particular statistical modeling approach, *growth mixture modeling* (*GMM*). Fig. 1 depicts the building blocks and how each one contributes unique design elements, as well as the overlaps between contributions.

As an evaluation model, theory-based evaluation argues that programs are based upon implicit or explicit theory and theoretical assumptions (Weiss, 1972, 2007). The theory-based evaluation model prescribes using theory, derived either from practical

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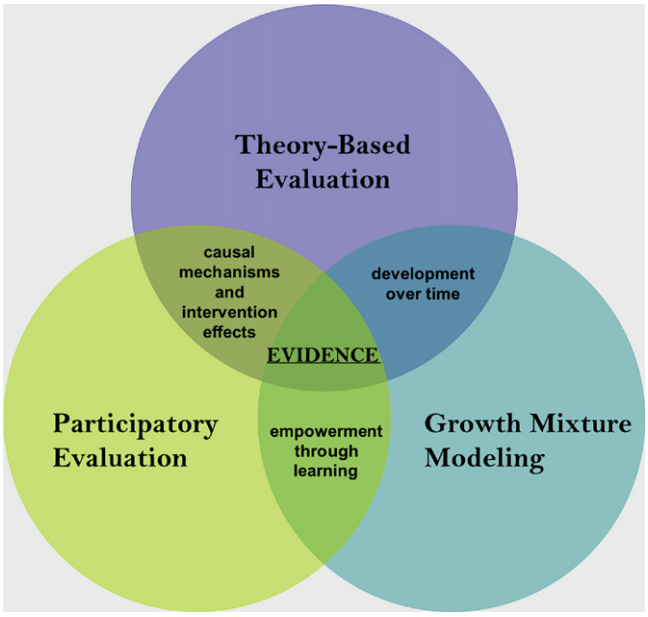

Fig. 1. The components of a participatory, theory-based effectiveness evaluation.

experience or empirical research, to articulate causal linkages between activities implemented and the short- and long-term outcomes. The participatory evaluation approach prescribes the participation of stakeholders, the individuals with an invested interest in the program, in all aspects of the evaluation. Stakeholder participation in the process of developing a theory of change that underlies a program provides a theory-based model of causal mechanisms and intervention effects.

Growth mixture modeling, generically a latent variable growth modeling technique, uses longitudinal data to create trajectories of individual program participant growth (Muthén & Khoo, 1998). Additionally, in conjunction with the intermediate outcomes, one can examine how background characteristics or other external factors influence the attributes of growth or the long-term outcome (Muthén & Khoo, 1998). The "mixture" in growth mixture modeling indicates that a categorical latent variable is included in the modeling process to determine whether subgroups of program participants benefit from the intervention in different ways (Muthén et al., 2002).

For an effectiveness evaluation, the data analysis method is restricted to those designs and methods able to support causal inference. From a theory-based evaluation perspective, it is equally important to know not only whether an effect was detected, but, if so, also some information about the how and why of that effect. A theory of change can be translated into a growth mixture model for the purpose of analyzing data, thereby enabling a sophisticated investigation of development over time. For these reasons – the need for causal methods, and a desire to incorporate theory into the analysis – latent variable growth modeling is an ideal data-analysis strategy for a PTBEE.

Lastly, growth mixture modeling is an extremely flexible approach to data analysis that provides rich outputs in terms of information. The data-analysis process offers stakeholders tremendous opportunities for interpretation and gaining knowledge, thereby empowering them to take an active learning role in the evaluation process.

Collaborative approaches to evaluation have increased in popularity, but often terms like "participatory" hold different meanings among evaluators (Cousins & Whitmore, 1998). Here, participatory is used to signify shared control of procedural decision-making and stakeholder participation in all aspects of the evaluation except for data analysis.

The stakeholders involved in this evaluation contributed substantive knowledge regarding local context and the nature of the intervention, i.e. what mediators and moderators they believed had important influence over effectiveness and qualitatively which children were the most appropriate counterfactual. It should be noted that in this particular evaluation, stakeholders were not involved in determining the general evaluation question, but rather in collectively agreeing that exploring questions regarding effectiveness were worthwhile and also determining which aspects of the theoretical model were of the most practical and political relevance to the local community.

As noted earlier, specific approaches to evaluation were selected and combined by the evaluator to encourage and facilitate the participation of stakeholders. The evaluator employed a participatory mode to clarify an existing program theory (Chen, 2005). The "theorizing procedures" (Chen, 2005, p. 418) that are prescribed as part of the theory-driven evaluation model (theory-driven evaluation will be defined below) were used to ensure that stakeholder participation was substantive in nature and not limited to technical and procedural contributions such as reporting on attrition or de-identifying data. The latter representing the typical roles stakeholders in large-scale effectiveness evaluations are asked to fulfill.

Theory-driven evaluation developed in reaction to consistent "no effect" findings common in experimentally designed evaluations. Chen and Rossi (1980) suggested that it was not the evaluation methodology nor social programs in general that were not effective, but rather the fact that evaluators focused attention on a few narrowly defined measurable effect variables chosen from among the official program goals (Chen & Rossi, 1980). As an alternative, Chen and Rossi (1980) suggested theory should drive selection of potential outcomes and the specification of intervening causal mechanisms that lead to observable change.

The process of working with stakeholders to articulate a program theory to guide evaluation design has been the focus of several recent evaluation case examples (see, for example, Cooksy, Gill, & Kelly, 2001; Renger, 2006; Yampolskaya, Nesman, Hernandez, & Koch, 2004). In this evaluation, a logic model was developed to capture the theory of change underlying the intervention. A logic model is a graphical representation of a plausible and sensible model of how an intervention works to affect change (Bickman, 1987). In this evaluation, the production of the logic model by the stakeholders represents the most time intensive portion of stakeholder involvement in this evaluation.

In the field of evaluation, developing theories of change in the form of logic models has been a significant part of evaluation practice over the last 20 years. Nevertheless, little attention has been paid in the evaluation literature about how to translate these theoretical models of change over time into rigorous tests of effectiveness. Growth mixture modeling, a specific type of latent variable growth modeling that includes continuous and categorical latent variables, provides an excellent tool to do just that—create a closer relationship between the theoretical models from which evaluative hypotheses are derived and the statistical models used to test the hypotheses empirically (Bollen & Curran, 2006; Curran & Muthén, 1999). The final phases of the evaluation, not discussed in this article, were the development of growth mixture models and the discussion of these models with stakeholders. Of importance to the topic of this article, however, is the point that GMM, the primary data analysis method, was specifically chosen to enhance stakeholder contributions in the determination of effectiveness due to the fact that the stakeholder theory of change provided the basis for the empirical test of effectiveness.