DESIGNING AND MANAGING PROGRAMS

An Effectiveness-Based Approach

5 EDITION

Peter M. Kettner
Robert M. Moroney
Lawrence L. Martin

C H A P T E R 6

Selecting the Appropriate Intervention Strategy

CHAPTER OVERVIEW

The purpose of this chapter is to explain:

- Why programs should be conceptualized and designed around their underlying hypotheses
- How to move from an understanding of a social problem to the construction of a hypothesis
- Why it is important to think through and understand the appropriate level of intervention
- The logical process and the steps involved in developing a program hypothesis
- The relationship between causal factors and effects to be tested through program design and implementation
- How to ensure that services provided focus on the barriers that were identified in the program hypothesis

The following topics are covered in this chapter:

- The Program Hypothesis
  - ○ A Maternal and Child Health Example
- Types of Program Hypotheses
  - ○ Where to Intervene
  - ○ Example 1: Political Economy as a Factor Contributing to Unemployment
  - ○ Example 2: The Presence of a Child With a Disability as a Factor Contributing to Child Abuse
  - ○ Example 3: Sexuality and Teenage Pregnancy
- The Process of Developing a Program Hypothesis
  - ○ Statement of a Condition
  - ○ Statement of a Social Problem
  - ○ Needs Assessment
  - ○ Mothers Working in Marginal Jobs

Over the past three chapters, we have defined and made distinctions among conditions, social problems, and social need. Furthermore, we have demonstrated the importance of not deciding on a solution prematurely, but instead beginning with a condition, transforming that condition into a social problem, and then translating a problem into a social need that will be targeted for action. Finally, we have discussed ways to generate estimates of the numbers with particular social needs, to describe the characteristics of those with these needs, and to locate geographic areas with high numbers of those with needs.

The next task is to take all of the above and devise an intervention strategy. In this chapter, we introduce the *program hypothesis* and its central function in shaping the goals, objectives, and design of the program and, eventually, the monitoring and evaluation of the program.

THE PROGRAM HYPOTHESIS

Most human service professionals would probably argue that because they are action oriented and not researchers, their primary concern is to solve problems and not to test hypotheses. The fact of the matter is, however, that when they design programs they are also proposing hypotheses. Granted, most administrators and program planners do not explicitly offer and document tentative assumptions that are then translated into testable logical or empirical consequences. Still, most design their programs with hypotheses in mind, albeit simplistic ones at times. The most rudimentary form of a hypothesis would be the administrator's hunch, based on practical experience, that a particular problem or situation will respond to a particular form of intervention—for example, that parenting classes will prevent child abuse.

We can think of hypotheses as nothing more than a series of *if-then* statements. Effective program design should be viewed as a hypothesis-generating activity (e.g., "If we provide parenting classes, then we will prevent child abuse"). The if-then statement then provides the mechanism for program evaluation, which is a hypothesis-testing activity (e.g., Was child abuse prevented after parenting classes were provided?). In generating a hypothesis, the program planner is able both to identify meaningful objectives and to structure these objectives in a hierarchical series of statements—objectives that are, in fact, a series of means-ends (or if-then) statements.

We find the basis for these informed hunches in the research literature—the literature that identifies the etiology of the problem. It is at this point that theory is joined to practice. (See Chapter 2 for a more detailed discussion of this point.)

A Maternal and Child Health Example

The following example of a program hypothesis might be helpful. In the mid-1960s, the U.S. Department of Health, Education and Welfare (now the U.S. Department of Health and Human Services), concerned with the problems of infant mortality and mental retardation, provided funds for the development of a number of maternal and infant care projects. (We acknowledge that the term *mental retardation* is no longer used; we use this term since it was the then-current phrase used in the literature and in the title of the legislation.) Although this new program seemed, on the surface, to resemble a number of previous programs, at least in terms of services, the underlying or implicit assumptions and hypotheses were quite different. In summary form, the assumptions were as follows:

- Infant mortality and mental retardation are related to the incidence of low birth weight (prematurity).

- Low birth weight is related to untreated illness, trauma, and nutritional deficiency experienced by the mother during the pregnancy.

- These conditions are more likely to be found among certain population groups, such as teenagers, women over 35 years of age, women with histories of multiple births, women who have had previous premature births, and women with low family incomes.

On the basis of these interrelated assumptions, the following program hypothesis was formulated:

- *If* we are able to locate high-risk mothers, and *if* we are able to recruit them to our program, and *if* we are able to offer services that will effectively deal with those factors associated with prematurity, *then* we should see a reduction in the incidence of prematurity, and *then* we should see a reduction in the incidence of infant mortality and mental retardation.

One can easily take the above and translate the terms into a more traditional research framework (this is basically what one does when concerned with program evaluation—the hypothesis-testing function).

We introduce the issue of program evaluation at this point in the process rather than at the end of the process (where it usually is discussed) because it is here that the foundation is laid for the monitoring and evaluation of the program. All too often, planning, design, and evaluation are viewed as loosely connected but separate processes. This failure to connect different parts of the program-planning process can lead to disastrous evaluations by producing findings that simply do not reflect what a program has produced. Findings from an evaluation that has not been through a disciplined planning process tend to be unrealistically positive, inaccurately negative, or inconclusive. The situation becomes disastrous when these flawed findings are treated as accurate reflections of program performance and are used to extend or discontinue funding, and therefore the life of the program. We do, of course, devote a number of chapters to the issues of monitoring and evaluation later in this volume, but at this point we want to argue the importance of laying the necessary foundation for those functions.
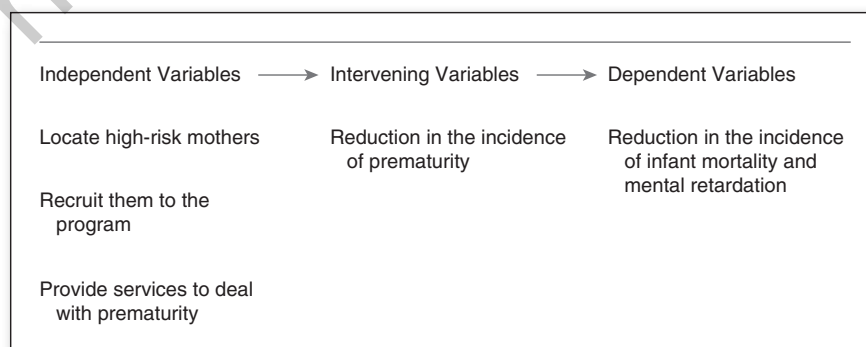
Freeman and Sherwood (1965) discussed this issue in an early article prompted by their experience evaluating many of the emerging social programs of the War on Poverty and other Great Society initiatives. They acknowledged that the usual practice was to engage someone to evaluate a program toward the end of the program, often at the end of a year or more. Given this, they argued that the evaluator would begin by asking the planners for a copy of the program plan, only to find that the document did not have any objectives or that while it might have objectives they were not measurable. (See Chapter 7 for a discussion of the criteria used to evaluate measurable objectives.) One scenario would have the evaluator stating that she would not begin the evaluation until the program staff develop measurable objectives. Freeman and Sherwood's conclusion: Bring lots of novels to the office since the wait will be long. In an alternative scenario, the evaluator is told to develop the objectives and evaluate the program. If she agrees to their suggestion and "evaluates" the program, and if the results are negative, the program people can then take the position that the objectives she evaluated were hers and not theirs.

Evaluation begins with stating a proposed relationship between a program or service (the independent variable) and some desired outcome (the dependent variable). In the example cited above, comprehensive prenatal care (including aggressive case finding and outreach) was the independent variable, and infant mortality and mental retardation were the dependent variables.

There may also be intervening variables (in a later chapter, we refer to these as *intermediate outcomes*) insofar as some variables appear in a causal chain between the independent variable and a dependent variable and influence the causal pattern. The concept of intervening variables recognizes the existence of multicausal models in understanding the complex problems that human service professionals encounter. Often, there is a long and complicated chain of events between treatment and outcomes. To test the program hypothesis, this chain must be explicated.

In the maternal and infant care example, the relationship between the services and the lower incidence of infant mortality is complex. The program affects these outcomes by improving the nutritional and health status of high-risk mothers. These, then, are the intervening variables: a series of steps or events, each of which is the result of a preceding event and a precondition of the next event. These relationships are illustrated in Figure 6.1.

Figure 6.1 The Relationships Between Variables

Independent Variables	Intervening Variables	Dependent Variables
Locate high-risk mothers	Reduction in the incidence of prematurity	Reduction in the incidence of infant mortality and mental retardation
Recruit them to the program		
Provide services to deal with prematurity		

TYPES OF PROGRAM HYPOTHESES

Where to Intervene

Throughout these chapters, the notion of causation has been discussed. We are using the term *cause* in the sense of factors associated with the existence of a condition and not in the more classic sense of cause and effect. Smoking, for example, is a factor associated with cancer, heart disease, and emphysema, but it is not a cause in that nonsmokers also experience these problems and some smokers do not. Furthermore, linear cause-and-effect relationships are rare when one is dealing with social problems. Multiple causation or multiple factors associated with social problems tend to be the rule.

If one hopes to deal successfully with a problem, one should modify or remove those *factors associated with the condition.* One of the purposes of the analysis, then, is to identify those factors or preconditions—the etiology of the problem. There are, however, special considerations about certain of these factors. Some do not lend themselves to intervention at the community level. For example:

- Certain preconditions can be dealt with only at the regional or national level (see Example 1 that follows).

- Some preconditions do not lend themselves to intervention because we lack the knowledge and/or technology to change them (see Example 2).

- Other preconditions may not be addressed because they cannot be controlled, in that controls would be either socially or culturally unacceptable (see Example 3).

These distinctions are critical; the following examples are offered only to illustrate the different paths and perspectives generated by different formulations of the problem.

Example 1: Political Economy as a Factor Contributing to Unemployment

It has been argued that many of the problems facing a particular society are caused by the specific form of that society's political economy (e.g., capitalism). If one were to begin at this level, proposed solutions would be likely to involve a radical transformation of the existing system or at least its modification. Although the analysis can be theoretically and technically correct, it is unlikely that a planner or administrator at the local level will be in a position to change that system, whether it is a form of capitalism or socialism.

Periodic unemployment for some and more permanent unemployment for others is a fact of life in our society. Our economy is such that (a) cycles of growth are always followed by cycles of decline; (b) inflation historically increases as unemployment declines; and (c) structural and frictional factors in our economy will produce a number of patterns, among which are higher unemployment rates in certain labor markets, regional disparities, the channeling of women and minorities into secondary labor markets with low-paying, dead-end jobs, and the exclusion of others from any labor markets, thus creating a permanent underclass.

Although these problems are caused by imperfections in our capitalistic system of relatively free enterprise, our solutions are not likely to address the capitalistic system as such but are likely to fall into one or more of the following categories: (a) training those who are unemployed, (b) providing (usually tax) incentives to employers to hire the unemployed and the underemployed, and (c) creating jobs by attracting new industries to the community.

The analysis has shifted from the causes of unemployment to the factors associated with why some people in a community are unemployed at a specific point in time.

If we were to focus on the economic system as the cause, the original hypothesis might follow this line of reasoning:

- *If* we were to modify our current economic system in such a way that cycles of growth and decline could be managed and inflation controlled,

- *then* we would be able to reduce or prevent structural and frictional factors that produce regional disparities, exclusionary employment practices, and the channeling of women and minorities into secondary labor markets, and

- *then* we could reduce the numbers of people in the permanent underclass.

Clearly, the actions implied by the above hypothesis are not within the control of a local human service agency. Recognizing, therefore, that the root problem of "imperfections in our economic system" cannot be addressed, we construct a more realistic new hypothesis:

- *If* we can identify the factors associated with an individual's unemployability, and

- *if* we can provide the necessary incentives to make currently unemployable people employable,

- *then* the unemployment rate in our community will go down.

The value of this shift in focus from large-scale national issues to local concerns is that it consciously recognizes root causes and determines them to be beyond the purview of local agency limitations yet translates the social problem of unemployment into a framework that makes it manageable at the local level.

Example 2: The Presence of a Child With a Disability as a Factor Contributing to Child Abuse

This example, one that is on a more micro level than Example 1, helps clarify further the issues surrounding the program hypothesis. We know from a number of studies that families caring for a child with severe disability are at greater statistical risk of abusing their children than families with children who are not disabled. A model that seeks to determine the cause of the problem—in this case, child abuse—would identify the cause as the presence of the disabling condition.

However, no program is likely to propose a solution to this problem—that is, the removal of the condition, severe disability. We do not have the knowledge or the technology to reverse the pathology, for example, to increase an IQ from 50 to 100 or to reverse the physiological aspects of Down syndrome. Therefore, we would probably conclude that, for intervention purposes, the cause of the problem is not simply the presence of a child with a severe disability but the stress caused by that presence. Given this, the solution to the problem would be the reduction of the stress. The wording of the hypothesis would then shift from "if we can remove the disability" to "if we can reduce the stress associated with the care of the child with the disability."

Example 3: Sexuality and Teenage Pregnancy

Teenage pregnancy will serve as an example of a situation in which a precondition is not addressed because it is not subject to community control or because to try to make it subject to community control would be socially or culturally unacceptable. A major problem facing families, educators, and human service professionals today is the startling increase in the incidence of pregnancy among teens. This problem has a number of subproblems. Each year, 1 in 10 teens becomes pregnant; more than a million adolescent pregnancies occur each year.

Over half of these pregnancies are brought to term, and almost 40% end in abortions. One could argue that just as capitalism is the real cause of unemployment in the first example, and the presence of the child with severe disability is the real cause in the second example, the real cause in this example is the act of sex. The solution, then, would involve the reduction or elimination of sexual activity among adolescents. However, given the inability of society to control adolescent sexual activity, most teen pregnancy programs begin at another level, the prevention of conception. The target now is not sexual activity but conception, and interventions focus on reducing the incidence of conception by introducing effective birth control measures. The program hypothesis changes from "if we could prevent sexual activity" to "if we could prevent conception."

In all three of the examples provided, we are likely to move from higher levels of factors to an identification of a factor that we have some chance of changing. Advanced capitalism, the presence of a child with a disability, or adolescent sexual activity might be the real causes, but they are not causes we can deal with on a practical level. Therefore, we call them *preconditions* to the presence of the problem. They help explain—they provide insight—but they are not the targets of the intervention.

THE PROCESS OF DEVELOPING A PROGRAM HYPOTHESIS

Let us return to Example 1. In our discussion of employment, we covered such issues as unemployment and underemployment, structural and frictional factors, and primary and secondary labor markets. We concluded that proposed interventions were likely to emphasize training and job creation and not the more basic causes of these problems. The

following section offers an example of how the problem of unemployment at the local level might be approached and takes the reader through the total process introduced and discussed up to this point.

Statement of a Condition

A recent survey carried out by a county's department of human services estimates that of the 10,000 families living in the Morningside neighborhood, 2,000 families had income of less than $18,000.

This statement is a statement of fact and only a statement of fact. There is no interpretation of the fact at this time, nor has a value been placed on the fact. The concept of *social problem* was discussed earlier as relative, in that individuals or groups bring a frame of reference, shaped by a value system, to a condition that allows (or forces) them to interpret it. In some cases, this interpretation results in a condition being labeled a social problem. Furthermore, this interpretation and labeling of the condition becomes the stimulus and justification for action.

Statement of a Social Problem

There are 2,000 families in this neighborhood living in unsafe and substandard conditions below minimally acceptable levels for this community. Furthermore, this rate of 20% is almost twice as high as that for any other neighborhood or area in the county. Therefore, resources should be targeted to Morningside to raise the level of family income.

There are three parts to this statement. The first suggests that a family income of $18,000 not only is inadequate but also is so low that it places a family at great risk. This is a *qualitative* statement. The second argues that the situation is problematic in its scale or size relative to other parts of the county. This is a *quantitative* statement. These two statements become the basis for the third statement: that something should be done about the situation. This is the *justification for action* statement.

Based on this labeling of the condition as a social problem, which provides a rationale for intervening in the situation, the next task is to determine who these 2,000 families are and why their family income is below $18,000. A survey is commissioned, and a series of community meetings are held over the next few months that produce the following information.

Needs Assessment

Of the 2,000 families with income below $18,000:

- 1,000 (50%) are headed by single mothers who are working in marginal jobs with little chance for advancement

- 200 (10%) are headed by fathers who, because of alcohol and other substance problems, are only sporadically employed

- 500 (25%) are headed by mothers who are receiving Temporary Assistance for Needy Families (TANF; previously Aid to Families with Dependent Children, or AFDC)

- 200 (10%) are headed by fathers who are employed full time but earn slightly more than the minimum wage and mothers who cannot work because they are needed to care for their pre–school-age children

- 100 (5%) are made up of elderly persons

The needs assessment has helped us understand why these families have incomes of less than $18,000. We now know there are at least five distinct groups of families in this neighborhood, with as many different reasons for their low income levels. This type of analysis is critical as we move on in the planning process. It has provided us with the basis for the program hypothesis, or, in this instance, the five-program hypotheses.

It also has provided us with *estimates of the numbers* of families in each category, information that becomes crucial when specific interventions are to be designed. The following section takes the first category (mothers in marginal jobs) and walks the reader through the assumptions that eventually become a program hypothesis. Our purpose here is only to demonstrate a line of thinking, an approach that eventually results in services.

Different program hypotheses would, of course, be developed for the other four categories because each represents a different subpopulation and because the factors associated with each group's having low income are different. The first program hypothesis would not be an appropriate hypothesis for the others, nor would the services that evolve from this hypothesis be effective for the other families.

Mothers Working in Marginal Jobs

For the 1,000 families headed by single parents (mothers) earning marginal salaries, we would probably consider an intervention that included, at a minimum, the following components:

- child support enforcement

- job training/placement

- child care

It is likely that for at least a percentage of these families, the father is not paying child support. This support is often ordered by a court, yet some fathers refuse to keep up with monthly child support payments. In other instances, the mother, for any number of reasons, never went to court to attempt to collect child support. It is also likely that many of these mothers are restricted to jobs in the secondary labor market because they lack marketable skills. Finally, it is likely that many of these women are restricted to less than full-time employment because of a lack of affordable, accessible child care.

Program hypothesis:

- *If* these women can acquire marketable job skills, and

- *if* they are assisted in finding employment in the primary labor market, and

- *if* they are relieved of their child care responsibilities by the provision of quality child care,

- *then* they are likely to complete their training, secure and retain employment, and raise their standard of living to reasonable levels; and, in some instances,

- *if* child support is provided to the mother,

- *then* that mother will have more options open to her.

Not only will she be in a position to increase her family income, but she will be able to choose between part- and full-time work outside the home and even to return to school as a first step in establishing a career.

PROGRAM HYPOTHESES AND THE IDEA OF CONSEQUENCES

Thus far, we have discussed the concepts of primary or ultimate causes and the factors associated with primary or ultimate causes. Wherever possible, a program hypothesis should focus as clearly and consistently as possible on causes or on the factors associated with causes. There are, however, many instances in which social problems have gone far beyond primary effects and have reached a stage of secondary and tertiary consequences. One might think of this phenomenon as a series of concentric circles involving a ripple effect. In these cases, it is often necessary for program planners to shift their focus from causes to consequences and target the factors associated with consequences.

Let us continue with our example of women who have been abused. If we were concerned with preventing domestic violence, we would have to identify the cause(s) of violence in our society. While there are probably many such causes, a number of authors have argued that we learn to be violent because we were socialized into a culture of violence; in other words, we live in a society where violence is not only accepted but also approved. David Gil (1970) has been arguing this point for over 40 years. This conclusion was also promoted by the Carnegie Council on Children (Kenniston, 1977), which discussed violence in sports, especially football; violence in the workplace, especially in the military and textile towns; and violence in the media. If we believed that the prevention of domestic violence requires strategies that would diminish violence in our society, we would be in the same predicament discussed in the political economy and periodic unemployment example discussed earlier in the chapter.

We now move from primary prevention to *secondary prevention,* or early intervention. Any Google search for *domestic violence prevention* will produce hundreds of examples that describe programs that seek to identify women who are in the early stages of being abused. They can be educational programs for the general public or specialized efforts to involve human service personnel in establishing screening programs. The overall goal of these programs is early case finding and intervention before the problem becomes more serious. Another example of secondary prevention focuses on identifying bullying in schools where patterns of violent behavior are learned, with serious long-term negative consequences. A widely cited study reported that in a national sample of almost 16,000 students

in Grades 6 through 10, 13.0% self-reported being a bully, 10.6% self-reported being bullied, and 6.3% had been a bully and had been bullied (Tonja et al., 2001).

In the same way that we developed program hypotheses around causes and factors, we can develop them around consequences and factors: *tertiary prevention.* Following the framework of the maternal and child health example introduced at the beginning of the chapter, we can now list our *assumptions* about women who have been abused. Building on the discussion of domestic violence in Chapter 2, we can generate the following assumptions and a working hypothesis guiding our intervention.

Because there are women who experience the following:

- low self-esteem and general anxiety disorder

- social isolation from friends, family, and community

- lack of financial resources to meet their basic needs

- lack of basic education and marketable skills to get and hold a steady job with a salary that meets their basic needs

The result is women who are vulnerable to becoming victims of domestic violence due to

- a combination of personal, emotional, and psychological problems

- isolation from social support systems and networks

- dependence on a partner for financial support

- severe limitations in their ability to secure and succeed in a steady job with a career path

If the following actions are taken with a population that has been victimized by domestic violence:

- provide individual and group counseling to address personal, emotional, and psychological problems;

- provide case management services to facilitate and support making appropriate community contacts designed to build a sustainable, steady lifestyle following treatment;

- provide financial planning services designed to manage income and meet basic expenses;

- provide employment training and placement,

then it is expected that women who participate in the program

- will increase self-esteem and reduce anxiety

- will secure housing and child care and will be able to meet other needs necessary to independent living in the community

- will be able to manage their finances effectively
- will be employed in a job with a career path and a salary adequate to meet their financial needs

FROM PROGRAM HYPOTHESIS TO SERVICE

The strength of the above transformation of conditions into problems—and eventually problems into needs—rests on our willingness and ability to propose a set of relational statements (if-then, means-ends) that explain not only what we will do but also why we are doing it. It is our rationale not only for taking action but also for the action we take. If program planners were to stop here, we would be left with a series of statements that might be logically consistent and theoretically correct, but the exercise would have produced nothing of value for clients.

The value of effectiveness-based program planning rests in the ability to create, design, and implement a relevant service that is likely to reduce or eliminate the problem. If the problem analysis and the resulting program hypothesis produce nothing of value for the clients and community, then the exercise has been a waste of time.

Incorporating Problem Analysis Into Program Design

There are, unfortunately, numerous examples of elaborate analyses that have been carried out, often at great expense in time and resources, and have then been ignored when the program's services are developed. This is not unlike a physician ordering an elaborate series of laboratory tests and then ignoring their findings and prescribing something inconsistent with the diagnosis simply because his or her prescribed treatment is easier, more convenient, or cheaper than the "correct" prescription. Let us turn to an example of direct client service to illustrate.

A caseworker, working in a program attempting to help women achieve self-sufficiency, needs to identify all of those potential barriers standing in the way of achieving this goal. The identification of these barriers, then, should produce the prescription or case plan. But what if the case plan identified only individual counseling and parent-training classes because these are the services that are currently available? Given the assessment, we would have to question the selection of these two services. There are no relationships among problem, cause, and solution. It should be obvious that other services need to be provided.

Program planners make the same mistakes when they fail to make connections among causes, consequences, factors, and service. The introduction of an innovative planning process cannot end with "business as usual"—that is, the decision to continue offering the services that have been and are being offered with the rationale that we have to offer them because we are organized to offer them. When program planners ignore the inconsistencies between cause/consequences/factors, on the one hand, and services, on the other, they are dooming a program to waste resources, to provide ineffective services, and ultimately to fail. New discoveries call for new, innovative, or redesigned services.

We address the task of designing or redesigning services in Chapter 8. But first, in Chapter 7, we focus on moving from the program hypothesis to the setting of goals and objectives—statements that become, in effect, the beacons toward which we move as we develop new, innovative, or redesigned services. Goals and objectives succinctly summarize the problem analysis, needs assessment, and program hypothesis components of the plan and guide the design of the service.

Benefits of the Program Hypothesis

The above approach—beginning with problem analysis, moving to needs assessment, developing a program hypothesis, and developing a hierarchical set of goals and objectives—will produce a number of benefits that cannot be produced from any other process. These benefits are listed below, and each is discussed in turn.

The Program Hypothesis Helps Focus Programs on Problems Rather Than on Activities

In his discussion of the current landscape of social welfare management, Patti (2000) emphasizes the increasing expectations that managers will measure organizational performance in a way that is responsive to funding and policy bodies, while taking into consideration available resources, technology, and the needs and preferences of the consumer. Meeting the expectations of these widely varying constituents means that organizations and programs must be structured around understanding and resolving problems, and not solely on the activities of staff.

In our earlier discussion of domestic violence, the problem analysis, program hypothesis, and eventually goals and objectives are all focused on ways to protect women and children who have been victims of domestic violence and to provide the kind of support needed by the target population for long-term self-sufficiency. Because the program hypothesis is problem directed, it forces us to think first about the purpose of our program and not about the details of the actual services.

A traditional approach would tend to focus on the services provided by workers—services that eventually take on purposes and lives of their own. In this example, in the absence of problem-oriented goals and objectives based on a program hypothesis, a plan might be developed focused on the provision of casework services, leaving the decision about what the participants need to the judgment of many different caseworkers. This approach could very well result in trial and error and ignore all the research and evaluation findings that point to specific factors that, in combination, increase the risk of subjecting vulnerable women to continued physical and emotional violence.

The Program Hypothesis Can Link Program Activities to Outcomes

In discussing the importance of client outcomes, Hatry (2012) points out that increasingly sophisticated technology will enable human service organizations to track outcomes of different categories of clients, clients who have received different types and amounts of service, and different outcomes from different offices and workers. While this type of information cannot definitively establish cause-and-effect linkages, it can steer managers

in the direction of providing more of what works and less of what doesn't. Furthermore, if we find that the program is more successful with certain clients and not as successful with others (e.g., mothers with more or less education, more or less employment experience; clients with different ethnic backgrounds), it would stimulate us to explore why we see less success and hopefully change our approach to these groups.

This linkage between means and ends specified in the working intervention hypothesis is critical in that it allows the administrator to determine whether a program is working as intended. This sentence is deceptive in its apparent simplicity. There are, however, two distinct questions involved, both of which are the essence of program evaluation:

1. Did we actually implement the program we designed?

2. To what extent did we achieve the proposed results?

If a working intervention hypothesis is a series of statements that includes, at a minimal level, a relationship between identified programs and anticipated results, we need to determine two things: (1) whether the intervention was implemented as designed (e.g., case management services, counseling, financial management training, employment training and placement provided) and (2) the extent to which the expected results (e.g., increase in self-esteem, reduction in anxiety, strengthening of social support networks, ability to manage finances effectively, employability, self-sufficiency) were achieved. This, then, forms the basis for ever-increasing precision in matching programs to problem and need and ultimately for supporting, rejecting, or modifying the program hypothesis.

The Program Hypothesis Can Provide a Basis for Long-Range Planning

The system we are outlining requires that the planner think beyond the present or, more accurately, beyond a single year. By planning programs around problems and by linking activities to identified results or outcomes, we are encouraged to focus efforts on long-term effects. Austin and Solomon (2000) describe long-range planning as involving "a profound shift in management philosophy from reactive crisis management to proactive strategic management" (p. 342).

Most of the problems we are concerned with are complex. Many cannot be successfully dealt with in a single year's time frame. Many are of such a scale that only a portion of the people in need can be served—or a portion of the services to be provided can be completed—in a single year. We need, then, to identify multiple-year objectives and to generate multiple-year estimates of resources needed to achieve these objectives.

For example, a needs assessment might provide an estimate of 180 young women within a particular geographical boundary at any given time who meet the definition of being at high risk of domestic violence. In program planning, those knowledgeable about domestic violence services might calculate that during the first year, only about 30 women can be served, given the capacity and the resources to be made available in this program. Planners would still want to develop, during the second and subsequent years, the capacity to serve a greater number and secure the resources needed to accomplish this. The planning process would also identify other shelters in the community that may participate in this program and serve different groups of women.

The Program Hypothesis Can Provide a Framework for Continuous Monitoring and Evaluation of the Service Provision Process

The system we are describing is one that will have different levels of outcomes. One set can be described as the ultimate results expected from the program. Another can be described as intermediate results. In our example, the ultimate result expected is the reduction of domestic violence in the community by reducing recidivism. Realistically, we should not expect to observe meaningful changes in the impact of this program on the community in the first year in which the program was initiated, especially in view of the program's attempt to somehow change lifestyles and attitudes of women who have become dependent on abusers. However, this does not mean that we should ignore evaluation until the end of the second year. We should take intermediate measures such as successful completion of an individual rehab plan and mastery of certain knowledge and skills, so that, if all is not going according to plan, we can be in a position to take corrective action when it can make a difference (i.e., early in the program's life).

Again, our program hypothesis and accompanying goals and objectives allow us to begin our evaluation at an early date. We have posited a relationship between the variables of (1) low self-esteem (Kirkwood, 1993), (2) high anxiety (Tolman & Rosen, 2001), (3) lack of independent living skills (Johnson & Ferraro, 1998), (4) poor financial management skills, and (5) lack of employable skills (McCauley, Kern, Koladron, & Dill, 1995). Are we finding that the program is having success in its attempt to increase self-esteem? Reduce anxiety? Are there measurable improvements in knowledge about managing finances? Are independent living skills being mastered? Are training courses being successfully completed, and if so, are these newly mastered skills resulting in steady jobs that can lead to successful careers? If the program hypothesis is correct, and if the interventions are effective, these are some of the factors that can be measured early in the life of the program, and we can plan to measure reductions in the incidence of domestic violence in the community at a later time.

The Program Hypothesis Can Provide a Database for Cost-Benefit and Cost-Effectiveness Studies

The final contribution of this system is that it gives us the ability to tie cost data to program data. The program hypothesis provides a framework for linking resources to outcomes. The effectiveness of a financial management system should be judged, at least in part, on the basis of how well it contributes to services' effectiveness (Ezell, 2000). Cost data allow us to take the next step, which is the assessment of how much these outcomes have cost. This allows the administrator to address the following questions:

1. Is the program cost-effective (are the results worth the cost)?

2. Could we achieve the same results at a lower cost?

This issue is the focus of later chapters dealing with budgeting.

In summary, the program hypothesis provides an important transition statement. It is crafted from the earlier study and analysis of the problem and the need, and it establishes a foundation on which subsequent components of the plan are built. Goals and objectives

will establish the direction of planning from this point on, so it is critical that goals and objectives be written in a way that is consistent with the program hypothesis. Planners must also be cognizant of the purpose and direction of the host agency. Purpose and direction are established in the agency's mission statement.

SUMMARY

This chapter is the culmination of all the previous activities (i.e., problem analysis and needs assessment) and sets the stage for the remaining components of a program plan. Building on the previous sections, we are in a position to put the pieces together. If we can think of the hypothesis as a series of if-then statements in a hierarchal format, a hierarchy made up of two distinct classes of statements, we have outlined what we are going to do (lower level statements or outputs) and what we hope to achieve (higher level statements or outcomes).

Furthermore, we emphasized the importance of determining what aspect of the problem we are attempting to resolve. Three major foci were discussed. The first was concerned with preventing the problem from occurring, the second with early intervention once the problem exists, and the third with an attempt to ameliorate the consequences of the problem. Depending on our focus, we will be directed to evaluate different research in order to target specific factors in the program. A well-thought-through hypothesis now becomes the framework for all subsequent activities.

REVIEW QUESTIONS

1. Why is the articulation of a hypothesis essential in the development of an effective program?

2. How is a hypothesis different from a hunch?

3. What do we mean when we say a hypothesis is a series of ends/means statements?

4. What do we mean when we say that program evaluation begins with the development of a hypothesis?

5. How do we actually develop both the lower and higher level statements in the hypothesis?

REFERENCES

Austin, M., & Solomon, J. (2000). Managing the planning process. In R. Patti (Ed.), *The handbook of social welfare management* (pp. 341–359). Thousand Oaks, CA: Sage.

Ezell, M. (2000). Financial management. In R. Patti (Ed.), *The handbook of social welfare management* (pp. 377–394). Thousand Oaks, CA: Sage.

Freeman, H, & Sherwood, C. (1965) Research in large scale intervention programs. *Journal of Social Issues, 21*(1), 11–28.

Gil, D. (1970). *Violence against children: Physical child abuse in the United States.* Cambridge, MA: Harvard University Press.

Hatry, H. (2012). Outcomes measurement in the human services: Lessons learned from public and private sectors. In J. Magnabosco & R. Manderscheid (Eds.), *Outcomes measurement in the human services: Cross-cutting issues and methods* (2nd ed., pp. 3–19). Washington, DC: NASW Press.

Johnson, M., & Ferraro, K. (1998). Research on domestic violence in the 1990s. *Journal of Marriage and the Family, 62,* 948–960.

Kenniston, K. (1977). *All our children: The American family under pressure.* New York, NY: Harcourt Brace Jovanovich.

Kirkwood, C. (1993). *Leaving abusive partners: From the scare of survival to the wisdom of change.* Thousand Oaks, CA: Sage.

McCauley, J., Kern, J., Koladron, D., & Dill, L. (1995). The battering syndrome: Prevalence and clinical characteristics of domestic violence in primary care. *Annals of Internal Medicine, 123*, 737–745.

Patti, R. (2000). The landscape of social welfare management. In R. Patti (Ed.), *The handbook of social welfare management* (pp. 3–25). Thousand Oaks, CA: Sage.

Tolman, R., & Rosen, D. (2001). Domestic violence in the lives of women receiving welfare. *Violence Against Women, 7,* 141–158.

Tonja, R., Overpaek, M., Pilla, R., Ruan, J., Simons-Mortin, B., & Scheidt, P. (2001). Bullying behavior among U.S. youths: Prevalence and association with psychological adjustment. *Journal of the American Medical Association, 285,* 2094–2100.