Effectiveness of interventions in health promotion (HP) is often difficult to articulate, assess, and measure because the outcomes of any policy, program or intervention are often far distant in time from the intervention. Moreover, the observed outcomes may be further complicated by interactions (or effects) from other HP efforts or as a result of the “natural” evolution or “history” of the phenomena upon which a HP intervention takes place. Indeed, changes over time are difficult to detect measure and evaluate. This chapter concentrates on some of the measurement issues.

Given this, knowledge and evaluation of HP effectiveness is quite limited, and often, indirect. As in the Platonic shadows of the Republic, effectiveness can be captured by studying the evidence that can be produced by an intervention. Like in Plato’s allegory of the cave (“To them . . .the truth would be literally nothing but the shadows of the images”) it is quite often impossible to decide the absolute truth of the HP effectiveness but rather do one’s best in observing (measuring) its shadow (the evidence) and analyze and interpret this to better understand the noumena, the realities. In few cases, researchers can organize their effectiveness studies like in many other disciplines, using standard research design (such as random trials) and standard measurement and analytical tools (e.g. standardized survey questionnaire and statistical tests). Often this is simply not possible for theoretical, methodological or feasibility (practical) reasons. So, researchers seeking information about effectiveness of a HP program or intervention should work on looking into which measure (which shadow in the Platonic metaphor) can be more suitable, how this can be properly analyzed and interpreted to gain useful information to evaluate HP effectiveness.

The aim of this chapter is that of offering a first methodological discussion on some of the issues that a researcher should or could afford in the evaluation or, more generally, in the study of HP effectiveness. Since the author acknowledges that to properly discuss many of the methodological issues presented here would require more space than this chapter provides, the goal is to offer an overview of the major issues of HP effectiveness and building the evidence based upon empirical research and evaluated practice from the scientific literature. After this “stroll,” more in-depth discussions are provided in the cited literature.
This chapter begins with a fundamental discussion about the importance of time as an essential variable in measuring the evidence of effectiveness in HP: effectiveness often, if not always, is interested in changes or trends of dynamic processes. HP wants to offer to the target population knowledge, tools, etc. to allow them to make something to eventually increase their own level of health. This process that operates at individual level, from the HP perspective, is observed at aggregate level, observing changes, trends that show what the HP effort has produced over time. For this reason, e.g. prevalence measures are important in HP, but not as much as knowing their evolution over time: to know that in an interested area the prevalence of young female smokers is 15% could be interesting, but no one can say how much worrying, or how many resources for intervention requires a 15%. To know, instead, that the prevalence of smoking among the young female population in that area is increasing, stable or decreasing could be of dramatic importance, information that could drive HP efforts. HP is not particularly interested in the reality as it appears, as much as in the dynamic that is behind it. To embed time in the measurement and analysis process is the only way to understand these dynamic processes.

The Measurement Process: Measuring Effectiveness, Measuring Health Promotion

*The Measurement Process*

Before discussing the intricacies of measuring HP effectiveness, it is important to recall the fundamentals of any measurement process. Here I will briefly mention the basics steps (see Fig. 18.1) to help focus the discussion. In the following paragraphs I will look to HP effectiveness in context.

In the measurement process, it is often the case that we are not dealing with easily measurable concepts; i.e., attitude, behavior change, knowledge attainment are not objective outcomes, such as height, length, weight, that are more directly measured. For the latter the only challenge of measurement is that of finding a valid and reliable measurement tool. Rather, in HP we are trying to measure abstract concepts that first require a study of their conceptualization (Blalock, 1979) and definition in a more operative way, even to have a broad idea about the kind of measurements that can be applied.

Devising a clearer, more “usable” definition for the concepts in a hypothesis is called operationalization or operationalizing concepts – because it makes the hypothesis operational or ready to be used. Emphasizing the difficulty of doing this, Julie Ford (Ford, 1975) compares it to building a rope bridge across a chasm between the world of ideas and the world of observation (which she also calls “the world of appearances”). Once the process is established, one needs to define measurement design. Social science research offers several approaches