3.2.2 Comparison of Intervention Methods

Is intervention method A more effective than intervention method B? This question is a clinical problem affecting every individual treated by an occupational therapist in a hospital, home, or school setting. Nonetheless, the application of published clinical research remains limited. Many occupational therapists continue to use traditional methods of intervention without searching the literature to determine whether their effectiveness has been established through research. The classical research design employed in testing the relative effectiveness of clinical intervention methods is the paradigm (Figure 3-2).

In this example, the experimental intervention represents the independent or manipulated variable, whereas the degree of improvement represents the dependent variable. A cause-effect relationship is inferred directly by the experimenter.

Traditionally, the control group has been a non-intervention group or a comparative intervention group. In a nonintervention group, there is a possibility of a Hawthorne effect in which each group does not get equal attention, and the results may be attributable to the attention of the experimental group rather than to the intervention effect. In their classical work on experimental design, Campbell and Stanley (1963) used the term quasiexperimental to indicate experimental designs in which there is no comparative control group. For example, in a pilot study, a researcher may want to examine the effects of a stress management program on the reduction of depression by using an experimental group without a control group (Nowak, Preson, & Horoszewski, 2015). This would be considered a quasiexperimental design.