

# **Interpretation and Explanation of Research and Evaluation Results: A Case Study in Use and Misuse**

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## **The Context**

Information Services Inc. (ISI) is a leading marketer of information, software, and other services for business decision making. A focus of ISI during the 1990s was to initiate and manage change to realize revenue growth. Providing training to employees to increase job effectiveness was seen as one approach to initiating and managing such change. The other was through divestitures and workforce reductions. This latter approach was not dis-

closed to the evaluators involved in this case until the reporting phase of the evaluation.

ISI decided to conduct an evaluation of an interpersonal skills training program. The main purpose was to determine the effectiveness of the training in monetary and nonmonetary ways. A second objective was to investigate whether any differences arose when using line managers rather than trainers to deliver the training.

### **The Ethical Dilemma**

Several key people from ISI were involved in the evaluation, including the vice president of operations, the executive director of organization and professional development, the chief financial officer, and the director of management development. The vice president of operations, responsible for unit training and development, was concerned that the money spent on training would affect the bottom line. The executive director of organization and professional development was charged with providing the vice president of operations with the data needed to justify the interpersonal skills program. The chief financial officer wanted to see a formal return on investment (ROI) study completed on the training program. The director of management development was interested in obtaining evidence that the training had some effect.

Several key people from the consulting organization were involved in the evaluation, including the research director, a research manager and research assistants, and the organization's chief financial officer. The researchers were concerned with conducting a sound evaluation and testing some ideas on an approach to determining the costs and benefits of interpersonal skills training. The chief financial officer and a manager of finance from the researcher's organization acted as advisors to the project.

ISI had more than 100 locations throughout the United States. Given such dispersion, the organization became concerned with moving to a more supportive and cooperative climate, as well as fostering improved performance. A program that could accomplish those goals had to be inexpensive, at least relative to the benefits obtained. Certainly, the budget review focused on the dollar value of all Human Resource Development (HRD) programs at ISI.

The training program being evaluated provided basic human interaction skills. The instructors, whether from the training staff or from line management, attended a 4-day certification seminar. This seminar included such topics as facilitation skills, the learning process, basic program content, and implementation strategies.

The program at ISI was delivered in three locations. In one facility, a training staff member from the corporate headquarters delivered all of the training. At a second location, a trainer from one of the regional offices delivered the training. At the third location, one of the local managers delivered the training. A fourth location was selected to provide a control group

of employees who were similar to the trainees, but who would receive the training at a later date.

The evaluation used pre- and posttraining ratings of behaviors of the trained and control group participants. These were obtained from the participants, their supervisors, and two of their colleagues. The pre- and posttraining ratings were matched for each respondent. Pretraining ratings were gathered immediately before training, and posttraining ratings were gathered approximately 1 month following the last training session.

Repeated measures multiple analyses of variance (MANOVAs) found statistically significant differences in the ratings from before to after training for all rating groups, as compared with the control groups. These results were then converted to dollar benefits by using the time spent on these behavioral tasks and average salary data. The dollar benefits were then subtracted from estimates of the dollar costs, including the costs of the trainers' and the trainees' time.

In addition to the analysis examining the return on investment in behavioral and monetary terms, the study also examined the effectiveness of the three types of trainers: corporate trainer, regional trainer, and line manager. In this case, no differences were found among the groups.

A series of written reports was prepared for the senior management team. These reports included an executive summary; a technical report presenting the details on the evaluation design, instruments, statistical analyses, and results; a copy of all the statistical analyses; and an oral presentation to the senior management team. During the oral presentation, when questions arose concerning the details of the analyses, audience members could review the results in one of the reports.

### **Focus Questions**

Before reading the analysis of the dilemma, think about what you would do in this situation by considering the following questions:

1. What should be measured to determine the effectiveness of the training?
2. Can and should skill improvements in interpersonal skills be translated into monetary benefits?
3. What cautions should be added to reports of evaluation results?
4. To what extent do such cautions lead to a lack of respect for the HRD professional and for the evaluation?
5. What is the responsibility of the HRD professional in guiding decision making based on the results of an evaluation?

### **Analysis of the Dilemma**

An important ethical issue facing the evaluators in this case was that of competence from the General Principles. At the time of the above-described evaluation, very little empirical research had been published regarding

approaches to translating performance gains into monetary benefits. Even today, there exists little consensus as to the most appropriate methods. Although the researchers consulted with financial analysts, perhaps more could have been done to ensure that the financial analysis met with generally accepted practices.

A second area of concern identified is that of interpretation and explanation of research and evaluation results, described under research and evaluation. The evaluators provided the organization with a variety of reporting formats. This helped many of the senior management to understand the findings and the implications. The evaluators could, however, have provided more discussion as to the limitations of the research. Note that such listing of limitations, though appropriate for academic publications, tends to reduce the credibility of the findings when viewed by management.

A final area of concern within the General Standards is that of the misuse of HRD professionals' work. Initially, it appeared that senior management was prepared to misuse the results to make decisions regarding downsizing. Instances where research and evaluation yield information leading to downsizing efforts pose a dilemma for the HRD professional. Which is considered ethical—a workforce reduction leading to a profitable and sustainable organization, or the preservation of jobs leading to an unprofitable and unsustainable organization? Of course, the most satisfying outcome would be one in which there is a preservation of jobs along with a sustainable and profitable organization. In this case, the financial personnel and the evaluators succeeded in convincing senior management that using training results from an interpersonal skills program to reduce this type of personnel was inappropriate.

### **Applicable Standards**

This case illustrates the use of the following research and evaluation standards.

*Data collection.* The researchers consulted with financial analysts, including a Chief Financial Office; however, more might have been undertaken with regard to additional financial analyses, including discounted cash-flow methods.

*Informed consent.* Researchers did obtain the consent of employees and held the individual information as confidential. However, they did not provide complete information regarding the possible risks of the evaluation.

*Interpretation and explanation of research and evaluation results.* Researchers provided information to various stakeholder groups in different formats. Additional consultation with senior management helped to avoid misuse of the results.