Measuring Results of MBTI® Type Training

ROI in Action

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Introduction

This booklet describes our journey in trying to "measure" the impact of any human resource development (HRD) intervention, especially the use of the MBTI® assessment in organizations. We began this journey more than 10 years ago and feel we have finally made some progress. Our goal in writing this booklet is to enable readers to bypass many of the steps we took along the way and follow a straighter path to our conclusion.

We describe how we got to where we are today and offer readers a format to use in measuring their own MBTI interventions. We offer some background to help them understand why the process can seem so daunting. We provide an instrument that helps us measure interventions we deal with on a regular basis, and also offer a practical example of how this has worked for us. Finally, we offer some application exercises that will help individuals and teams understand the real value of knowing the return on investment of their MBTI training.

How Do Organizations Assess the Value of MBTI® Training?

If an organization using the MBTI tool (1) looks at the big picture and is an industry leader, (2) retains employees and reduces its hiring and training costs, (3) increases its sales revenue, and (4) successfully completes corporate restructuring, with teams functioning well and employees talking about type at meetings, does this mean the MBTI tool is working for the organization? Apparently, yes. But how can the organization know the real impact of using the MBTI tool? That is, how might it go about assessing the actual value the tool has contributed to the organization?

The best way to approach this issue is to view this use of the MBTI tool as what it is, an HRD intervention designed to bring about some level of change in the organization. Thus we can begin our assessment by asking a direct question: How are other HRD interventions evaluated?

Kirkpatrick's Model of Training Evaluation

Donald Kirkpatrick's (1998) model of training evaluation is a common jumping-off point for assessing HRD efforts. Kirkpatrick identified four levels for evaluating any training:

- Level 1: Reactions
- Level 2: Learning
- Level 3: Behavioral changes
- Level 4: Organizational results

As we shall see, levels 3 and 4 of Kirkpatrick's model focus on issues more critical to most organizations than do levels 1 and 2.

Level 1: Reactions

Level 1 measures reactions: How did the participants like the training program? This is the evaluation method most commonly used by organizations. Typically, participants are given a posttraining questionnaire that uses a Likert-type scale (1 = strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, 5 = strongly agree). Response items focus on the participants' opinions on various aspects and outcomes of the program, such as

- I really enjoyed attending this program
- This program will be a great help in my job
- The instructor was very knowledgeable about the topic
- I would recommend this program to my peers

Reactions are easy to measure, and they can certainly give trainers (and others) a sense of well-being and comfort about their HRD program. The feeling is that if participants really liked the program, it must be a good one. Reactions can also be seen as one measure of how motivated trainees are to attend the program. Motivation is not always a good indicator, however, because reactions can be easily manipulated. Good food and a pleasant day away from work can make an HRD program very attractive. Who wouldn't rather spend a day at a resort, eating good food, than slaving away at the office?

Level 2: Learning

Level 2 focuses on participant learning. While measuring learning is very useful for evaluating some programs, it is of little value for many others. For example, if we are training someone to use a computer spreadsheet program, it makes sense to evaluate the training by "testing" the person's knowledge before and after the training to determine what he or she learned about the spreadsheet program. Alternatively, if we are training someone to perform CPR, does it really matter if the person can pass a written test on the subject, or would we rather see whether he or she can actually perform CPR? Obviously, actually doing CPR is what really matters for a CPR training program.

Learning is usually measured using a test comparing knowledge, skills, and/or attitudes before and after training. Put simply, the pretraining score is subtracted from the posttraining score, and the difference is what was learned from the training program. We also try to identify a *control group* (a group that is as similar as possible to the participant group but that

does not receive the training). If the participant group "learns" but the control group does not, most likely the training program is successful.

Learning is a very good measure of training program success, *if* the training program's goal is to teach people something and is easily measured.

Level 3: Behavior Changes

Level 3 measures behavior changes: How has participants' behavior changed since taking part in the training program? This can be difficult to measure and analyze. Usually, both a pretest and a posttest measure are used, and a control group is included for comparison purposes. Presumably, any changes that occur in the group receiving the training but not in the control group can be attributed to the training.

The difficulty of evaluating behavior changes is compounded by the difficulty of measuring behaviors at all. How do we measure behaviors? We can observe how people behave and record those observations, but this is time consuming, and people often behave differently when they know they are being observed. Self-reports are often used to measure behaviors. A self-report* is a questionnaire completed by the participants themselves, usually using a Likert scale as discussed above and containing items such as

- I always ask for help when I have a problem at work
- My colleagues and I communicate regularly
- I always wear my seatbelt when driving

Level 4: Organizational Results

Level 4 measures organizational results, with the focus on the impact the HRD intervention has had on some important and quantifiable measure used by the organization. For example, did absenteeism or turnover decrease, or did productivity increase? Results are generally viewed as the "bottom line" for the organization, and are often measured using the concept of *return on investment,* or *ROI.* This will be discussed in detail in the next section of this booklet.

Kirkpatrick (1998, p. 59) describes this fourth level as "the most important and perhaps most difficult of all" to determine. He suggests trainers consider a number of questions to evaluate results. These questions include (pp. 60–61)

- How much did quality improve because of the training program?

- How much has it contributed to profits?

- What reduction in turnover and scrap rate did we get after training?

- What has been the result of all our training programs?

- How much has productivity increased and how much have costs been reduced as a result of our training efforts?

- What is the return on investment for all the money we spend on training?

But the ultimate issue for trainers and managers is this: How can they determine the return on investment? While both the concept and the formula for calculating ROI appear simple and straightforward, the application of both is considerably more difficult. All this will be discussed in the next section, where we will explore how to apply ROI to evaluate the impact of HRD interventions.

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* *Note:* Podsakoff and Organ (1986) identified a serious problem with using self-report data to evaluate training. This is the issue of the *socially desirable response.* Respondents may give the response they think the boss wants to hear rather than give a candid answer.