

Conducting an EAP Evaluation Using the Workplace Outcome Suite

The WOS was created largely as a way to improve the empirical basis of claims you might make about EAP to an employer....Here's how to use it.

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In previous articles, the authors described the need for improved measurement of workplace outcomes in EAPs (see the *Journal of Employee Assistance*, 4th Quarter of 2009, pages 18-19) and introduced a measurement tool specifically designed for EAPs known as the *Workplace Outcome Suite* (WOS). The WOS is short, psychometrically tested, easy to administer, and it's free. In this article, we will discuss how to administer the WOS (or any other outcome measurement tool) in a practice setting using a simple "Before & After," also referred to as a "Pre-Post" correlational design.

We constructed the WOS largely as a way to improve the empirical basis of claims you might make about EAP to an employer. However, remember that when you undertake a scientific examination of your employee assistance program – one that relies on established principals – being too lax with these principals can diminish the credibility of your findings. Moreover, while evaluation studies are not free by any means, the WOS is designed to help contain costs. However, even then, it does not reduce costs to "zero," even if you do not purchase external consultation from an established researcher.

Correlational 'Pre-Post' Design

The correlational design allows EA professionals to examine the relationship between EAP intervention and workplace effects (such as absenteeism, presenteeism, etc). This model allows users to pre-test a client BEFORE introducing the EAP intervention and then AFTER the intervention (usually 60-90 days later to see if the EAP intervention has a sustained impact). The EA professional will want to see if there is any change over time, so the post-test should NOT be administered immediately after the final EAP visit or intervention. This design is really the "workhorse" of practice evaluations, and it is not disruptive to the EAP process and client experience.

Obviously, your hypothesis would postulate that the specific EAP intervention correlates with improved work performance. This design can generally identify IF employees are improving at work, but it cannot necessarily explain *why*. Consequently, not having a comparison group may cause someone to wonder if EAP intervention (and not some other unknown explanation) caused the improvement in work performance. If you have access to a "matched" comparison group of non-EAP users, any differences can be factored into your analysis. Admittedly, finding a matched comparison group within a particular workplace is usually not practical and likely not permitted by the employer.

Finally, the EA professional will want to decide if the WOS should be administered with *all* EAP clients or a representative sample. Too few subjects may lead to an evaluation that is flawed because the appropriate number of subjects required was not met. It is crucial to ensure that your sample is large enough to achieve statistical significance so you can detect even sensitive changes between the pre- and post-test.

Questionnaire Design

The WOS contains the following scales: Absenteeism, Presenteeism, Work Engagement, Life Satisfaction, and Workplace Distress. You may use one – or all of the scales. EA professionals will probably want to add some demographic questions, such as job category, age, gender, etc. to make sure you understand the nature of the sample you will eventually analyze.

Most importantly, you will need to create a unique identifier for each subject that acts as a "proxy" for his or her name so you can link the pre-test subject with the same post-test subject. Most WOS users have the unique identifier entered by the EAP intake counselor at baseline and then by the client during the post-test follow-up. This is the only way whoever is analyzing the data can connect the pre- and post-

test and calculate any measurable change presumably caused by the intervention. Data cannot be analyzed without this unique identifier.

Recruitment

Recruitment involves finding subjects willing to participate in the evaluation of your program by providing answers to the WOS (or other questionnaire) as they enter the EAP and again at about 90 days following completion of EAP. Subjects may or may not be offered an incentive to participate, but they cannot be coerced into participating and they must be allowed to “drop out” of the evaluation at any time.

Although the subjects’ identities will be need to be tracked from pre-EAP to post-EAP, they must be guaranteed anonymity and assured that employers and supervisor will not be allowed to view their responses. Convincing employees to participate in an evaluation and to provide truthful responses to the WOS is a component that cannot be underestimated.

Subject Tracking

Subjects must complete the WOS at least two times: once at baseline and another at follow-up. Remember, outcomes occur AFTER the intervention is complete – thus, getting subjects to respond to the follow-up post-test is a major factor in the success of the evaluation. Many EAPs using the WOS have a staff person that tracks subjects and obtains follow-up data. Unlike mail surveys that often broadcast a large baseline survey in the hopes of capturing a large enough sample to make a fair test of the hypotheses, practice evaluation studies involving EAPs typically spend their resources obtaining good contact information at the pre-test and then finding subjects 90 days later for the post-test.

During the pre-test, it’s important to let subjects know that a follow-up staff person will be contacting them over the phone and/or by e-mail to remind them to complete the follow-up post-test. Get good data during the pre-test and permission to make contact three months later (e-mail, cell, work, and home phone numbers).

A low *response rate* is just as problematic as too small a sample. If less than a majority of subjects complete the post-test, one is left wondering about the effects of EAP on work performance for those who did not complete the post-test. If you have a response rate of less than 50%, it is not possible to extrapolate your findings with confidence to the larger population of EAP users. An 80% or above response rate is desirable; 50% is really the minimum acceptable level.

Data Collection

There are three basic methods by which the data may be collected:

* *The first is a self-administered paper-and-pencil version that employees may take during an office visit.* This may involve providing a desk or clipboard in the waiting area for the employee to sit and provide answers. The WOS typically takes less than four minutes to complete. It is essential that either the either employee’s name or unique identifier be included on the questionnaire. A good procedure is to provide an envelope for the employee to place his or her completed questionnaire to conceal the response from casual observers. The WOS proctor needs to check to make sure the responses are completed and the identification number is on the sheet before the employee leaves the site. Use of the paper-and-pencil version of the WOS has been shown to be both valid and reliable.

* *Second, the WOS can be administered over a commercial survey website.* Survey firms such Zoomerang and Survey Monkey both provide professional survey platforms at reasonable prices. It may be useful to create two separate sites, one for the baseline administration, and the other for the follow-up. The internal EAP evaluator may connect these sites by linking their common identification number or name. With this approach, the employee can connect to the Internet when it is convenient and provide responses to the WOS after inputting his or her subject ID. This assures that no unauthorized personnel can access the evaluation. Validation of the WOS using Internet-based survey sites is ongoing.

* *Third, the WOS can be administered over the phone.* The interviewer needs only to read the questions and record the responses in a database. This approach can be combined with the web-based version in which the interviewer inputs the responses on the website as he or she obtains the responses from the subject. This is a particularly effective way to maximize follow-up data. Use of the WOS with the telephone administration method has been psychometrically evaluated and found to have acceptable validity and reliability.

Data Reduction

Once all of the data has been collected, it is time to put it into a format that can be analyzed. Most statistical software programs such as SPSS, SAS, SYSTAT and others analyze a common data matrix in which the data are arranged by subject fashion. Each subject's data is placed on a single line. Consequently, if you use the 25 item WOS you have 25 columns of data plus a subject ID number (usually in the first column). If you have 250 subjects, you have 250 rows.

The best to organize these data is in an Excel spreadsheet. SPSS can read excel files directly, and you can even include the names of each variable (i.e., Subject ID, WOS 1 through WOS25) on the first row of the spreadsheet. SPSS will ask you if the variable names are on the first row. With a "yes" response, SPSS will automatically create the file you need to conduct a host of statistical analysis to test the effectiveness of your program.

Calculating the Scores

Once the Excel files are read into a statistical package, the EA professional can conduct that small amount of data transformation that's needed to score the subscale score. This involves adding the relevant five items in five separate scale scores. For Absenteeism, Presenteeism, Work Engagement, and Workplace Distress, this means simply adding together the five items in each scale into a single score. For example, Absenteeism is simply the sum of the first five items as in $\text{Absenteeism} = \text{WOS1} + \text{WOS2} + \text{WOS3} + \text{WOS4} + \text{WOS5}$.

Life Satisfaction works a little differently. This scale has two items that are scored in the negative and need to be recoded before they are added. For items 17 and 20, we use a recoded statement in SPSS to reverse the scoring so that 5 becomes 1, 4 become 2, 3 stays the same, 2 becomes 4 and 1 becomes 5. We then add the relevant items (using the reversed scored version items 17 and 20) to calculate the life satisfaction score.

Data Analysis

The data analysis aspect of the evaluation typically involves calculating the descriptive statistics, such as mean and standard deviation, for the individual items and for the scale scores. One should examine the results looking at missing data and irregular distribution with either too much or too little variance.

For the most part, the comparison of an intervention and matched comparison groups can be done with a t-test of the means or an analysis of co-variance on post-EAP averages controlling for pre-EAP scores. Analysis of co-variance is particularly helpful when there is a control group present, but subjects could not be randomly assigned to the intervention condition. In this case, analysis of co-variance may be used to statistically remove pre-treatment differences between the treatment and the control group that might confound the post-EAP test.

Final Report

The results of an evaluation are typically summarized in a final report similar to those seen in academic journals. The reports usually start with an introduction of the specific rationale for the evaluation including the theoretical framework of the intervention. The "methods" section describes the evaluation design, the selection of the subjects, the nature of the intervention, and the statistical analysis. The "findings" section summarizes all of the results in tabular form and describes them in narrative text. Finally, the "discussion" section interprets the results in terms of the effectiveness of the intervention, and any limitation of the study that might mitigate the results.

While the primary objective is to provide purchasers and stakeholders with quantifiable and credible data regarding the effectiveness of your EAP, if your evaluation is not shared or shareable, it will be of little value to the broader EAP community. A well-done, empirical evaluation should be viewed as community property, and thus published. The specific employer's identity can be easily preserved if the employer does not want their specific name or brand shared.

Suggestions on Implementing the WOS

This article outlined the implementation issues in executing an outcome evaluation using a simple correlational design: take a baseline measure at intake; introduce the EAP intervention; take a second measure around 90 days later; conduct an analysis and produce a report. Even though the process

seems straight forward, there are many reasons why EAPs have not measured outcomes and conducted evaluations:

1. Absence of a short, valid, relevant, affordable measure (until now);
2. Limited staff resources or data collection capability;
3. Lack of easy-to-access scientific expertise to analyze data/produce reports;
4. No extra funding to implement outcome measures;
5. Cooperative subjects and follow-up or post-tests are too hard to come by; and/or
6. Resists implementation.

However, the time has come to use empirical outcome data instead of relying on marketing propaganda, satisfaction surveys with low response rates, and anecdotal reports with emotional appeal. The following are some final “tips” regarding implementation:

- There are no “cookbook” approaches to a protocol – every EAP setting is unique.
- Staffs who collect the data must understand the value of outcomes...incentive programs usually help.
- Appoint an “Outcomes Manager” with the skills to carry out the evaluation.
- Outcomes should become a part of your operational flow (and not just a time-limited project).
- Analyzing and visually presenting results is both an art and a science...get help if you need it.

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