COMPARING IMPROVEMENT
after EAP counseling for different outcomes

EAP impacts work presenteeism and life satisfaction the most and equally effective across contextual factors

WORKPLACE OUTCOME SUITE (WOS)

ANNUAL REPORT 2017

Prepared by Chestnut Global Partners, LLC
Division of Commercial Science
1003 Martin Luther King Drive, Bloomington, IL 61701
chestnutglobalpartners.org | EAPResearch.com

WORKPLACE OUTCOME SUITE (WOS)

Annual Report 2017

Comparing Improvement After EAP Counseling for Different Outcomes and Clinical Context Factors in Over 16,000 EAP Cases Worldwide

EAP Impacts Work Presenteeism and Life Satisfaction the Most
and Is Equally Effective Across Contextual Factors

Prepared by Chestnut Global Partners, LLC
Division of Commercial Science
1003 Martin Luther King Drive, Bloomington, IL 61701
chestnutglobalpartners.org EAPResearch.com
dsharar@chestnut.org

Table of Contents

INTRODUCTION

What is the Workplace Outcome Suite?
The Workplace Outcome Suite (WOS) is an easy-to-administer tool developed by Chestnut Global Partners (CGP) Division of Commercial Science. It uses a short, precise, and easy-to-administer survey that collects EAP specific outcome data both before (pre – at start of the counseling) and after (post – usually after 3 months) EAP services. Thus, the WOS is a measure of change that examines five key aspects of workplace functioning: *absenteeism, presenteeism, work engagement, workplace distress, and life satisfaction*. The WOS is currently the only publicly available, free instrument that has been psychometrically validated and tested for use in EAP settings. See the 2016 WOS Report for a discussion of how it is administered, basic calculation methods for change over time, and the history of the development of the full 25-item, 9-item and brief 5-item versions.

What are the Items on the WOS-5?
The items for each outcome area are listed below. Absenteeism is a fill in the blank response whereas the others are rated on a Likert-type response of: 1 = strong disagree, 2 = somewhat disagree, 3 = neutral, 4 = somewhat agree, and 5 = strongly agree.

- **Absenteeism** (looks at the number of hours absent due to a personal problem taking the employee away from work). *"For the period of the past 30 days, please total the number of hours your personal concern caused you to miss work. Include complete eight-hour days and partial days when you came in late or left early.."*

- **Presenteeism** (measures decreases in productivity even though the employee is not absent per se but not working at his or her optimum due to unresolved personal problems). *"My personal problems kept me from concentrating on my work."*

- **Workplace Distress** (examines the degree of anxiety or stress at work). *"I dread going in to work."*

- **Work Engagement** (refers to the extent to which the employee is invested in or passionate about his or her job). *"I am often eager to get to the work site to start the day."*

- **Life Satisfaction** (addresses one's general sense of well-being). *"So far, my life seems to be going very well."*

How much has the number of WOS users increased since 2016?
In 2017, more than **600** EAPs signed license agreements to use the WOS, and there are more than 3,400 additional individual EAP cases just since last year. Some WOS users voluntarily submit their data to CGP in order for this pooled report to be created. These figures demonstrate that greater numbers of EAPs are finding the WOS can be highly effective at demonstrating improvement for their EAP counseling clients.

Why has EAPA endorsed the WOS?
EAPA has endorsed the WOS as an EAP Best Practice for measuring and evaluating work-related outcomes of services provided by EAPs. With access to thousands of EAP professionals across the globe and a deep commitment to the highest standards of EA practice, EAPA believes the WOS, when properly

implemented, can bring clarification to our field's value proposition and need for greater evidence of effectiveness.

How does this EAPA/CGP report differ from last year?
This report updates Employee Assistance Professionals Association (EAPA) members and other stakeholders regarding the latest data and information about the significant, positive results that outcome measurement with the Workplace Outcome Suite has for users of EA counseling.
The 2017 Report is different in four key ways. Each of these differences are noted below.

First, this year's report features a larger sample size of 16,792 cases that adds another 3,700+ cases to the pooled dataset from last year. The data represents pre and post use scores on various versions of the WOS collected since year 2011 from many different EAP vendors and programs in multiple countries. This report focuses on the five single items that comprise the super short version of the WOS, called the WOS-5.

Secondly, we include the consideration of the statistical effect sizes for the results, which allows for a fair and direct comparison of the magnitude of findings for the five WOS scales. This added level of interpretation is critical when using extremely large sample sizes that create a situation where even a tiny difference can be declared "statistically significant" at beyond chance levels, even when the practical significance of such a small difference is questionable.

Third, new analyses are presented that explore if the level of change from before to after use of EAP counseling is moderated by demographic, clinical and employer contextual factors. Detailed tables of ratings and statistics are in **Appendix A – Change Levels and Contextual Factors.**

Finally, the Reduction in Problem Status approach is introduced as an alternative procedure for coding the case-level WOS data and for analyzing the results for change over time. This method asks, for each outcome area, how many employees are having problems and then how many of these same cases have improved enough at the follow-up to no longer be at the problem level?

Background on the WOS
For those readers who are not familiar with the WOS or the pooled results project done in collaboration with EAPA, a review of the *importance, background*, and *implementation* of using the Workplace Outcome Suite can be found later in this report, starting on page 24.

Appendix B – Methodology
The methodology for the 2017 report is presented in Appendix B. This describes the study sample, the data integrity for removing outlier cases with extremely high work absence and other missing data, and correlational results that support the convergent and discriminant validity of the WOS measures.

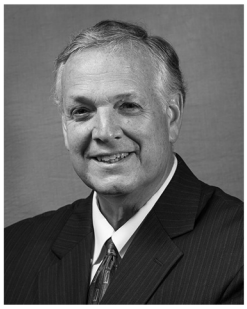
Appendix C – ROI Conversion
Converting WOS Absenteeism and Presenteeism scores into a monetized Return on Investment (ROI) – another important consideration for EA professionals – is presented as Appendix C in this report.

Appendix D – New CIR Tool
Also, Chestnut Global Partners (CGP) Division of Commercial Science and EAP researcher Dr. Patricia Herlihy are developing a Critical Incident Response (CIR) measure – the latest tool in the WOS family of tools. This information appears as Appendix D in this report.

Who are some of the individuals who contributed to this report?

EAPA and CGP's executive leadership team extend our thanks to those WOS user groups who designed a WOS evaluation, collected data, and submitted de-identified data to CGP so the analysis in this report could be presented. CGP executive leadership would also like to acknowledge and thank the following individuals for their contributions in the preparation of this document: Dr. Mark Attridge, Scientist and Owner, Attridge Consulting; Gregory DeLapp, CEO, EAPA; Dr. Patricia Herlihy, Scientist and Owner, Rocky Mountain Research; Pam Ihnes, Data Analyst, CGP; Mike Jacquart, Editor of the *Journal of Employee Assistance* and the *Employee Assistance Report*; Dr. Richard "Rik" Lennox, Psychometric Consultant to CGP; Marina London, Web Developer, EAPA; Lou Servizio, Executive Director, CGP Brazil and Developer of Wellcast ROI; and Robert Gregory, Graphic Designer.

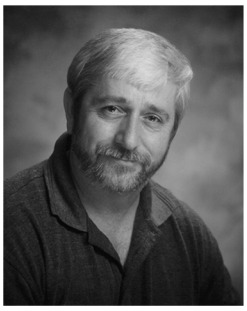

Dr. Mark Attridge


Gregory DeLapp

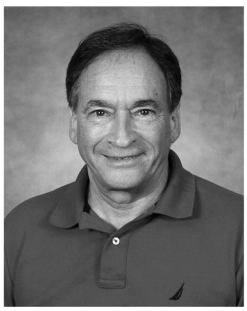

Dr. Patricia Herlihy


Pamela Ihnes


Mike Jacquart


Dr. Richard Lennox


Marina London


Lou Servizio


Dr. David Sharar

RESULTS

WOS POOLED RESULTS FOR 2017:
Part 1. IMPROVEMENT OVER TIME

Research Question 1: Does the use of EA counseling result in significant improvements over time in the five outcomes measured by the WOS?

The first question to answer using this global pooled dataset was: What are the industry-wide levels of average improvement in the outcomes of work absenteeism, work presenteeism, work distress, workplace engagement and life satisfaction and is this a statistically significant degree of change over time? This was tested using a general linear model (GLM) procedure with Time as repeated measures approach with two time points (Pre vs. Post). Results show **each of the WOS measures had improvement over time that was significant beyond chance levels ($p < .05$).**

Change in Absenteeism – 5-item version (25- or 9-item scales) Sample size N = 4,590 EAP Cases
Before EAP services, 10.92 hours of work were missed over a 30-day period. At follow-up after EAP services, 5.64 hours of work were missed over a 30-day period. This is net difference of 5.28 fewer hours of employee absence per month. This is a relative improvement of **48%**.

Change in Absenteeism – 1-item version in the WOS-5 Sample size N = 11,543 EAP Cases
Before EAP services, 5.64 hours of work were missed over a 30-day period. At follow-up after EAP services, 2.43 hours of work were missed over a 30-day period. This is net difference of 3.21 fewer hours of employee absence per month. This is a relative improvement of **57%**. See Figure 1 bar chart of this result on page 8. Note that this single item measure yields about half the hours of total absence as when five different types of absenteeism from work were asked about (see above pooled across the WOS 25- or 9-item results).

Change in Work Presenteeism Sample size N = 16,435 EAP Cases
Before EAP services, the average rating for level of agreement was 3.29 and at follow-up after EAP services the average rating was 2.42. This is a relative improvement of **26%.** See Figure 2 bar chart of this result on page 8.

Change in Work Distress Sample size N = 16,409 EAP Cases
Before EAP services, the average rating for level of agreement was 2.20 and at follow-up after EAP services the average rating was 1.92. This is a relative improvement of **13%.** See Figure 3 bar chart of this result on page 9.

Change in Work Engagement Sample size N = 16,051 EAP Cases
Before EAP services, the average rating for level of agreement was 3.21 and at follow-up after EAP services the average rating was 3.42. This is a relative improvement of **7%.** See Figure 4 bar chart of this result on page 9.

Change in Life Satisfaction Sample size N = 16,420 EAP Cases
Before EAP services, the average rating for level of agreement was 3.03 and at follow-up after EAP services the average rating was 3.70 This is a relative improvement of **22%.** See Figure 5 bar chart of this result on page 9.

Figure 1

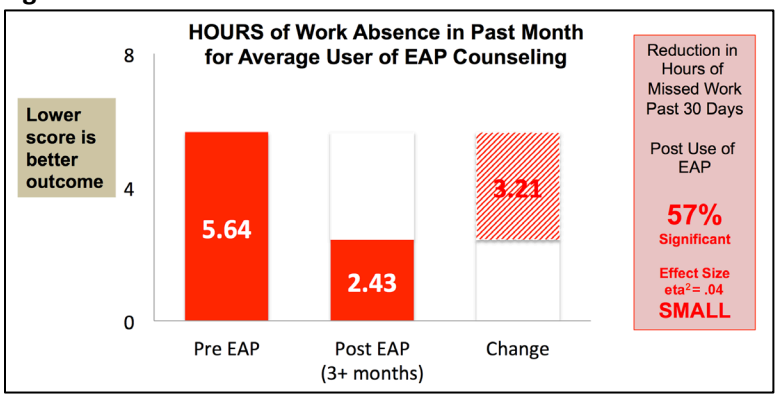


Figure 2

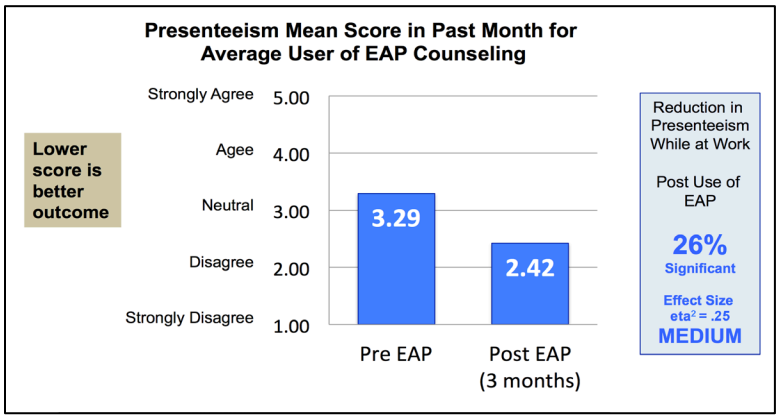


Figure 3

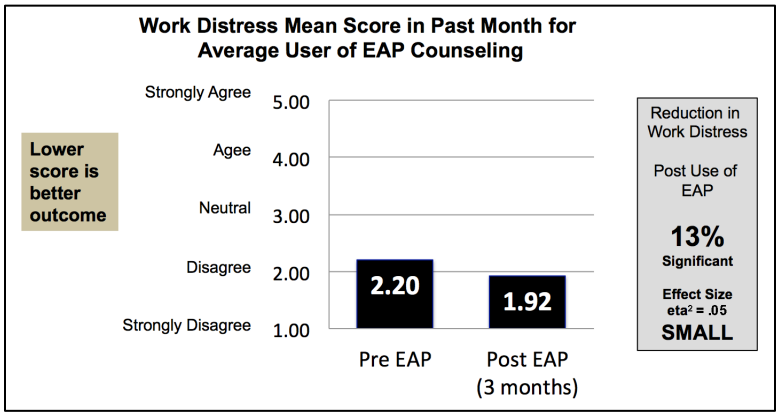


Figure 4

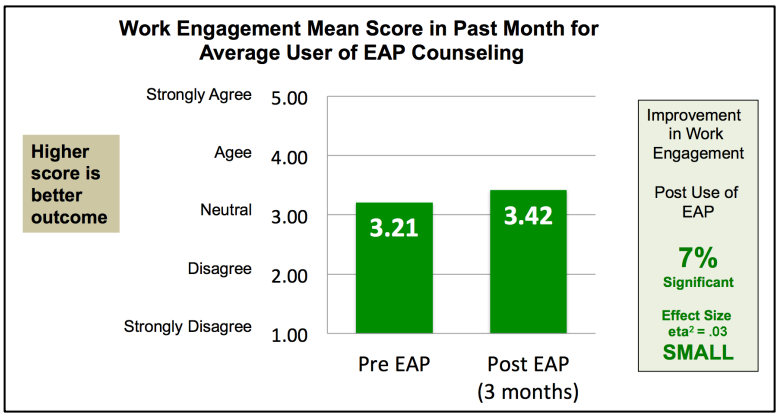
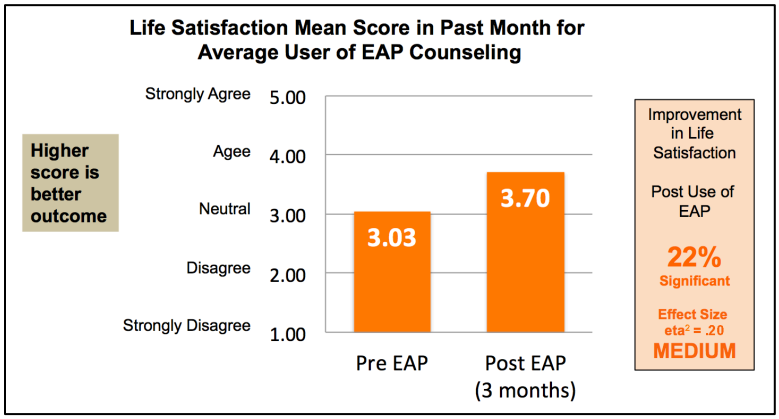


Figure 5

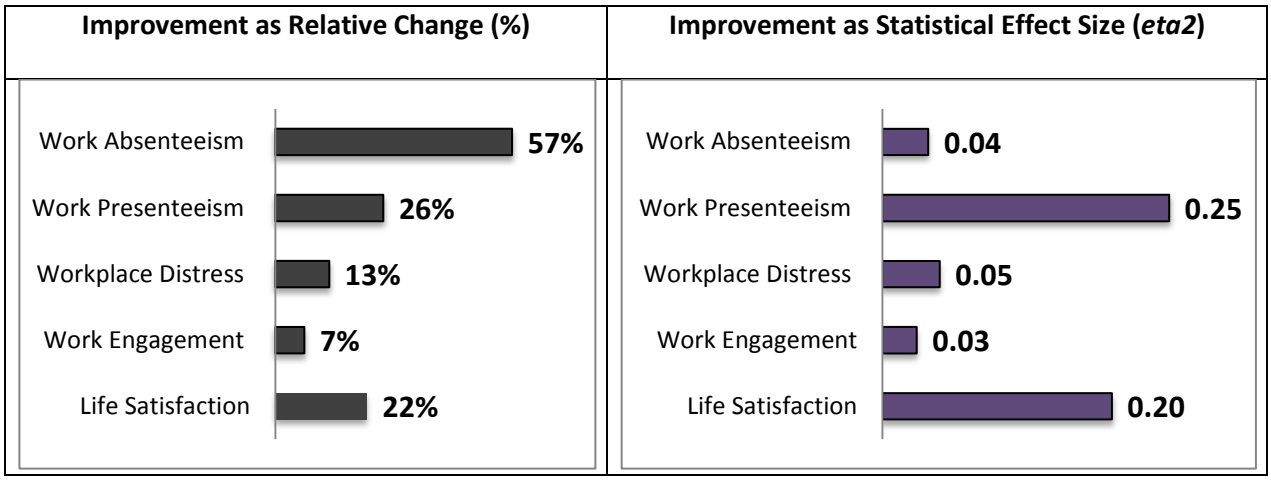


Research Question 2: Which of the five WOS dimensions have the largest size effects for improvements over time?

Although each of the tests were significant beyond chance levels, the WOS measures also differed substantially from each other in the size of the relative change from baseline to after EAP counseling: absenteeism had the largest change (57% relative improvement), followed by presenteeism and life satisfaction (26% and 22%), with the work distress and work engagement measures both much lower (13% and 7%). These results are accurate mathematically (i.e., taking the difference between the Pre score minus the Post score and dividing that raw difference into the Pre score to yield a %). However, it is better to take into account not just the magnitude of the differences in mean score levels at Pre and Post but also the degree of variance around each of these averages. It is also important to standardize the different rating scales across the outcomes, as absenteeism is measured in hours (range from 0 to 160+) whereas the other WOS dimensions are measured in ratings of agreement or disagreement with a range of 1-5. Estimates of statistical effect size offer a way to more fairly compare the results of the five WOS scales. We calculated the *partial eta squared* version of effect size from GLM repeated measures test results. This estimate can range from 0 to over 1.00; **a small size effect is 0.02 to 0.12; a medium size effect is 0.13 to 0.25; and a large size effect is 0.26 or greater.**

The results are very different for absenteeism when comparing relative change in mean scores and the standardized effect sizes (See Figure 6). When looking at relative % improvement (left side), absenteeism has an inflated impact as its true effect size is small. **Presenteeism** and **Life Satisfaction** actually had the biggest change (both medium size effects), while the other three outcomes had quite small size effects. Note that the four WOS items (which share the same response scale) other than Absenteeism, have the same rank ordering among each other when using either the relative change or the statistical effect size approaches (see pattern in left and right sides of Figure 6)

Figure 6. Two Methods for Interpreting Improvement on WOS-5 Items



CONCLUSION: Although all five WOS outcomes show significant changes in the expected directions, Work Presenteeism and Life Satisfaction have the greatest improvement after use of EAP counseling.

WOS POOLED RESULTS FOR 2017:
Part 2. MODERATING FACTORS OF IMPROVEMENT OVER TIME

We also explored if the level of change over time from before to after use of EAP counseling was moderated by other factors. These tests included certain demographic, clinical and employer factors (see below).

Demographic Factors	Clinical Factors	Employer Context Factors
Age of EAP User Sex of EAP User	Referral Source Into EAP Type of Presenting Problem	Industry Delivery Model

Research Question 3A: To what extent is the improvement over time in each of the five WOS dimensions different for the demographic factors of age and sex of client?

Research Question 3B: To what extent is the improvement over time in each of the five WOS dimensions different for the clinical factors of referral source and presenting problem type?

Research Question 3C: To what extent is the improvement over time in each of the five WOS dimensions different for contextual factors created by the business sponsor of the EAP: the industry of the employer and the delivery model for the EAP service (internal program vs. external vendor)?

Even though the different groups for the moderating factor may have some slight differences between each other in where they start out on the Pre EAP measure, it is the degree of change from the Pre to the Post measure that is tested in an interaction effect. We tested change over time using a general linear model (GLM) procedure and repeated measures approach to explore the impact of the moderating factors. In this process, we get the *partial eta squared* version of statistical effect size. This statistic was used to properly interpret the tests of moderating factors when using such an extremely large sample where testing for the probability of an effect being significant has less meaning. More specifically, we wanted to know if the *interaction effect* of Time X Age (or other factors) was significant beyond chance and how big the effect size was.

This procedure determines if the degree of change (the % improvement from Pre to Post) between the groups is different. For instance, do males have a larger reduction in absence hours than females? Does one group have minimal change in work distress while another group has a large change? Do groups based on EAP delivery model have a pattern of change in life satisfaction that goes in opposite directions (Internal EAPs increase while External EAPs decrease)?

Separate tests were conducted to explore if demographic (age, sex), clinical (problem and referral type) and employer characteristics (industry and delivery model) were associated with the improvements in each of the five WOS outcomes. As not all EAPs provided data for every case for each of the moderator factors, the sample sizes ranged from 3,700+ to 16,400+. Even so, each sample was extremely large and had enough cases to conduct a proper test.

WOS-5 POOLED RESULTS BY AGE

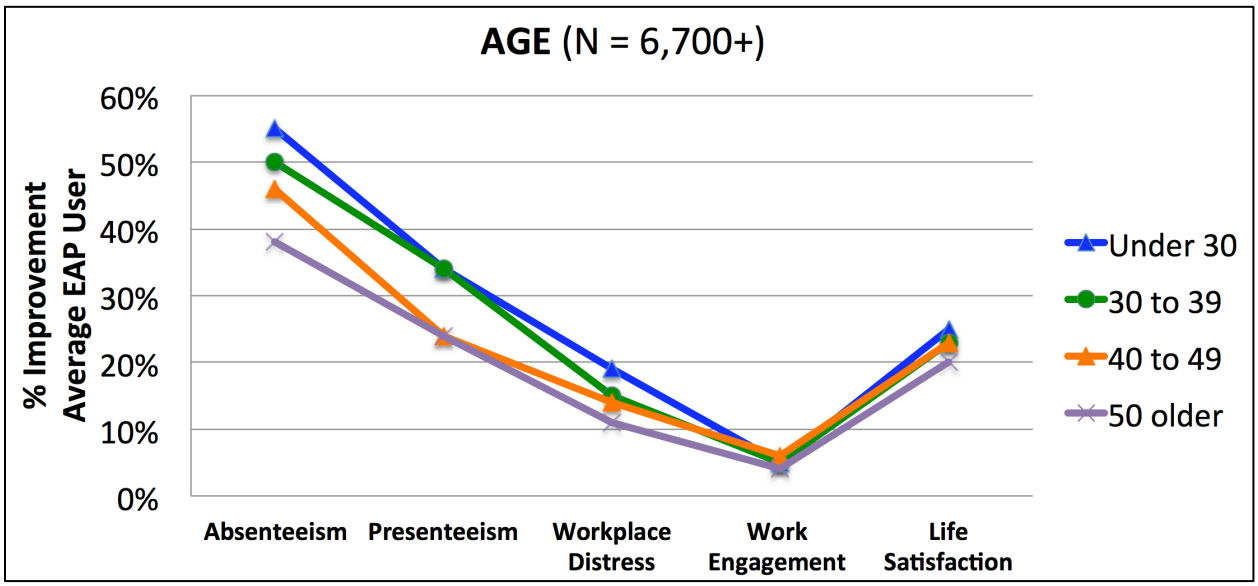
Age of the EAP client was categorized into four levels: under ager 30 (about 1,890 cases); age 30 to 39 (about 2,200 cases); age 40 to 49 (about 1,100 cases); and age 50 or higher (about 900 cases). However, for most of the total sample age was unknown (about 10,200 cases). From this data we learned that the subset of the sample with age was comprised of 31% who were in their 20s or younger; 36% in the 30s; 18% in the 40s and 15% in their 50s. Overall, this is a fairly young cohort of EAP users as the majority of these people were under age 40.

See Table A in Appendix A for Pre and Post EAP scores on the five single-item WOS measures and tests of change by age groups.

Figure 7 below displays the very similar patterns of change across the five WOS outcomes for the four age groups. All tests of the interaction effect of Age X Time were either non-significant or had a very small effect size (< 0.01).

Although of minor importance, on four of the WOS measures (other than Work Engagement), the oldest and youngest groups tended to be the farthest apart such that older clients had the least improvement and the youngest age group had the most improvement.

Figure 7. Age as Moderating Factor for Improvement Over Time in WOS Outcomes



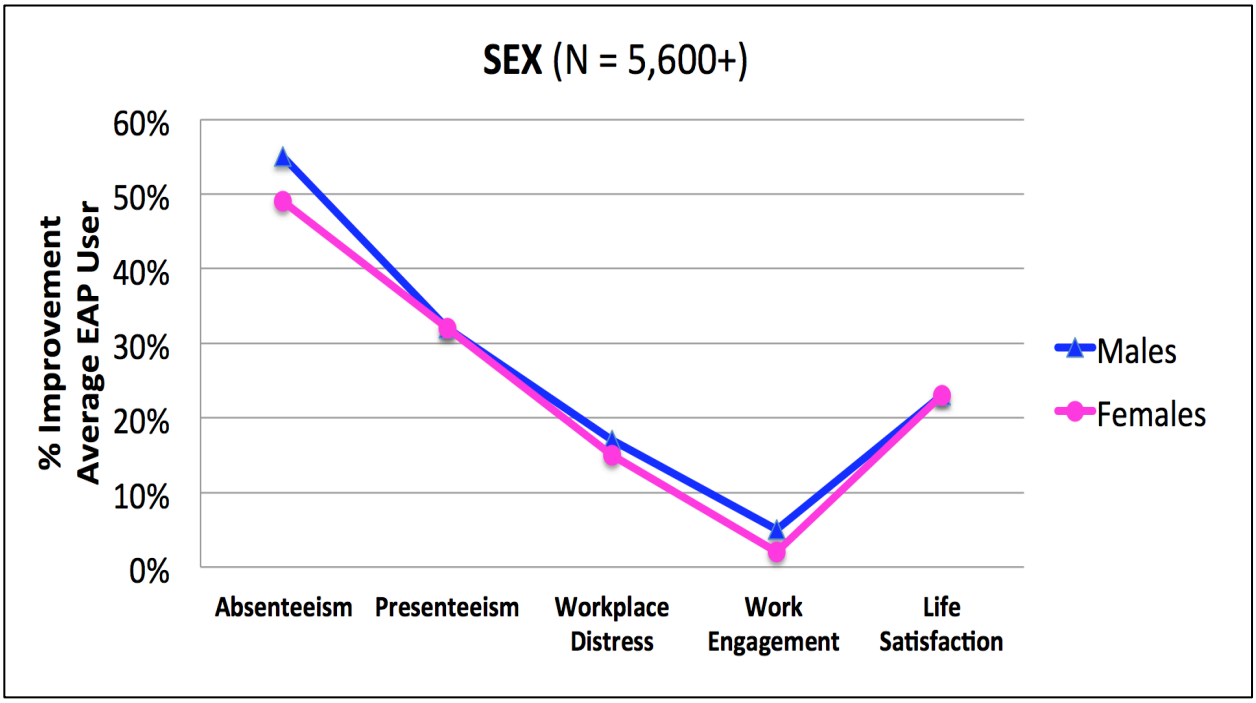
WOS-5 POOLED RESULTS BY SEX

Sex of the EAP client was available for about 5,650 cases; yet with most of the total sample sex was unknown (roughly 10,600 cases). From this data we learned that the subset of the sample with sex was comprised of about one-third men and two-thirds women.

See Table B in Appendix A for Pre and Post EAP scores on the five single-item WOS measures and tests of change by men and women.

Figure 8 below displays the very similar patterns of change across the five WOS outcomes for men and for women. All tests of the interaction effect of Sex X Time were either non-significant or had a very small effect size (< 0.01).

Figure 8. Sex as Moderating Factor for Improvement Over Time in WOS Outcomes



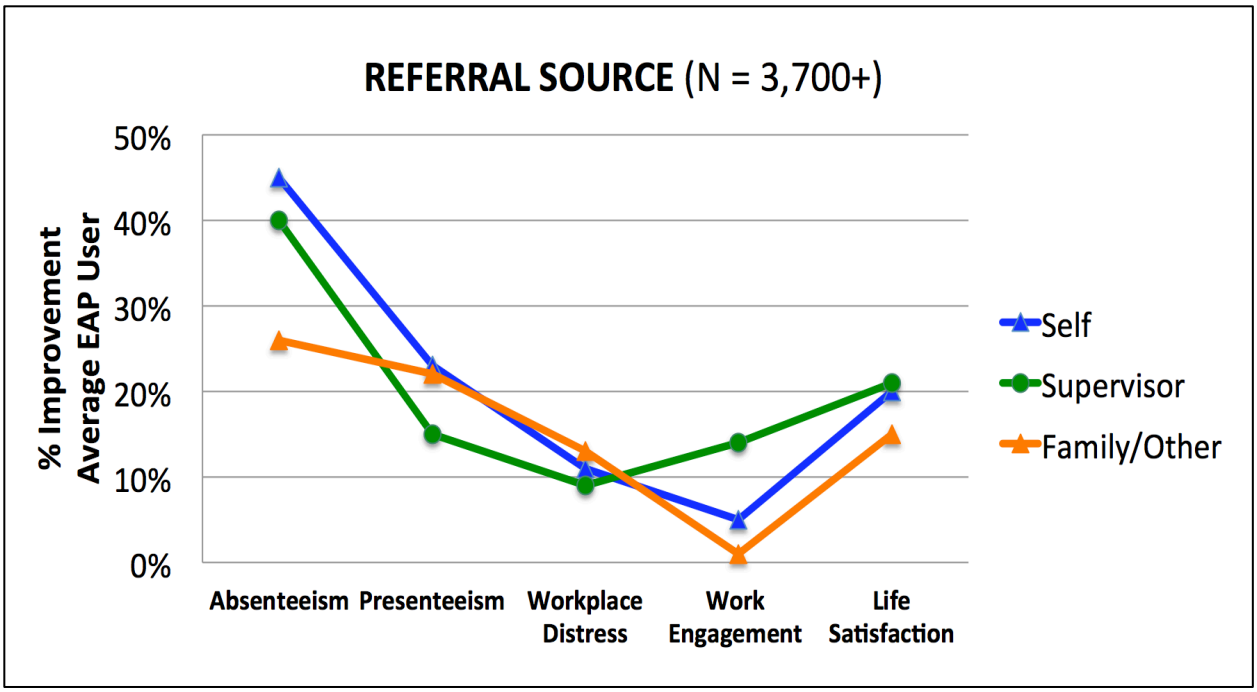
WOS-5 POOLED RESULTS BY REFERRAL SOURCES

Over 3,700 cases were also categorized based on referral sources, with the vast majority of other cases unknown for referral type (about 12,600). A *Self referral* was by far the most common type of referral into the EAP (about 3,200 cases – 85%); referrals from *Supervisor* (about 210 cases – 6%) and referrals from *Family or Other* (about 350 cases – 9%).

See Table C in Appendix A for detailed results of Pre and Post EAP scores on the five single-item WOS measures and tests of change by Referral groups.

Figure 9 below displays the very similar patterns of change across the five WOS outcomes for the three referral sources. All tests of the interaction effect of Referral Source X Time were either non-significant or had a very small effect size (< 0.01).

Figure 9. Referral Source as Moderating Factor for Improvement Over Time in WOS Outcomes



WOS-5 POOLED RESULTS BY PRESENTING CONCERNS

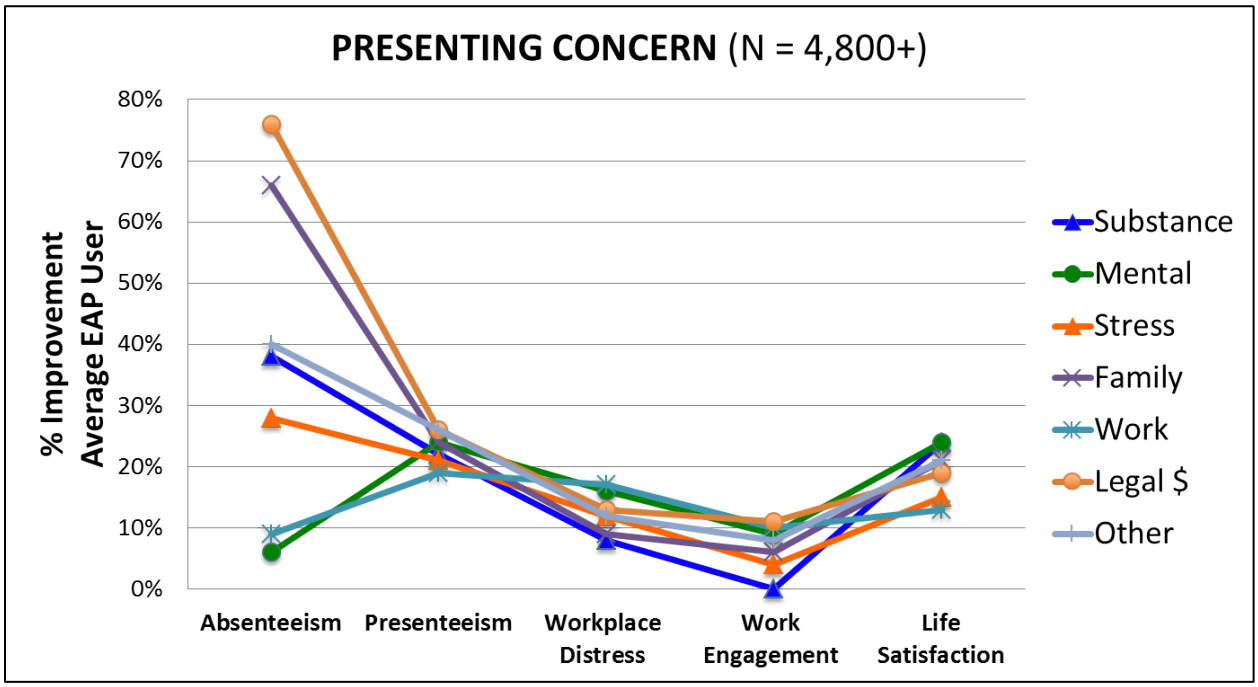
About 4,900 clients were categorized based on their self-reported presenting concerns, including *Family* (marital or child/elder problems; about 1,500 cases – 31%), *Mental Health* (including anxiety, depression, grief, and behavioral/conduct problems about 1,350 cases – 28%), *Stress* (about 1,000 cases – 20%), *Occupational* (about 350 cases – 7%), *Substance Use* (about 180 cases – 4%), *Financial/Legal* (about 150 cases – 3%) or *Other* (about 350 cases – 7%). Unfortunately, most of the EAP groups submitting data did not provide this information and clinical problem type was unknown for about 11,500 cases.

See Table D in Appendix A for Pre and Post EAP scores on the five single-item WOS measures and tests of change by different Concerns.

Figure 10 below displays the very similar patterns of change across the five WOS outcomes for the seven types of presenting concerns. All tests of the interaction effect of Concern Type X Time were either non-significant or had a very small effect size (< 0.01).

The apparently large differences for Absenteeism in the figure below arise mainly because of the wider range in absence hours possible in the measure, which greatly affects the calculation of percentage change over the level at baseline. When taking into account the substantial variance around the mean scores at Pre and Post EAP use exhibited in each of the concern type subgroups, the rate of change in Absenteeism actually was not that different in more sophisticated testing procedures.

Figure 10. Referral Source as Moderating Factor for Improvement Over Time in WOS Outcomes



WOS-5 POOLED RESULTS BY INDUSTRY

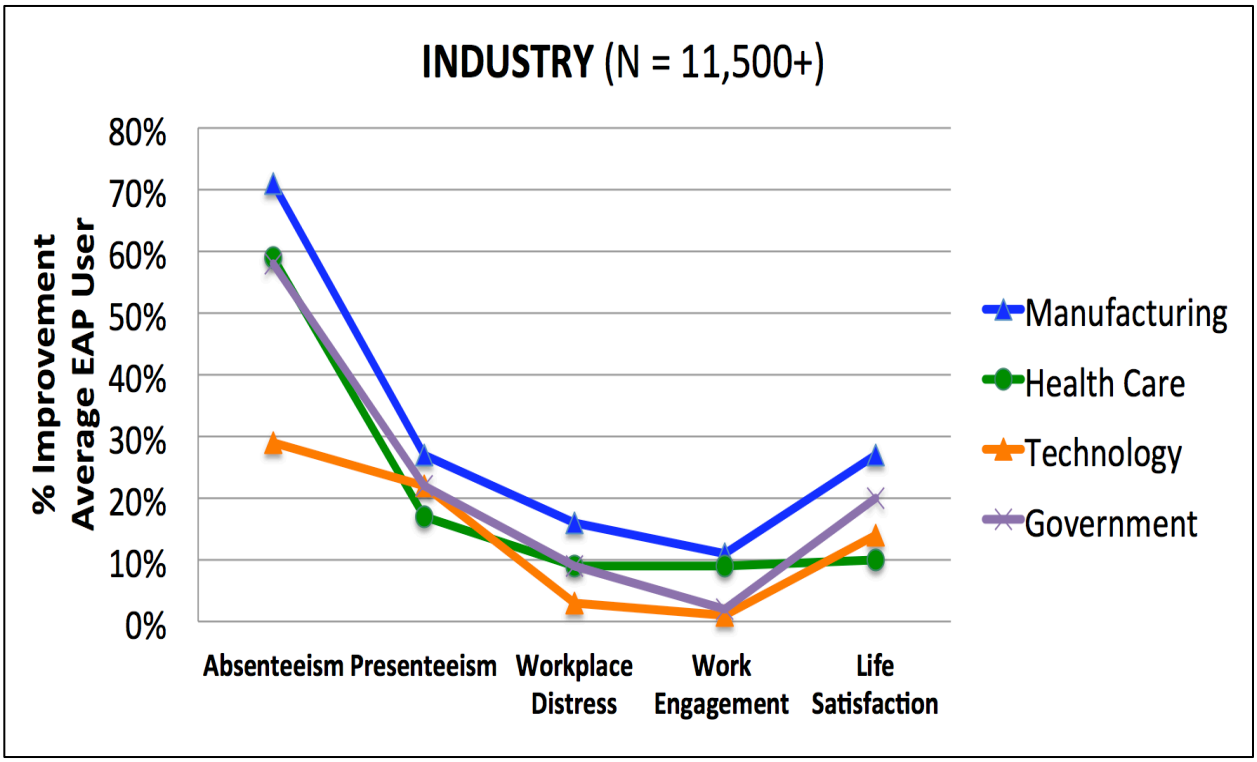
Based on CGP staff's knowledge of the EAP provider, and that provider's client organizations, where possible client organizations were categorized as belonging to one of four industries: *Manufacturing* (about 5,200 cases – 45%), *Government* (about 3,400 cases 29%), *Healthcare* (about 1,600 cases – 14%) and *Technology* (about 1,400 cases - 12%). However, another 4,800 cases could not be placed into one of these categories and were represented in tests as an unclassified group.

See Table E in Appendix A for Pre and Post EAP scores on the five single-item WOS measures and tests of change by Industry.

Figure 11 below displays the very similar patterns of change across the five WOS outcomes for the four industries. All tests of the interaction effect of Industry Type X Time were either non-significant or had a very small effect size (< 0.01).

The apparently large differences for Absenteeism in the figure below arise mainly because of the wider range in absence hours possible in the measure, which greatly affects the calculation of percentage change over the level at baseline. When taking into account the substantial variance around the mean scores at Pre and Post EAP use exhibited in each of the industry subgroups, the rate of change in Absenteeism actually was not that different in more sophisticated testing procedures.

Figure 11. Industry of Employer as Moderating Factor for Improvement Over Time in WOS Outcomes



WOS-5 POOLED RESULTS BY EAP DELIVERY MODEL

Based on CGP staff's knowledge of the EAP provider, the delivery model for the EA services were categorized as being either Internal Program (with dedicated EAP staff within one larger organization) or External Vendors and Other Programs. The number of cases served by Internal Programs was about 2,150 (13%) while the other roughly 14,200 cases were served in an External/Other delivery model (87%).

See Table F in Appendix A for Pre and Post EAP scores on the five single-item WOS measures and tests of change by EAP Model.

Figure 12 below displays the very similar patterns of change across the five WOS outcomes for the two types of delivery models. All tests of the interaction effect of Model X Time were either non-significant or had a very small effect size (< 0.01).

Figure 12. EAP Delivery Model as Moderating Factor for Improvement Over Time in WOS Outcomes

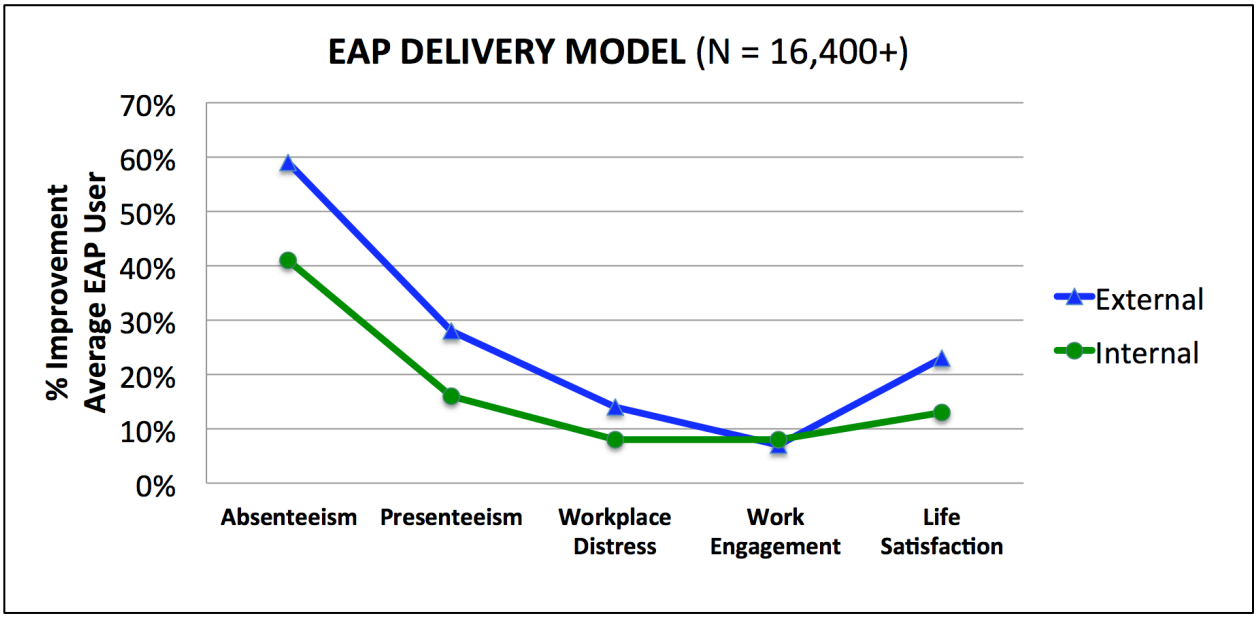


Table 1. Results of Tests of Six Possible Moderator Factors on Extent of Improvement Over Time in WOS-5 Measures

	Size of Effect for Interaction of Time X Moderator Factor **WOS-5 Item**				
Moderator Factor:	**Work Absence**	**Work Presenteeism**	**Work Distress**	**Work Engagement**	**Life Satisfaction**
Age	very small	very small	very small	very small	very small
Sex	very small	very small	very small	very small	very small
Referral	very small	very small	very small	very small	very small
Problem	very small	very small	very small	very small	very small
Industry	very small	very small	very small	very small	very small
Model	very small	very small	very small	very small	very small

SUMMARY of MODERATOR FACTOR TESTS

The results showed the *degree of change over time* (% improvement) from Pre to Post use of EAP counseling occurred to a similar extent for various factors on all of the five WOS measures. As shown in Table 1, the statistical tests found either very small or non-significant interaction effects for these six potential moderating factors. **The conclusion is that age and sex of client, source of referral and presenting concern, and industry and delivery model have almost no practical impact on the effectiveness of the EAP counseling as represented in the rates of improvement on the five WOS scales.** Thus, these factors do not appreciably affect the degree of change over time (which is the primary outcome of interest) - as almost all conditions within each factor show the expected significant positive changes over time on the five WOS items and to have effect sizes for this change that were similar.

Nonetheless, there are some differences between some of groups on these factors at baseline that are interesting from a descriptive perspective – as some subgroups have a slightly different set of starting and ending levels on certain outcomes – even though their overall pattern of change over time was similar. For example, presenting concern had considerable differences in the number of absence hours at baseline for different concerns, even though all concerns had a reduction in hours after EAP use. Referral type had an interesting finding such that improvement in work engagement was higher for those with a referral from their supervisor than other kinds of referrals – even though the other kinds also had a positive (if smaller) change on this outcome.

CONCLUSION: In general, EAP counseling is effective to a similar level on all five WOS outcomes for cases of different ages, for males and females, for different referral sources into the EAP, for different presenting concerns, for different industries and for different delivery models for EA counseling.

WOS POOLED RESULTS FOR 2017:
Part 3. CHANGE IN PROBLEM STATUS

Finally, the Problem Status approach to testing WOS data is presented. This is an alternative procedure for coding the case-level WOS data and for analyzing the results. The standard approach is statistically oriented and examines the change in mean average scores at pre and post use of the EAP. But the placement of the average scores *relative to* the full range of the response scale involved is ignored (i.e., the 1-5 rating). This new approach focuses on interpreting the user scores relative to the inherent meaning embedded in the response scales to determine the more clinically relevant portion of the EA client population who score at a "problem level" on a WOS outcome. This approach borrows from the wellness field's emphasis on finding cases who are at-risk for a health issue, then providing an intervention and determining how many of the cases had improved to no longer be at-risk after completing the intervention. This outcome is simple and just compares the percentage of the total cases at a problem level at Pre and at Post use of the EAP

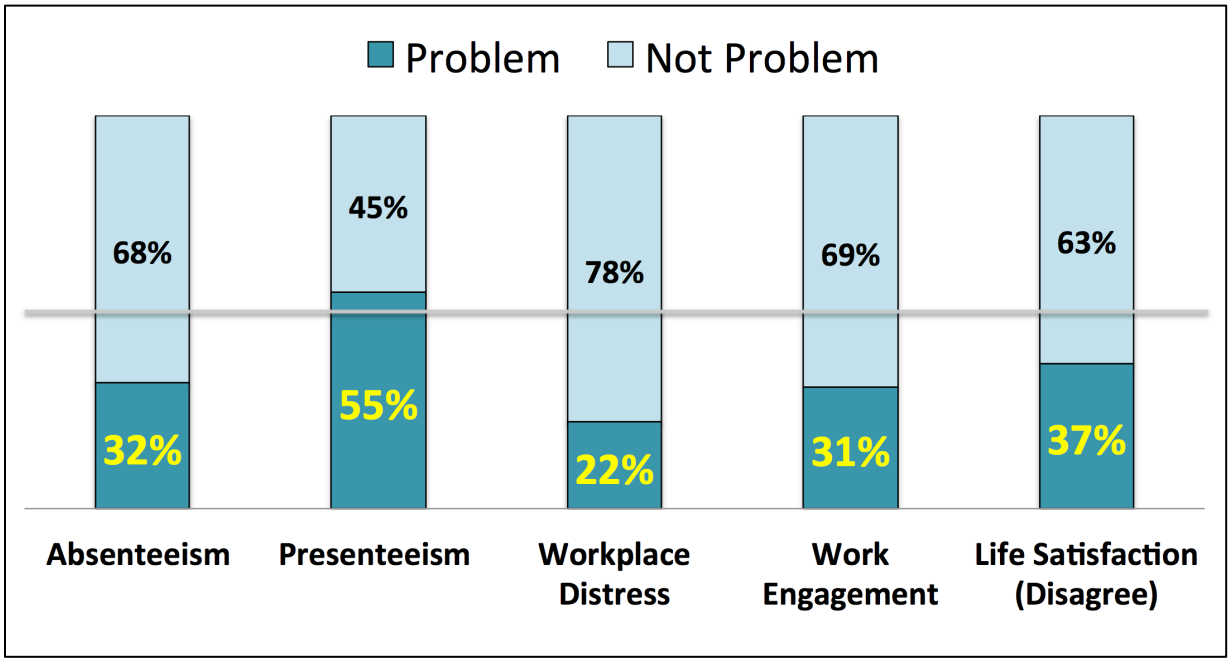
The main question here with EAP counseling is how many people are having problems in the five areas of the WOS - with missing work, lack of concentration while at work, distress over work, disengaging from work and being unsatisfied with their life when they start EAP counseling? And then how many of these same cases had improved enough at the follow-up to no longer be at the problem level?

Research Question 4A: Among the full population of users of EAP counseling services, how many have problems with missing more than the typical amount of time from work, lacking concentration while at work, feeling distress over work, disengaging from work and being unsatisfied with life when they start counseling?

Research Question 4B: Among the full population of users of EAP counseling services, how many cases have problems in each WOS outcome area at the follow-up after use of EAP counseling?

The WOS data is re-coded for problem level status in the following manner. As the typical employee misses less than half a day of work each month due to health reasons, a criterion of four hours was established. EAP cases with more than 4 hours of absence are considered at a "problem level" of absenteeism (for both the 5-item and 1-item absenteeism measures). The two WOS scales that were phrased as unhealthy constructs (Presenteeism and Work Distress) were considered to be at a "problem level" when cases either agreed or strongly agreed with the item. Conversely, the remaining two WOS scales that were phrased as healthy constructs (Work Engagement and Life Satisfaction) were considered to be at a "problem level" when cases disagreed with the item (i.e., selected options of disagree or strongly disagree).

Figure 13. Percentage of Cases at "Problem Level" and "Not at Problem Level" for WOS Measures at Before Use of Counseling

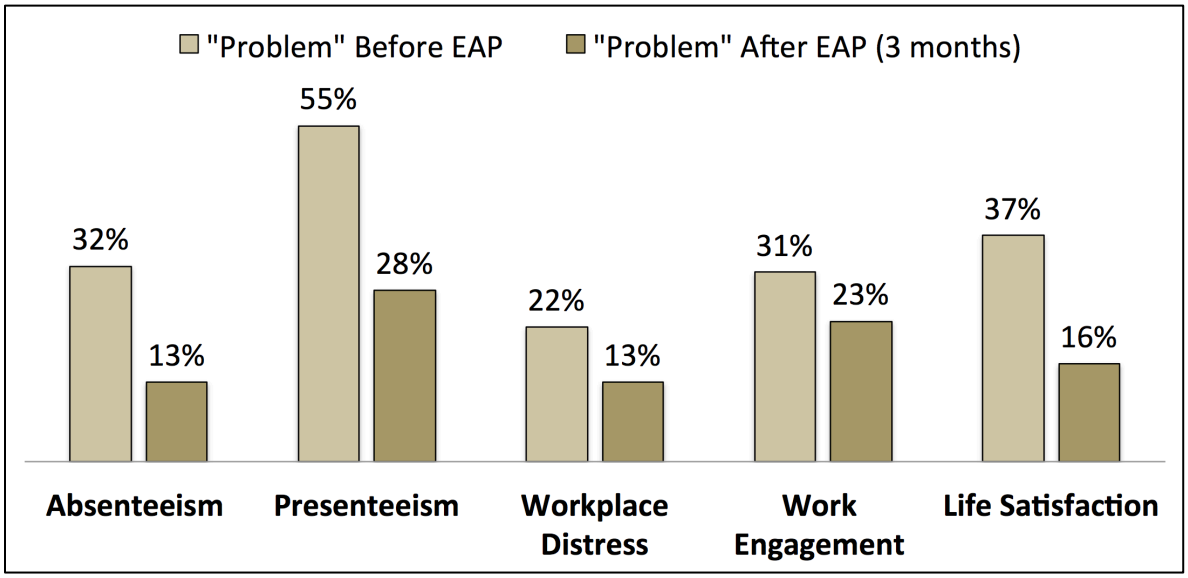


The WOS scores were recoded for all cases with available data. Absenteeism was based on rescoring the sum of the hours from the WOS 5-item version and the single-item version. The other four WOS outcomes are based on only the single item featured in the WOS-5 brief version, but taken from all available responses pooled across the full WOS-25, WOS-9 and WOS-5 versions.

The results presented in Figure 13 reveal that the majority of EAP cases are *not* at problem level on four of the five WOS scales when they start counseling. This fact is an indication of the acute - but not clinically severe - nature of most individuals who are healthy enough to be working but who need to seek help from employee assistance programs. These results also indicate that the majority of employees do access EAP services before their work absence, work distress and work engagement is seriously affected.

Only the outcome of *work presenteeism* is a problem for the average EAP user (55% of cases). The EAP core technology goal of supporting employees with behavioral health issues that interfere with their ability to work productively appears to be a real opportunity for most EAPs as presenteeism is the most troubling area while the other four outcome dimensions seriously impact only between one-quarter and one-third of all cases.

Figure 14. EAP Results for Problem Status on WOS Outcomes at Pre and Post Use of EAP



As shown in Figure 14, each of the five WOS measures had a reduction in the percentage of cases at a "problem level" after use of the EAP compared to before the EAP. Each change also was significant at beyond chance ($p < .05$). The greatest impact from use of EAP counseling was for the outcomes of presenteeism (net change of 27 fewer cases at Problem Level after EAP per 100 total cases) and life satisfaction (21 per 100), followed by absenteeism (19 per 100) with both work distress and work engagement much lower (9 and 8 per 100). This pattern of impact for the WOS scales is much closer to the pattern found when using the statistical effect size metrics (most accurate) that found work presenteeism and life satisfaction as medium size effects ($eta^2 = .25$ and .20) and the other outcomes with only small size effects (.03 to .05).

Also, the Problem Status analysis is easy to do in Excel without the more advanced statistical tools (i.e., SPSS or SAS) needed to calculate *t*-tests and effect sizes. It also has the advantage when presenting results to employers of using the same well-known health and wellness goals of reducing the percentage of the employee population at-risk (e.g., a change in problem status).

WOS POOLED RESULTS FOR 2017:
Part 4. DISCUSSION OF RESULTS

Which constructs of the WOS have demonstrated better outcomes than others?

Effects for Presenteeism and Life Satisfaction are particularly strong. These two outcomes are the big story for where EAPS make the most difference. The other three WOS outcomes are still useful, if less prevalent as problematic issues.

Improved Presenteeism (l focus and concentration while at work) can produce cost savings through productivity enhancements that likely doubles the expense of the EAP itself (See example in Appendix C). Life Satisfaction may also be functioning in this measurement context as a general indicator of clinical relief and restored personal well-being after interacting with the EAP program and counselor.

Absence from work is simply not a significant work performance problem in most EAP cases. When using the single-item WOS Absenteeism measure, the majority of cases (59%) presenting at the EAP have zero absence hours in past 30 days. This increases to 79% with zero absence at the follow-up. But the number of hours involved, on average for all cases including so many at zero, is rather small – a change from Pre to Post of 5.6 to 2.4 hours. Considering a typical full-time work schedule of 160 hours in a month, this amount of lost work time is less than 2%. Other research shows the typical employee misses between 2 to 3 hours per month due to health or personal issues. Thus, the level of absenteeism among EAP cases is not that much higher than typical levels of absence.

However, when the full WOS set of five items (25-Item or 9-item Scales) are used to ask about hours missed from work in the past 30 days, the total hours of absence are much higher than when only the single item in the WOS-5 is used. The single-item thus underestimates both the absence burden at baseline (10.9 vs. 5.6 hours, respectively) and reduces the net reduction in that burden after use (difference of 5.3 vs. 3.2 fewer hours, respectively).

One implication of choice of which WOS absenteeism measure to use is for the calculations of ROI, in which the total savings for absence costs would accordingly be slightly lower when using the single-item measure of absence.

This data reinforces what we need to emphasize in the EAP value story of reducing presenteeism (which is substantial for most EAP cases) and restoring the associated productivity levels to be more focused when they are working. In the ROI model, of the total dollar savings in avoided further lost productive time due to EAP use, about 80% comes from restored productivity (improved presenteeism) and only 20% from reduced absenteeism.

Although EAP use does move Work Engagement and Work Distress in positive and expected directions, the effect for these outcomes is much smaller. It may be that EAP interventions delivered at the individual employee level cannot directly impact workplace and managerial conditions operating at the organizational level that drive both Work Engagement and Work Distress.

Why were there so few meaningful differences in the rate of change in outcomes by client age, sex, referral source, presenting problem, industry type, or EAP delivery model?

We were surprised to learn that demographic, clinical and employer contextual factors have largely insignificant differences on these outcomes and had very small effect sizes.

Can you explain the lack of difference in results between internal and external models of EAPs?

External/Mixed had slightly higher levels of improvements over "pure" Internals models on four of WOS constructs, although the differences were very small. The two models were most similar for the change in Work Engagement. Although externals were slightly higher in baseline levels of absenteeism and presenteeism, it is possible that pure internals (here employed EAP staff exclusively perform key EAP functions on behalf of the sponsoring organization) get a higher percentage of more clinically severe or complex cases compared to externals. If so, then other variables may be more important than the employment source for the EAP counselor or the location of the program. Pure internals may indeed outperform externals in select areas (such as the handling of management referrals and other more organizationally focused problems) that are not measured out by the WOS.

If it is not the factors examined in this study, what else explains the degree of variability or difference in the change over time in WOS outcomes?

There are numerous variables responsible for differences in data that are missing from the study – such the overall health or well-being status of the client (risk factors), the counselor rated severity of the case (clinical severity), the number of counseling sessions experienced (clinical dosage), the fidelity of the counseling interventions provided to meeting best practices for EAP (quality), if the case was referred out after the EAP for more serious treatment (clinical referral), if the sessions were provided in-person or telephone or e-health technology tools (clinical modality). All of these important factors are not in the global dataset we have on the WOS. Further research is needed to tease apart which of these factors are most strongly impacting how clients improve from EAP counseling and support.

Even so, this study clearly indicates that "typical" EAP interventions have a substantial impact on work presenteeism and overall life satisfaction of employees and a smaller effect on reducing problems of work absence, distress and lack of work engagement. It's true that we would be more effective as a field if collective efforts at intervention were based more on the operational and clinical practices that represent quality of care and which drive outcomes. This way the most successful interventions that contribute to the greatest improvements could be more easily replicated throughout the EAP industry.

Conclusion

This evaluation – completed through the collective efforts of a large practice-based research network of EAP providers who agreed to use the same tool and data collection approach and share their data – fully supports the claim that EAPs *"improve the productivity and healthy functioning among employees in the workplace through the application of specialized knowledge about human behavior and behavioral health."* In other words, EAPs by and large do what they intend to do, and are an excellent resource as well as a good investment for employers.

WOS POOLED RESULTS FOR 2017:
Part 5. HISTORICAL REVIEW

For those readers who are not familiar with the project, the *importance, background*, and *implementation* of the WOS measurement approach to outcomes from EAP are now described.

IMPORTANCE

Why should my EAP be concerned about measuring outcomes?

Our historic focus for measuring EAP success has relied on utilization rates and client satisfaction surveys – *neither of which are actual workplace outcomes*. Many EAPs don't know the extent to which their program or interventions actually improve the work performance of employees who use EAP services. This lack of information means employers, purchasers, or other stakeholders focus on two metrics where information does exist: **cost** and **utilization**.

Without an effective method and tool to measure outcomes, there is no link between cost and expected results. When quantitative measures of value are lacking, many business leaders remain skeptical of the value proposition of services like EAP, Work-Life, and Wellness. The very essence of value is outcomes achieved relative to cost incurred – so those EAPs who do not measure outcomes struggle in defining a coherent value proposition.

Wouldn't you like your EAP to be paid more?

EAP providers are currently not paid in proportion to their effectiveness, and this is unlikely to change unless the profession embraces improved outcome measurement. It's time that EA professionals spend less energy and time on counting heads, dissecting *processes*, and invest more in measuring *outcomes* and demonstrating **results.** Imagine a future EAP marketplace in which the focus is on actual "results" instead of low price and program "features."

Why the WOS instead of other measurement tools?

As opposed to a patchwork of measurement tools that have not advanced the EA field, the WOS presents a *single* tool that can be used across the EAP spectrum for demonstrating effectiveness, and in turn furthering the field. While not foolproof, the WOS is demonstrating that EAP intervention produces statistically significant improvements in workplace outcomes with very large samples of employees. The 5-item version is easy to administer – a crucial point since most outcome measures are time consuming, consider only one construct, and/or are expensive to purchase or administer.

What are the key features of the WOS?

- Scientifically validated and tested
- Focused on workplace (not clinical) outcomes
- Free with the signing of a license agreement – go the EAPA website: bit.ly/WOS-License-Agreement
- Short (5 items) and yet still able to detect sensitive change

How does my particular EAP benefit by using the WOS?

Client organizations are most interested in the workplace impact of their particular EA service rather than hearing about research on other programs or employer groups. By submitting data to CGP, you will be able to produce workplace outcome reports that are specific to your services. You will also be eligible to receive complimentary data analysis when you submit de-identified data to CGP.

BACKGROUND

How do the versions of the WOS differ?

The original 25-item WOS includes the same core constructs, but the longer version goes into greater detail by listing five item entries under each construct. Conversely, the 5-item WOS only lists **one** entry in each of the same variables. However, *the 5-item WOS approximates the original 25-item version without negligible loss of reliability, validity, or sensitivity.* CGP developed the 5-item version at the request of WOS users to reduce the amount of time it takes for clients to complete the tool, increasing response rates. Thus, most EAPs have migrated to using the 5-item version.

In what ways are the different versions of the WOS similar?

All versions use the self-report 1-5 Likert scale that examines various components of the effects of personal issues in relation to workplace functioning (other than absenteeism) and life satisfaction, with the exception of Absenteeism which looks at hours missed due to a personal concern.

Is the 5-item Absenteeism scale in the 25-item WOS version equivalent to the single item Absenteeism question in the brief 5-item WOS version?

The answer is No. Even though both the 25-item and the 5-item WOS work well in terms of showing effectiveness for reducing absenteeism, they are not directly interchangeable between the 25- and 5-item versions like the other four constructs. We should expect some variance in response between the single Absenteeism question (5-item version) and the five Absenteeism questions (25-item version).
In other words, the five Absenteeism questions (25-item version) asks about five different ways of being absent that are not specified in the single question (e.g., required you to be on phone or e-mail, made you late, caused you to take off early, pulled you away from work, and caused you to miss work altogether). This added prompting of five different ways to be absent may also lead to deeper thought and retrospective assessment of absence-related experiences over the past 30 days compared to the psychological context of answering the more general single item version.

As mentioned above, four of the WOS constructs (but not Absenteeism) are derived from classical psychometric theory (called "effect-indicator"). For the 25-item version this means we ask the same question five different ways for four constructs: Presenteeism, Work Engagement, Life Satisfaction, and Work Distress. So for these four constructs the short version (5-item) is comparable to the 25-item. But for Absenteeism **only** the 25-item version is different – as noted, it is based on a "formative" measurement structure, meaning we ask about 5 different ways one can be absent and then add up each item for a total score.

IMPLEMENTATION

How is the 5-item WOS administered?

The WOS uses two modes of delivery: 1) counselor or intake worker administers to subjects over the phone or in person; 2) subject self-administers over the Internet or by paper and pen. Both modes work equally well. Subjects are employee clients (not family members) who voluntarily provide answers to the 5-item WOS as they start EAP services and about 90 days after the initial intake.

Although subjects' identities were tracked from pre to post-EAP use, they were guaranteed anonymity and assured that employers would never be allowed to view their responses. Data was **only** shared as an aggregated average for an employer or group of employers.

How were WOS evaluations typically designed by user groups who submitted data?

Subjects (or EAP employee clients) are given the WOS *before* introducing the EAP intervention and then several months *after* the intervention (usually 90 days after the intake) to see if the EAP had a sustained impact after the conclusion of the counseling). This time frame is vital, as opposed to administering the post-test immediately after the last EAP visit.

This design of using only the intervention group who experienced EAP counseling and no comparison group of employees who were equally distressed but who do *not* get EAP counseling, is known as a "Correlational" or "Before/After" single-group study. It can identify *if* employees improved at work after EAP counseling, but it cannot definitely explain *why* or if the EAP counseling was the sole or most important causal factor in the improvement. Rather, its purpose is to test the extent of improvement in workplace outcomes in the context of EAP counseling being provided. This report confirms that the typical EAP user has improvements in all five WOS outcomes, and with a sample this large and diverse, it's highly unlikely that the EAP intervention was not a major contributing factor in what caused the positive changes from baseline to follow-up for these 16,435 employees.

How is data usually collected?

Most EAPs conducted the pre-test over the phone at the end of an intake while others had the client complete the intake in a waiting area before meeting with an EA professional. As mentioned, the post-test was typically sent out roughly 90 days after the pre-test, either by phone or email. *This required getting good locator information at intake*. Most EAP providers adopted a protocol of at least three follow-up attempts by email or phone before considering the subject non-responsive. A future best

practices change to this process could also include collecting WOS data at the final clinical session as well. This is a true Pre vs. Post design that then adds a follow-up at several months later to confirm that the change at post treatment has been maintained over a longer time period. This end of intervention data point can help link the changes on outcomes with the EAP intervention more closely than when we rely only on the measurement many months later which could also simply reflect a possible return to normal levels of work performance because of multiple other possible factors than use of the EAP.

Why was follow-up so important in implementing this WOS evaluation?

Getting subjects to respond to the follow-up post-test was a **major** factor in the success of this evaluation. Having a **50% plus** response rate helps to reduce uncertainty in reporting results. Low response or selection bias occurs when respondents are not typical of the larger population of EAP clients. A common example of selection bias in EAP settings are "client satisfaction" surveys in which response rates are often less than 8% but satisfaction levels are 95%+, which means the vast majority of EAP users who did not respond to the survey could be either neutral or dissatisfied with their EAP experience. It is better to target a random sample of EAP clients and pursue them with diligence to complete a survey or *follow-up post-test.* The exact response rate among all EAP providers who contributed to this report is unknown - although our best estimates indicate a response rate in the range of approximately 30% to 35%.

CONCLUSION

To reiterate, what makes the WOS different from other measurement tools?

The workplace outcome approach represents a departure from conventional measures by objectively identifying when EA services demonstrably work in the context of the workplace. Moreover, as noted in Appendix C, it is now possible to convert WOS results into ROI, which furthers the case for EAP services in quantifiable business terms. No survey instrument is perfect, but the WOS is the best tool to date that EA professionals have for refuting the age-old question that skeptical employers have of whether EAPs actually contribute to improvements in employee well-being and work presenteeism.

Where can I get more information?

Try the tutorial on WOS implementation at www.eapresearch.com or direct questions or a request for complimentary consultation to Dr. David A. Sharar at dsharar@chestnut.org or (309) 820-3570.

Appendix A

Results of Moderator Factors on Change Over Time in WOS-5 Measures

See next pages for the following tables of detailed data.

Table A. Improvement Over Time in WOS-5 Measures by AGE

Table B. Improvement Over Time in WOS-5 Measures by SEX

Table C. Improvement Over Time in WOS-5 Measures by REFERRAL TYPE

Table D. Improvement Over Time in WOS-5 Measures by PRESENTING CONCERN

Table E. Improvement Over Time in WOS-5 Measures by EMPLOYER INDUSTRY

Table F. Improvement Over Time in WOS-5 Measures by EAP DELIVERY MODEL

Table A. Improvement Over Time in WOS-5 Measures by AGE

Age of EAP Client	N count	PRE EAP Mean	POST EAP Mean	% Improve	Time Effect Size eta2	Time Effect Size	Interaction of Time X Age
Absenteeism 1-item							
< 30 years	1,890	2.95	1.34	**55%**	0.02	small	very small effect size = similar improvement by Age
30-39 years	2,200	3.59	1.78	**50%**	0.02	small	
40-49 years	1,091	5.95	3.20	**46%**	0.03	small	
50+ years	890	7.20	4.50	**38%**	0.01	very small	
Unclassified	5,440	7.09	2.58	**64%**	0.07	small	
Work Presenteeism							
< 30 years	1,892	3.20	2.10	**34%**	0.35	large	very small effect size = similar improvement by Age
30-39 years	2,198	3.24	2.13	**34%**	0.33	large	
40-49 years	1,091	3.32	2.52	**24%**	0.20	medium	
50+ years	892	3.25	2.56	**21%**	0.16	medium	
Unclassified	10,293	3.32	2.52	**24%**	0.22	medium	
Workplace Distress							
< 30 years	1,891	2.05	1.67	**19%**	0.08	small	very small effect size = similar improvement by Age
30-39 years	2,199	1.93	1.64	**15%**	0.06	small	
40-49 years	1,092	2.20	1.90	**14%**	0.05	small	
50+ years	892	2.35	2.08	**11%**	0.03	small	
Unclassified	10,266	2.28	2.01	**12%**	0.04	small	
Work Engagement							
< 30 years	1,890	2.97	3.11	**5%**	0.01	very small	very small effect size = similar improvement by Age
30-39 years	2,200	3.11	3.25	**5%**	0.01	very small	
40-49 years	1,091	3.17	3.36	**6%**	0.02	small	
50+ years	892	3.26	3.38	**4%**	0.01	very small	
Unclassified	9,909	3.28	3.53	**8%**	0.04	small	
Life Satisfaction							
< 30 years	1,891	3.07	3.84	**25%**	0.25	medium	very small effect size = similar improvement by Age
30-39 years	2,199	3.12	3.83	**23%**	0.22	medium	
40-49 years	1,092	3.02	3.70	**23%**	0.21	medium	
50+ years	892	3.01	3.62	**20%**	0.17	medium	
Unclassified	10,277	3.01	3.66	**22%**	0.19	medium	

Note: Improvement % in **bold** significant ($p < .05$)

Table B. Improvement Over Time in WOS-5 Measures by SEX

Sex of EAP Client	N count	PRE EAP Mean	POST EAP Mean	% Improve	Effect Size eta2	Effect Size	Interaction of Time X Sex
Absenteeism 1-item							
Male	1,907	3.70	1.66	**55%**	0.03	small	very small effect size = similar change by Sex
Female	3,741	4.28	2.20	**49%**	0.02	small	
Unclassified	5,863	7.14	2.83	**60%**	0.06	small	
Work Presenteeism							
Male	1,908	3.31	2.24	**32%**	0.32	large	very small effect size = similar change by Sex
Female	3,742	3.23	2.21	**32%**	0.30	large	
Unclassified	10,716	3.31	2.53	**24%**	0.21	medium	
Workplace Distress							
Male	1908	2.04	1.69	**17%**	0.07	small	very small effect size = similar change by Sex
Female	3743	2.05	1.74	**15%**	0.05	small	
Unclassified	10689	2.29	2.02	**12%**	0.04	small	
Work Engagement							
Male	1,906	3.18	3.33	**5%**	0.01	very small	very small effect size = similar change by Sex
Female	3,744	3.04	3.18	**5%**	0.01	very small	
Unclassified	10,332	3.27	3.53	**8%**	0.04	small	
Life Satisfaction							
Male	1,908	3.06	3.77	**23%**	0.21	medium	very small effect size = similar change by Sex
Female	3,743	3.07	3.77	**23%**	0.22	medium	
Unclassified	10,700	3.02	3.66	**21%**	0.19	medium	

Note: Improvement % in **bold** significant ($p < .05$)

Table C. Improvement Over Time in WOS-5 Measures by REFERRAL

Referral to EAP	N count	PRE EAP Mean	POST EAP Mean	% Improve	Effect Size eta2	Effect Size	Interaction of Time X Referral
Absenteeism 1-item							
Self	2,648	6.65	3.69	**45%**	0.03	small	very small effect size = similar change by Referral
Supervisor	211	6.69	3.99	40%	0.02	small	
Family/Other	263	7.94	5.86	**26%**	0.01	very small	
Unclassified	8,389	5.22	1.89	**64%**	0.05	small	
Work Presenteeism							
Self	3,211	3.38	2.60	**23%**	0.20	medium	very small effect size = similar change by Referral
Supervisor	212	2.97	2.51	**15%**	0.08	small	
Family/Other	356	3.14	2.44	**22%**	0.15	medium	
Unclassified	12,587	3.28	2.37	**28%**	0.26	large	
Workplace Distress							
Self	3210	2.33	2.08	**11%**	0.03	small	very small effect size = similar change by Referral
Supervisor	212	2.34	2.12	**9%**	0.02	small	
Family/Other	357	2.46	2.15	**13%**	0.04	small	
Unclassified	12561	2.16	1.87	**13%**	0.05	small	
Work Engagement							
Self	3,207	3.21	3.36	**5%**	0.01	very small	very small effect size = similar change by Referral
Supervisor	212	3.21	3.67	**14%**	0.10	small	
Family/Other	353	3.19	3.21	**1%**	0.01	very small	
Unclassified	12,210	3.21	3.44	**7%**	0.03	small	
Life Satisfaction							
Self	3,207	3.04	3.64	**20%**	0.18	medium	very small effect size = similar change by Referral
Supervisor	212	3.28	3.97	**21%**	0.21	medium	
Family/Other	355	3.23	3.72	**15%**	0.13	medium	
Unclassified	12,577	3.02	3.71	**23%**	0.21	medium	

Note: Improvement % in **bold** significant ($p < .05$)

Table D. Improvement Over Time in WOS-5 Measures by PRESENTING CONCERN

Presenting Concern	N count	PRE mean	POST Mean	% Improve	Effect eta2	Effect Size	Interaction of Time X Problem
Absenteeism 1-item							
Substance Abuse	158	8.92	5.49	38%	0.02	very small	very small effect size = similar change by Concern
Mental Health	1,216	8.26	3.67	**56%**	0.06	small	
Stress	748	7.05	5.05	**28%**	0.01	very small	
Family	1,316	5.95	2.00	**66%**	0.09	small	
Occupational Work	272	6.12	5.55	9%	0.00	none	
Financial / Legal	146	7.46	1.81	**76%**	0.15	medium	
Other	338	6.96	4.17	**40%**	0.03	small	
Unclassified	7,317	4.82	1.78	**63%**	0.05	small	
Work Presenteeism							
Substance Abuse	180	2.81	2.18	**22%**	0.15	medium	very small effect size = similar change by Concern
Mental Health	1,354	3.48	2.66	**24%**	0.23	medium	
Stress	984	3.31	2.60	**21%**	0.18	medium	
Family	1,508	3.32	2.52	**24%**	0.22	medium	
Occupational Work	356	2.86	2.33	**19%**	0.10	small	
Financial / Legal	154	3.31	2.46	**26%**	0.20	medium	
Other	340	3.39	2.50	**26%**	0.24	medium	
Unclassified	11,490	3.28	2.37	**28%**	0.26	large	
Workplace Distress							
Substance Abuse	180	1.92	1.76	**8%**	0.02	very small	very small effect size = similar change by Concern
Mental Health	1,351	2.38	2.01	**16%**	0.08	small	
Stress	983	2.38	2.09	**12%**	0.05	small	
Family	1,510	1.96	1.79	**9%**	0.02	very small	
Occupational Work	357	2.82	2.35	**17%**	0.09	small	
Financial / Legal	154	2.53	2.21	**13%**	0.04	small	
Other	339	2.26	2.00	**12%**	0.04	small	
Unclassified	11,466	2.18	1.89	**13%**	0.05	small	
Work Engagement							
Substance Abuse	178	3.71	3.70	0%	0.00	none	very small effect size = similar change by Concern
Mental Health	1,350	3.19	3.48	**9%**	0.04	small	
Stress	980	3.15	3.29	**4%**	0.01	very small	
Family	1,510	3.52	3.72	**6%**	0.03	small	
Occupational Work	356	2.99	3.29	**10%**	0.05	small	
Financial / Legal	154	2.94	3.27	**11%**	0.06	small	
Other	339	3.22	3.48	**8%**	0.04	small	
Unclassified	11,115	3.18	3.39	**7%**	0.02	small	
Life Satisfaction							
Substance Abuse	179	3.13	3.88	**24%**	0.25	medium	very small effect size = similar change by Concern
Mental Health	1,348	2.97	3.69	**24%**	0.23	medium	
Stress	984	3.13	3.60	**15%**	0.12	small	
Family	1,511	3.03	3.68	**21%**	0.20	medium	
Occupational Work	355	3.38	3.83	**13%**	0.11	small	
Financial / Legal	154	3.08	3.66	**19%**	0.18	medium	
Other	340	3.02	3.64	**21%**	0.18	medium	
Unclassified	11,480	3.02	3.71	**23%**	0.21	medium	

Note: Improvement % in **bold** significant ($p < .05$)

Table E. Improvement Over Time in WOS-5 Measures by EMPLOYER INDUSTRY

Industry of Employer	N count	PRE EAP Mean	POST EAP Mean	% Improve	Effect Size eta2	Effect Size	Interaction of Time X Industry
Absenteeism 1-item							
Manufacturing	1,634	7.39	2.17	**71%**	0.15	medium	very small effect size = similar change by Industry
Healthcare	803	3.60	1.48	**59%**	0.03	small	
Technology	968	4.97	3.52	**29%**	0.01	very small	
Government	3,298	8.37	3.49	**58%**	0.06	small	
Unclassified	4,808	3.65	1.73	**53%**	0.02	very small	
Work Presenteeism							
Manufacturing	5,249	3.38	2.47	**27%**	0.30	large	very small effect size = similar change by Industry
Healthcare	1,589	2.86	2.38	**17%**	0.09	small	
Technology	1,395	3.34	2.60	**22%**	0.20	large	
Government	3,389	3.50	2.68	**23%**	0.21	large	
Unclassified	4,813	3.18	2.17	**32%**	0.29	large	
Workplace Distress							
Manufacturing	5,213	2.25	1.89	**16%**	0.09	small	very small effect size = similar change by Industry
Healthcare	1,579	2.31	2.18	**6%**	0.01	very small	
Technology	1,391	2.13	2.06	**3%**	0.00	very small	
Government	3,367	2.31	2.1	**9%**	0.02	small	
Unclassified	4,796	2.06	1.69	**18%**	0.08	small	
Work Engagement							
Manufacturing	5,209	3.27	3.63	**11%**	0.09	small	very small effect size = similar change by Industry
Healthcare	1,218	3.26	3.55	**9%**	0.04	small	
Technology	1,391	3.46	3.50	1%	0.00	none	
Government	3,367	3.23	3.30	**2%**	0.00	very small	
Unclassified	11,185	3.04	3.23	**6%**	0.02	very small	
Life Satisfaction							
Manufacturing	5,212	2.83	3.59	**27%**	0.27	large	very small effect size = similar change by Industry
Healthcare	1,577	3.17	3.50	**10%**	0.05	small	
Technology	1,392	3.24	3.68	**14%**	0.11	small	
Government	3,368	3.17	3.81	**20%**	0.18	medium	
Unclassified	4,082	3.06	3.82	**25%**	0.24	medium	

Note: Improvement % in **bold** significant ($p < .05$)

Table F. Improvement Over Time in WOS-5 Measures by EAP DELIVERY MODEL

Delivery Model	N count	PRE EAP mean	POST EAP Mean	% Improve	Effect Size eta2	Effect Size	Interaction of Time X Model of Delivery
Absenteeism 1-item							
External/Mixed Providers	10,303	5.70	2.35	**59%**	0.05	small	very small effect size = similar change by Model
Internal Providers	1,208	5.16	3.07	**41%**	0.01	very small	
Work Presenteeism							
External/Mixed Providers	14,208	3.35	2.42	**28%**	0.28	large	very small effect size = similar change by Model
Internal Providers	2,158	2.91	2.43	**16%**	0.08	small	
Workplace Distress							
External/Mixed Providers	14,189	2.18	1.88	**14%**	0.06	small	very small effect size = similar change by Model
Internal Providers	2,151	2.38	2.20	**8%**	0.02	very small	
Work Engagement							
External/Mixed Providers	14,196	3.21	3.42	**7%**	0.03	small	very small effect size = similar change by Model
Internal Providers	1,786	3.22	3.47	**8%**	0.03	small	
Life Satisfaction							
External/Mixed Providers	14,200	3.02	3.72	**23%**	0.22	medium	very small effect size = similar change by Model
Internal Providers	2,151	3.16	3.57	**13%**	0.08	small	

Note: Improvement % in **bold** significant ($p < .05$)

Appendix B

Study Methodology

SAMPLE

As of April 2017, over 25 different providers or groups had kindly shared their data to Chestnut on the WOS pre and Post scores. Most of these were from the United States but over 25 non-North American countries are represented. Most of these sources are external vendors of EAP services, EAPs in hospital systems, but also some internal programs from large corporations and public sector or government organizations. The total number of EAP cases available in the dataset was 16,864. However, not all of these cases had complete data at both Pre and Post time periods on all of the WOS measures and some of these cases were removed for data integrity issues (see below).

It is assumed that the vast majority of these cases were users of counseling services from EA providers rather than from users of other EA services, although a small percent of cases were work/life or financial/legal in nature.

DATA INTEGRITY

New this year, the outliers for extremely high levels of work absenteeism were removed from all analyses. Outliers were defined as those cases with more than 160 hours of missed work in the past month (which is 40 hours week for all four weeks – which should mean the person is on leave and not actually working). Although a very small segment of the overall sample (n = 40 for the 5-item version = 0.9% and n = 32 from the 1-item version = 0.3%), these few outliers skewed the average results by adding more the 2 hours to the Pre count and 1 hour at the Post count. These outlier cases for absence were also removed from tests of the other four WOS measures as well. After removing these outlier cases, the number of unique cases appropriate for analysis was **16,792 valid cases**. The actual number of cases with complete paired data on a particular WOS measure from both Pre and Post varies from this total and is slightly smaller.

The number of total cases for Absenteeism is much lower than for the other four dimensions (over 4,850 fewer cases). This is because the original WOS was a total of 25 items, or five items per scale. The brief 5-item version was created to shorten the WOS. We were able to select the single "best" item for Presenteeism, Work Engagement, Life Satisfaction, and Work Distress from the 25-item version. But we could not do this for absenteeism data on the original version. If you inspect the 25-item version you will notice that all scales (except for Absenteeism) have slightly different wording of essentially the same question – a classical psychometric theory called "effect-indicator". But Absenteeism is based on a different structure known as "formative", meaning we ask about 5 *different ways* one can be absent from work. So the single Absenteeism question in the 5-item WOS scale is not directly interchangeable with the five questions on absenteeism in the full 25-item version. Therefore we could not include Absenteeism scores taken from the full 25-item version or from the 9-item version (which has all of the original Absenteeism items but only the four single items of the other scales) and include those scores in

this pooled data report. In this dataset, the 4,850+ cases from the original WOS scale could not be used for adding into the total for the absenteeism outcome based on the single items.

Furthermore, not all subjects endorsed all items of interest at each data collection opportunity. Thus, there is some fluctuation in the sample size because of missing data – both for the WOS and for the moderator factors.

RELIABILITY AND VALIDITY OF WOS MEASURES

The relationships between the five scale dimensions was re-examined in this very large dataset to confirm the expected pattern of moderately strong associations (positive and negative correlations) between the five WOS scales and to rule out their redundancy with each other. The single item has very high positive correlation with the full scale for the same dimension (that includes the item and four other related items). Presenteeism $r = .91$ ($n = 1{,}390$); Workplace Distress $r = .90$ ($n = 1{,}394$), Work Engagement $r = .74$ ($n = 1{,}039$) and Life Satisfaction $r = .78$ ($n = 1{,}388$). All of these correlations were significant at $p < .05$. Thus, the single item is very strongly associated with its source five-item scale.

Correlations Between WOS Measures

WOS Scale	Ab	Pr	WD	WE	LS
Absenteeism (-)	-	**.21**	**.16**	**-.10**	**-.14**
Presenteeism (-)	**.31**	-	**.26**	**-.17**	**-.27**
Workplace Distress (-)	**.13**	**.38**	-	**-.48**	**-.21**
Work Engagement	-.05	**-.22**	**-.40**	-	**.20**
Life Satisfaction	**-.17**	**-.37**	**-.26**	**.25**	-

Note: Single-item measures are above the diagonal (WOS-5; n = 16,000+) and the full 5-item measures are below the diagonal (WOS-25, N = 1,200+). Bold indicates significant a $p < .05$.

The correlational data (see above) shows the expected patterns of modest size correlations between all five WOS measures. This pattern was found for both the original 5-item scales and also the single-item versions. The findings confirm the shared meaning or overlap of different aspects of the work experience for EAP counseling cases. It shows that life satisfaction is linked somewhat to the four work outcomes. This pattern is evidence of the convergent validity of these constructs as measured. Also important for discriminant validity is the shared variance among the WOS measures is not too high (highest correlation of $r = .38$ squared = 14% shared variance). Thus, each WOS measure has its own meaning distinct from the other measures. These findings replicate the original scale development

findings from 2011 and confirm that each scale is indeed assessing a unique construct. Thus, each dimension in the outcome suite tells a different part of the outcomes story.

DATA ANALYSIS

CGP ran complimentary analysis using IBM SPSS version 22 for users who submitted de-identified data. This analysis used Before and After "mean," or average, scores to detect differences beyond chance levels (using paired t-tests) for all items except Absenteeism. Due to the skewness of "hours missed" in Absenteeism a non-parametric rank test (known as the "Wilcoxon") was used. We also calculated a practical measure of percent improvement by subtracting the "post" EAP use mean score from the "pre" EAP use mean score and then dividing by the pre mean score. Other testes used a general linear model approach with repeated measures of time and other factors (see the section on Moderator results).

Appendix C

Converting WOS Results into ROI

Work *Absenteeism* and *Presenteeism* represent the two primary types of productivity losses in the workplace. This appendix explains the basic concepts of monetizing lost productive time from work and how to calculate an ROI. A simple example is provided using only the absenteeism WOS result from this report. This is followed by a more robust example from with EAP utilization and cost inputs from an actual employer case study using the EAP ROI Calculator, which features both absenteeism and presenteeism and other kinds of outcomes using typical findings based on a review of EAP industry research studies.

PART A. Simple Math for Absenteeism Only ROI for EAP

This exercise involves the following eight steps:

1. *Reduction in Absenteeism Hours After EAP per Case*. The net change in absenteeism hours on the WOS full five-item scale was from 10.92 hours at baseline to 5.64 hours at the follow-up after EAP use. This difference is **5.28 hours of absenteeism saved per month.** [1]

2. *Total Hours of Absence Prevented by EAP per Case.* We can conservatively assume that the employee would have continued to experience this higher level of work absence for 3 months, if the EAP had never been used. This is a total of **15.72 hours avoided per case** because the EAP was used and the level of personal distress was reduced (5.28 absence hours X 3 months episode of distress if untreated).[2]

3. *Employee Hourly Compensation*. To determine the financial value of productive work time, we need to know the level of compensation (wages and benefits combined) for the employee. According to the most recent Bureau of Labor Statistics (from March of 2017), the average private sector worker was compensated at **$33.11 per hour**.

4. *Financial Value of Avoided Further Absenteeism Per Case*. The value of $33.11 per each hour of productive work times the 15.72 total hours of work absence restored after EAP use totals **$520.49**.

5. *EAP Clnical Utilization Rate*. Assume a 5.0% annual use rate for number of counselor cases that are employees in a 12-month period. For a covered population of 1,000 employees, there are **50 employee** users of EAP for counseling. Note that other non-employee users of the EAP are excluded.

6. *Total Return for the EAP.* The financial return is thus 50 cases X $520.49 each case in avoided absenteeism cost burden from further lost work productivity = **$26,025 total return** for the year.

7. *Investment in EAP*. Assume a cost of $25 per employee per year ($2.08 PEPM). For a 1,000 employee company this is a total investment of **$25,000**.

8. *Return on Investment Ratio*. The ROI is calculated by the $26,025 return divided by the $25,000 investment = **$1.05:1**. This indicates a ratio of $1.05 savings returned to the company for every $1.00 invested in the EAP. This is essentially a “break-even” level of ROI.

In summary, this quick math example featured absenteeism savings alone and no other outcomes from EAP use and yet the result is enough to cover the cost of the entire EA program. This point is important when considering that most formal analyses of the ROI from workplace mental health services find that absenteeism related cost savings are only about a small slice of the total work productivity savings, with presenteeism cost savings accounting for the vast majority of the total (See Attridge, 2012; 2016). This issue is illustrated in more detail in the next example.

PART B. Sophisticated Math for Absenteeism and Presenteeism ROI: The EAP ROI Calculator

The EAP ROI Calculator© uses standard financial terminology and measures to give company benefits managers, HR personnel and CFOs a reasonable indication of the impact of program on reducing a variety of business relevant costs associated with employee personal and behavioral health issues who use the EAP. It included data from many variables, including the opportunity cost of capital, prevalence rates of issues, workplace accidents and medical claims, and the effectiveness rates of the EAP in reducing cost represented in multiple kinds of outcomes from use of EAP services. A full description of the methodology and research-based defaults used in the logical model is available in other documents through Chestnut Global Partners (See original white paper by Attridge, Servizio, Sharar, & Mollenhauer, 2015) and articles in trade journals (Servizio, 2017; Servizio, Mollenhauer & Shjerven, 2016). Presentations and trainings on the EAP ROI Calculator have also been given at various EAP industry conferences held in Australia, Brazil, Greece, Italy, the United States and other locations.

The simple math example in Part A used compensation per hour as the business value of work absence. However, most employers recognize that the business value of employee work is often much greater than the amount of wages and benefits paid to the employee. For example, economic research conducted on managers suggests a conservative productivity multiplier of around 1.3 (range 1.0 to 5.0 or higher depending on the industry).[3] But a specific productivity multiplier figure many not be readily available at a particular employer. To support this concept, the Calculator features a proprietary database of daily productivity contributions of employees by occupation, industry, and geographic region - which are then used to estimate the dollar value to the business of a day of productive work.

Case Study Results: Comprehensive ROI for EAP

Following are the results of calculating the ROI of an EAP experience at a large international manufacturing company. In this example, we featured the business value of restored work productivity for employee users of the EAP resulting from fewer absence days and reduced work presenteeism.

Calculator Inputs

COMPANY PROFILE	
Employee Population Size	37,000
Investment in EAP (Per Employee Per Year)	$25.20
Total Investment in EAP	$932,400
Financial Discount Rate	2.03%
Employee Wages Per Work Day (Paid Benefits Excluded)	$150.00
Employee Productivity Value Per Work Day	$358.63
Wage Multiplier for Value of One Hour of Productive Work	2.39
Annual Utilization Rate for EAP Counseling Cases – Employees Only	6.20%
Total Number of Employee Users of EAP	2,294

Clinical Success Rate for EAP Treatment	86%
Adjusted Total Number of Employee Users of EAP for ROI	**1,973**
No. Days per Episode of Employee Distress - If Untreated	90 days (3 months)
No. Scheduled Work Days per Episode of Employee Distress	60 days (full-time standard)

Absenteeism (Research-based Defaults in Calculator per 90-day Episode)

Before EAP: No. Days Absent from Work	1.5 days
After EAP: Reduction in Absenteeism Hours*	44.3%
Change: Fewer Work Days Lost to Absenteeism	0.70 days

Presenteeism (Research-based Defaults in Calculator per 90-day Episode)

Before EAP: No. Days Lost to Presenteeism	11.2 days
After EAP: Reduction in Presenteeism*	39.7%
Change: Fewer Work Days Lost to Presenteeism	4.40 days

* WOS results go here in actual use of the ROI model

Work Productivity (Combined Absenteeism and Presenteeism)

Before EAP: Work Loss Burden Per Employee per 90-Day Episode	12.70 work days
After EAP: Work Loss Burden Per Employee per 90-Day Episode	7.60 work days
Change: Net Fewer Lost Work Days After EAP	**5.10 work days**

ROI Results – Work Productivity Only

Average Savings in Workplace Cost Burden Reduction per Successfully Treated Employee EAP Case	$1,829
% Workplace Savings due to Improved Absenteeism	19%
% Workplace Savings due to Improved Presenteeism	81%
Total Cost Savings – Work Productivity	$3,608,643
Cost/Benefit Ratio (ROI)	**$3.87 : 1.00**

ROI Results – All Outcomes

Cost Savings: Work Productivity	$3,608,643
Cost Savings: Avoided Employee Turnover & Work Accidents	$1,008,414
Cost Savings: Reduced Health Care Medical Comorbidity Costs	$688,200
Total Return (Combined Cost Savings)	$5,305,257
Internal Rate of Return	469%
Net Present Value	$4,267,300
Cost/Benefit Ratio (ROI)	**$5.69 : 1.00**

Summary

The WOS approach represents a departure from conventional outcome measures that are more clinically focused by objectively identifying when EA services yield outcomes in the context of the workplace. It is now possible to convert WOS Absenteeism and Presenteeism change results into a credible ROI in quantifiable business terms. It is also useful to show the full range of outcomes from EAP services that includes additional areas related to improvements in work culture/safety and employee overall health. When considering these full model ROI results, the presenteeism outcome accounts for over half (55%) of the total cost savings. Restoring the level of work productivity while employees are at work is a major contributor to the business value of EAP counseling services.

RESEARCH SOURCES & NOTES

Attridge, M., Servizio, L., Sharar, D., & Mollenhauer, M. (2015). *EAP ROI Calculator©: Conceptual approach and default data inputs: Research review appendix* (67 pages). Bloomington, IL: Chestnut Global Partners & Disease Management Strategy Group. See: http://chestnutglobalpartners.org/Services/EAP-ROI-Calculator

Bureau of Labor Statistics. (2017). *Employer costs for employee compensation – March 2017*. Washington, DC: United States Department of Labor.

Servizio, L.A., Mollenhauer, M., & Shjerven, T. (2016). Taking the mystery out of ROI calculations. *Journal of Employee Assistance, 46*(4), 26-27. [member magazine for the Employee Assistance Professionals Association]

Servizio, L.A. (2017). Why CFOs should learn to love EAPs. *WorkSpan*, April Issue, 51-57. [member magazine for WorldatWork]

Note 1. Other data on absenteeism (from 223,485 EAP cases worldwide from 20+ programs including the 2016 WOS pooled data; Attridge, 2016) had a slightly higher average of 13.04 hours per person per month before use of EAP and a change to 6.44 hours after use of EAP. Thus, the full five-item WOS scale 2017 results at 10.92 hours per month absent at baseline is closer to normative EAP industry findings than is the single-item WOS 2017 result at 5.64 hours per month at baseline. For context, other research documents that the typical employee in the US has between 2 and 3 hours of health-related absence per month.

- Attridge, M. (2016, October). *EAP industry outcomes for employee absenteeism and presenteeism: A global research analysis.* Presented the conference of the Employee Assistance Professionals Association, Chicago, IL.

Note 2. A published research study created a group of employees matched on level of personal distresss and demographic characteristics to the users of an statewide EAP program for government employees in Colordado and used the WOS original full scale to measure absenteeism and presenteeism (Richmond, Pampel, Wood, & Nunes; 2015). They found that the non-user employee group actually *increased in* their absenteeism hours per month (from 13.0 hours at baseline to 16.9 hours at the follow-up at 8 months later) whereas the EAP user group had a decrease in absence hours per month (from 15.0 hours at baseline to 10.7 hours at the follow-up at 4 months later). Thus, our assumption that the typical EAP case would have continued to have the same level of absence (if untreated by the EAP) is an underestimate compared to the findings of this high quality research study.

- Richmond, M. K., Pampel, F. C., Wood, R. C., & Nunes, A. P. (2017). The impact of employee assistance services on workplace outcomes: Results of a prospective, quasi-experimental study. *Journal of Occupational Health Psychology*, *22*(2), 170.

Note 3. Several articles have examined the estimation of the work productivity multiplier concepts. See below:

- Attridge, M. (2012). Employee assistance programs: Evidence and current trends. In R.J. Gatchel & I.Z. Schultz (Eds.), *Handbook of occupational health and wellness* (pp. 441-467). New York: Springer.
- Nicholson, S., Pauly, M.V., Polsky, D., Sharda, C. Szrek, H., & Berger, M.L. (2006). Measuring the effects of work loss on productivity with team production. *Health Economics, 15*: 111–123. doi:10.1002/hec.1052
- Mitchell, R.J., & Bates, P. (2011). Measuring health-related productivity loss. *Population Health Management*, *14*(2), 93-98.
- Pauly, M.V., Nicholson, S., Polsky, D., Berger, M.L., & Sharda, C. (2008). Valuing reductions in on-the-job illness: 'Presenteeism' from managerial and economic perspectives. *Health Economics*, *17*(4), 469-486.
- Sasso, A.T.L., Rost, K., & Beck, A. (2006). Modeling the impact of enhanced depression treatment on workplace functioning and costs: A cost–benefit approach. *Medical Care*, *44*(4), 352-358.

Appendix D

The Need for a Valid CIR Measurement Tool

Critical Incident Response (CIR) is probably the most visible and appreciated EAP service, according to Dr. John Pompe, Manager of Integrated Health Programs with Caterpillar, Inc. In fact, Pompe notes that if an EAP vendor does not offer a solid, empirically based CIR program it may either lose current contracts or not gain new ones.

Despite the importance of CIR, little empirical evidence is known about the actual workplace impact of these services, explains Dave Sharar, Director of Commercial Science with Chestnut Global Partners (CGP). The evidence that *does* exist consists mainly of individual case studies and reviews of archival records, which makes it difficult to generalize across different response approaches. Over the last five years, several studies (DeFraia, 2015; Gorter, Frey & O'Brien, 2015) *have* attempted to document the numbers and types of CIR interventions to help researchers develop an empirical tool to capture outcome data. CGP and noted EAP researcher Patricia Herlihy have taken this important work one step further by developing a new, empirically based tool called the *Critical Incident Outcome Measure* (CIOM). The CIOM, which builds on the model and success of the Workplace Outcome Suite (WOS), seeks to quantify the positive workplace effects of CIR services offered by EAPs.

CIOM: How it Works

Similar to the WOS, the CIOM uses two of the same workplace constructs (Presenteeism, Absenteeism), plus four **new** variables – *Resiliency, Return to Work*, *Emotional Distress* and the *Perception of Leadership's role* (in its response to the critical incident). Presentations and focus groups have been used to help refine and gauge the level of interest in this tool. Several companies have expressed interest in the tool while others remain hesitant about how to implement this measurement instrument and not disrupt the CIR intervention.

Beta Test Launched

In spring 2016, a lengthy beta test was implemented with over 250 individual responses. The test demonstrated the scientific validity of the measurement tool, and an article on the specifics of the psychometrics used in the methodology is currently being written.

Current Challenges

While the CIOM has been developed and validated, the research team is now confronting a series of challenges before this measurement tool can be widely disseminated and implemented. The team gladly welcomes feedback and other suggestions from practitioners and researchers alike to make this tool and it's administration more robust and effective. Some of the challenges include:

1. How to implement both pre- and post-testing in order to capture individual changes in accordance with standard research practices;

2. Pre-test screening introduces issues in time of testing (when someone experiences a Critical Incident), when the EAP intervenes and at what exact times should the tool be administered.

3. Can individual responses be accurately measured "retrospectively" in terms of what individuals remember *before* the critical incident occurred?

4. Do we have one administration of the tool post-event and then compare results to national norms on Emotional Distress; Presenteeism; Resiliency and Return to Work data?

Timetable for Development and Implementation of CIOM

2016 – Development of tool
2017 – Beta test and article on basic psychometrics of CIOM
2018 – Release of CIOM tool for EAP use

Summary

The time has come for a scientifically validated tool to accurately measure the outcome of EAP services offered around critical incidents in the workplace. The EAP field in general is moving towards evidence-based practice, so it is only natural that we apply this yardstick to the increase in requests for CIR services. Meeting these challenges is an ambitious task, but the end result – strengthening the usefulness, credibility, and effectiveness of CIR with the intent of returning employees and organizations to higher levels of productivity more quickly following CIR events – is well worth the effort.
A draft of the tool is on Page 44.

References

Attridge, M., & VandePol, B. (2010). The business case for workplace critical incident response: A literature review and some employer examples. *Journal of Workplace Behavioral Health, 25*(2), 132–145.

Caplan, G. (1964). *Principles of preventive psychiatry.* New York: Basic Books.

DeFraia, G. (2015). Psychological trauma in the workplace: Variation of incident severity among industry settings and between recurring *vs.* isolated incidents. *The International Journal of Occupational and Environmental Health, 6*(3), 155-168.

Gorter, J., Frey, J., & O'Brien, S. (2015). Broadening the value of critical incident response. *Journal of Employee Assistance*, *45*(3), 10-13.

Lindemann, E. (1944). Symptomatology and management of acute grief. *American Journal of Psychiatry, 101,* 141–148.

Masi, D.A. (1994). *Evaluating your employee assistance and managed behavioral care program*. Troy, MI: Performance Resource Press.

Mitchell, J. (2003). *Crisis intervention & CISM: A research summary*. White Paper. Ellicott City, MD: International Critical Incident Stress Foundation.

WOS – Critical Incident Outcome Measure

Candidate Items for the Critical Incident Outcome Measure

GENERAL INSTRUCTIONS
Below is a series of statements that refer to aspects of a recent "critical incident" or distressing event that occurred at work. Your Employee Assistance provider addressed this incident or event with an on-site service. Please read each item carefully and answer as accurately as you can.

		ABSENTEEISM	NUMBER OF HOURS
	1.	For the period of the past thirty (30) days, please total the number of hours the incident has caused you to miss work, including complete 8-hour days and partial days when you came in late or left early.	

		INSTRUCTIONS FOR ITEMS 2-22 The following statements reflect what you may do or feel on the job or at home. Indicate the degree to which you agree with each of the statements for the past 30 days. Use the 1-5 response key to the right.	STRONGLY DISAGREE	SOMEWHAT DISAGREE	NEUTRAL	SOMEWHAT AGREE	STRONGLY AGREE
EMOTIONAL DISTRESS	2.	I feel sad most of the time.	①	②	③	④	⑤
	3.	I feel anxious most of the time.	①	②	③	④	⑤
	4.	I worry a lot.	①	②	③	④	⑤
	5.	I feel like crying a lot.	①	②	③	④	⑤
	6.	I don't have any energy.	①	②	③	④	⑤
PRESENTEEISM	7.	I have a hard time doing my work because of the incident.	①	②	③	④	⑤
	8.	The incident keeps me from concentrating on my work.	①	②	③	④	⑤
	9.	I am not able to enjoy my work because of the incident.	①	②	③	④	⑤
	10.	The incident makes me worried about completing my normal duties.	①	②	③	④	⑤
	11.	I cannot do my job because of the incident.	①	②	③	④	⑤
RESILIENCY	12.	I actively look for ways to replace the losses I encounter in life.	①	②	③	④	⑤
	13.	I look for creative ways to alter difficult situations.	①	②	③	④	⑤
	14.	Regardless of what happens to me, I believe I can control my reactions to it.	①	②	③	④	⑤
	15.	I believe I can grow in positive ways by dealing with difficult situations.	①	②	③	④	⑤
	16.	I can usually find ways to deal with most problems I encounter.	①	②	③	④	⑤
RETURN TO WORK	17.	I believe that I can return to my duties without any interference from the incident.	①	②	③	④	⑤
	18.	I feel that I can perform my work without any problems from the incident.	①	②	③	④	⑤
	19.	I feel competent to return to my normal duties.	①	②	③	④	⑤
	20.	There shouldn't be any problem with me doing my regular work.	①	②	③	④	⑤
	21.	At this point the incident does not affect my ability to work.	①	②	③	④	⑤
		PERCEPTION OF LEADERSHIP					
	22.	On a scale of 1 to 5 with 1 being inadequate and 5 being superior, how would you rate the effectiveness of your organization leadership's reaction to the incident?	①	②	③	④	⑤

CGP
CHESTNUT GLOBAL PARTNERS

For more information contact: Patricia A. Herlihy Ph,D., RN
pherlihy@rockymountainresearch.us
303.641.4190

Dave Sharar, Ph.D
dsharar@chestnut.org
309.820.3570

1.800.433.7916 www.chestnutglobalpartners.org

Appendix E

WOS 5-item and 25-item Versions

WOS – 5-item Version

WORKPLACE OUTCOME SUITE – 5 ITEM VERSION

GENERAL INSTRUCTIONS
Below is a series of statements that refer to aspects of your work and life experience that may be affected by the personal problems you want to address at the EAP during the past 30 days. Please read each item carefully and answer as accurately as you can.

			NUMBER OF HOURS
AB	1.	For the period of the past 30 days, please total the number of hours your personal concern caused you to miss work. Include complete eight-hour days and partial days when you came in late or left early.	

		INSTRUCTIONS FOR ITEMS 2 – 5 The following statements reflect what you may do or feel on the job or at home. Please indicate the degree to which you agree with each of the statements for the past 30 days. Use the 1-5 response key to the right.	STRONGLY DISAGREE	SOMEWHAT DISAGREE	NEUTRAL	SOMEWHAT AGREE	STRONGLY AGREE
PR	2.	My personal problems kept me from concentrating on my work.	1	2	3	4	5
WE	3.	I am often eager to get to the work site to start the day.	1	2	3	4	5
LS	4.	So far, my life seems to be going very well.	1	2	3	4	5
WD	5.	I dread going into work.	1	2	3	4	5

CGP
CHESTNUT GLOBAL PARTNERS

For more information contact:
Dave Sharar, Ph.D.
dsharar@chestnut.org
309.820.3570
1.800.433.7916
www.eapresearch.com

WOS – 25-item Version

CGP WORKPLACE OUTCOME SUITE (WOS)

GENERAL INSTRUCTIONS
Below is a series of statements that refer to aspects of your work and life experience that may be affected by the personal problems you want to address at the EAP during the past 30 days. Please read each item carefully and answer as accurately as you can.

		INSTRUCTIONS FOR ITEMS 1-5 Please report for the period of the past 30 days the total number of hours your personal problems:	**NUMBER OF HOURS**
ABSENTEEISM	1.	Caused you to miss work altogether.	
	2.	Made you late for work.	
	3.	Caused you to take off early.	
	4.	Pulled you away from your normal work location.	
	5.	Required you to be on the phone, e-mail or internet while at work.	

		INSTRUCTIONS FOR ITEMS 6-25 The following statements reflect what you may do or feel on the job or at home. Please indicate the degree to which you agree with each of the statements for the past 30 days. Use the 1-5 response key to the right.	STRONGLY DISAGREE	SOMEWHAT DISAGREE	NEUTRAL	SOMEWHAT AGREE	STRONGLY AGREE
PRESENTEEISM	6.	I had a hard time doing my work because of my personal problems.	1	2	3	4	5
	7.	My personal problems kept me from concentrating on my work.	1	2	3	4	5
	8.	Because of my personal problems I was not able to enjoy my work.	1	2	3	4	5
	9.	My personal problems made me worry about completing my tasks.	1	2	3	4	5
	10.	I could not do my job well because of my personal problems.	1	2	3	4	5
WORK ENGAGEMENT	11.	I feel stimulated by my work.	1	2	3	4	5
	12.	I often think about work on my way to the work site.	1	2	3	4	5
	13.	I feel passionate about my job.	1	2	3	4	5
	14.	I am often eager to get to the work site to start the day.	1	2	3	4	5
	15.	I often find myself thinking about my work at home.	1	2	3	4	5
LIFE SATISFACTION	16.	My life is nearly perfect.	1	2	3	4	5
	17.	I am not very satisfied with my life as a whole.	1	2	3	4	5
	18.	So far, my life seems to be going very well.	1	2	3	4	5
	19.	There isn't anything about my life that I would change if I could.	1	2	3	4	5
	20.	I am very disappointed about the way my life has turned out.	1	2	3	4	5
WORKPLACE DISTRESS	21.	I often feel anxious at work.	1	2	3	4	5
	22.	Thinking about being at work makes me upset.	1	2	3	4	5
	23.	I am unhappy most of the time at work.	1	2	3	4	5
	24.	I dread going into work.	1	2	3	4	5
	25.	I can't wait to get away from work.	1	2	3	4	5

CGP
CHESTNUT GLOBAL PARTNERS

For more information contact:
Dave Sharar, Ph.D.
dsharar@chestnut.org
309.820.3570

1.800.433.7916 www.eapresearch.com