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Demonstrating Value: Measuring Outcome & Mitigating Risk: FOH EAP Study Utilizing the Workplace Outcome Suite

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ABSTRACT

KEY WORDS:

Employee Assistance Program, workplace outcomes, FOH, WOS, measurement tools

Despite the popularity and prevalence of Employee Assistance Programs (EAPs), and the historical emphasis on how EAP can improve work performance, there has been very little rigorous evaluation of the workplace effects of EAP counseling. The aim of this Federal Occupational Health (FOH) outcome study was to examine if and to what degree EAP counseling is associated with improved workplace effectiveness with this particular population.

Federal Occupational Health (FOH) is the largest provider of occupational health services in the Federal Government, serving more than 360 federal agencies and reaching 1.8 million federal employees. FOH began providing Employee Assistance Program (EAP) services in 1980 and is Health and Human Services' recognized expert in this key area of employee health programs, delivering specialized EAP services exclusively to over 905,624 federal employees. In 2004 Selvick, Stephenson, Plaza and Sugden published one of the few studies that demonstrated statistically and practically significant outcomes from the FOH's EAP. Their work showed significant improvement from pre- to post-EAP intervention on measures of productivity; work and social relationships; perceived health status; attendance and tardiness; and global assessment of functioning. In an effort to revitalize the findings with more current outcomes, FOH engaged an industry gold-standard tool, the Workplace Outcome Suite (WOS). This measurement tool consists of a 5-item measure, that has been psychometrically tested and is also easy to administer telephonically. It consists of five scales that measures absenteeism, presenteeism, work engagement, life satisfaction, and workplace distress. In October of 2015 FOH began to collect data on specific outcomes for clients who accessed the EAP. This study reports findings from 2016 and 2017 data that indicates a significant decrease in absenteeism and workplace distress as well as increases in life satisfaction and workplace presenteeism.

INTRODUCTION

William Huddock of SAMSHA (2017) stated that: "articulating a clear value proposition is a necessary, overarching goal for the EAP field. Employers and government leaders increasingly are demanding evidence-based programs that produce demonstrable results. Outcome measurement is the single most powerful tool in revamping the EAP proposition. Since 2009 Chestnut Global Partners has been constructing a measurement tool, the Workplace Outcome Suite (Lennox, 2009) to provide a means for all EAPs to collect outcome data from their

services. Many EAPs from across the globe have begun using the WOS tool as it evolves into a reliable instrument for gaining solid outcome results.

The Federal Occupational Health Program began using the WOS tool in October 2015 and immediately began collection of outcome data. This paper presents the data collected in both 2016 and 2017 and its implications for the field, as well as some recommendations for further related research (WOS Annual 2017 Report).

BACKGROUND

The Federal Occupational Health (FOH) is a non appropriated agency within the Program Support Center (PSC) of the U.S. Department of Health and Human Services and works in partnership with other federal agencies to deliver comprehensive occupational health solutions that “improve the health, safety and productivity of the federal employee.” Created in 1946 by an amendment to the Public Health Service Act (42U.S.C.), Federal Occupational Health has been providing services exclusively to federal agencies for almost seven decades and is the largest provider of occupational health services in the Federal Government, serving more than 360 federal agencies and reaching 1.8 million federal employees.

FOH began offering Employee Assistance Program (EAP) services in 1980. It delivers specialized EAP services exclusively to over 986,390 federal employees. Its unique leadership role with Health and Human Services enables Federal Occupational Health to leverage the expertise of Health and Human Service agencies such as the Substance Abuse and Mental Health Services Administration (SAMHSA) and the Centers for Disease Control and Prevention (CDC) to incorporate the latest trends and best practices within the evolving field of employee wellness. More than ten years ago, the EAP was integrated with the Work/Life Program, an integrated restructuring practice that had become popular in the field at that point in time. (Herlihy, 2011)

FOH fully understands that preserving sound psychological and physical health while also strengthening the coping abilities of personnel, is essential to maintaining a fully capable work force ready to serve our nation. As the self-supporting independent agency that employees 600,000 and is responsible for “providing a reliable, efficient, trusted and affordable universal delivery service that connects people and helps businesses grow”, FOH understands the unique challenges of the diverse agencies they serve.

FOH provides access to on and/or off-site assessment, counseling and problem solving for a wide range of emotional and Work/Life issues. FOH provides EAP

services in cities and towns all across the country including some of the most remote corners of the United States. In addition to staff counselors located in more than 50 counseling offices in federal buildings, FOH provides services through a vast network of “affiliate” counselors in approximately 21,000 locations across the country.

EAP Services are also available to federal employees and their families stationed in more than 100 countries overseas. Federal Occupational Health offers critical incident response, performance coaching, management consultation, educational activities, referral, monitoring, behavioral health consultation, and follow-up services 24 hours a day, 7 days a week, and 365 days a year.

STUDY DESIGN

This study deployed a group of “pre-post” or “before-after” design to examine the relationship between EAP counseling and specific workplace effects. This design is frequently used when access to a matched comparison group is not available or permitted. It was selected because it was not disruptive to the subject’s normal help-seeking process and the investigators were not in a position to remove or manipulate the intervention. Its purpose in this study was to test the strength of the association between EAP counseling and work effectiveness, so it can identify if employees are improving at work. Our intent was not to authoritatively explain why, or prove that EAP services caused the improvements at work. Rather to simply observe if there were any differences in workplace functioning post counseling services provided by the FOH EAP.

METHODOLOGY

To choose an appropriate number for the sample with this particular client company, a power analysis was used. The FOH program averages approximately 8,100 requests for EAP services per month from federal government employees. With this high volume of requests, the team decided a probability sample whereby a smaller number of participants can represent the total population of EAP clients, as long as each participant had an equal probability of

being selected.

In 2015 FOH began collecting WOS data by asking the five additional tool questions after the initial intake questions related to the employee's reason for calling for EAP assistance. A random sample of the clients seeking services were asked to answer the 5-item WOS questionnaire. Approximately three months (90 days) later these same respondents were re-contacted for follow up and asked the same 5-item WOS questions. The study sample size consisted of 2,603 in 2016 and 2,197 in 2017 for a total of 4800 respondents who completed both the pre and post tests and for a response rate of 28 percent. A paired sample t-test was used to examine changes in average scale scores from before respondents used EAP to after services were rendered.

WORKPLACE OUTCOME SUITE

The 25-item WOS measure was specifically developed for use with EAPs by the Division of Commercial Science at Chestnut Global Partners in 2010 (Lennox, 2010). It has demonstrated a robust degree of statistical sensitivity to change in EAP evaluations with as few as fifty (50) respondents. Although this measurement tool is comparably short, many EAPs consider the 25-item WOS too long for regular use in routine outcome monitoring. As a response to these comments, Chestnut Global Partners developed a 5-item version of the WOS (WOS-5) (Lennox, 2018) in 2015 (Consult Appendix). This shorter version takes one question from each of the original 25-item WOS scales of Presenteeism, Work Engagement, Life Satisfaction, and Workplace Distress. Traditional scaling techniques allowed the selection of the best representation question from each latent variable using the same confirmatory factor analysis reported in the original 25-item WOS validation (Lennox, et al., 2010). For a description of the psychometrics of the WOS-5 scaling down from the original WOS-25 tool please consult Lennox (2018).

FOH'S RATIONALE FOR USE OF WOS TOOL:

1. Workplace focused (not a clinical measure)
2. Validated with demonstrated psychometrics

3. Short but precise (sensitive to change)
4. FREE with signed license agreement
5. EAPA has endorsed the short 5-item version.

ANALYSIS:

Descriptive Statistics: Table 1 shows the respondents with their average pre and post-test scores reflecting the single-item of the scale for the fiscal year 2016. The range for the single absenteeism item is relatively similar with a slight decrease in range (0 – 176 hours of missed work). The rest of the items are relatively similar although there does seem to be a significant difference in Life Satisfaction between the 2016 and 2017 numbers which is hard to analyze due to the variety of intervening variables during that time period.

A paired samples t-test was conducted on the 2016 sample as well, to compare pre-test to post-test scores in the five measures. There was a significant difference found in the scores for Absenteeism at pre-test ($M = 10.27$, $SD = 20.97$) and post-test ($M = 3.16$, $SD = 10.68$); $t(1,523) = 12.77$, $p < .001$. A significant difference was found in the scores for Presenteeism at pre-test ($M = 3.56$, $SD = 1.45$) and post-test ($M = 2.75$, $SD = 1.63$); $t(1,523) = 18.86$, $p < .001$. A significant difference was found in Work Engagement scores for the 2016 pre-test ($M = 3.21$, $SD = 1.5$) and post-test ($M = 3.3$, $SD = 1.43$); $t(1,523) = -2.26$, $p = .024$. A significant difference was found in the scores for Life Satisfaction at pre-test ($M = 3.22$, $SD = 1.37$) and post-test ($M = 4$, $SD = 1.16$); $t(1,523) = -20.3$, $p < .001$. As well as a significant difference found in Workplace Distress from pre-test ($M = 2.39$, $SD = 1.54$) to post-test ($M = 2.15$, $SD = 1.42$); $t(1,523) = 6.3$, $p < .001$.

Descriptive Statistics: Table 2 shows the respondents with their average scores on pre- and post-tests from the year 2017 reflecting the single-item structure of the scale. The range on the single absenteeism items is from 0 hours to 160 hours of missed work. The remaining four items have a range of 1 to 5 adhering to the Likert scale responses. The means and standard deviations for the four Likert scales show the means to

Table 1. Results for 5-item Workplace Outcome Suite Pre-Use and Post-Use Scores - FOH FY2016

WOS Scale	Pre-Score	Post-Score	Numbers	Raw Difference Score	p-value	Difference Percentage	Effect Size <i>d</i>	Effect Size Interpreted
Absenteeism*	10.27	3.16	1,524	-7.11	0.000	-69.2%	-0.34	Small
Presenteeism*	3.56	2.75	1,524	-0.81	0.000	-22.8%	-0.56	Medium
Work Engagement**	3.21	3.30	1,524	0.09	0.024	2.8%	0.06	None
Life Satisfaction**	3.32	4.00	1,524	0.78	0.000	24.2%	0.57	Medium
Workplace Distress*	2.39	2.15	1,524	-0.24	0.000	-10.0%	-0.16	None

approximate the center of the distributions and the standard deviations to reflect some amount of variability around the measures.

A paired samples t-test was conducted on the 2017 sample to compare pre-test to post-test scores for the five measures. There was a significant difference in the scores for Absenteeism at pre-test ($M = 10.67$, $SD = 21.36$) and post-test ($M = 3.33$, $SD = 11.44$); $t(2,196) = 15.44$, $p < .001$. A significant difference was found in the scores for Presenteeism at pre-test ($M =$

3.48 , $SD = 1.52$) and post-test ($M = 2.6$, $SD = 1.55$); $t(2,196) = 23.68$, $p < .001$. A significant difference was not found in Work Engagement scores. A significant difference was found in the scores for Life Satisfaction at pre-test ($M = 3.23$, $SD = 1.41$) and post-test ($M = 3.85$, $SD = 1.06$); $t(2,196) = -19.6$, $p < .001$. As well as a significant difference found in Workplace Distress from pre-test ($M = 2.26$, $SD = 1.5$) to post-test ($M = 2$, $SD = 1.31$); $t(2,196) = 8.28$, $p < .001$.

Table 2. Results for 5-item Workplace Outcome Suite Pre-Use and Post-Use Scores - FOH FY2017

WOS Scale	Pre-Score	Post-Score	Numbers	Raw Difference Score	p-value	Difference Percentage	Effect Size <i>d</i>	Effect Size Interpreted
Absenteeism*	10.67	3.33	2,197	-7.336	0.000	-68.8%	-0.34	Small
Presenteeism*	3.48	2.60	2,197	-0.88	0.000	-25.3%	-0.58	Medium
Work Engagement**	3.40	3.45	2,197	0.05	0.126	1.5%	0.03	None
Life Satisfaction**	3.23	3.85	2,197	0.62	0.000	19.2%	0.44	Small
Workplace Distress*	2.26	2.00	2,197	-0.26	0.000	-11.5%	-0.17	None

Notes. *Lower scores are a better outcome; **Higher scores are a better outcome. Significant results are bolded.

Table 3: Comparison of 2016 and 2017 Final Results		
WOS Constructs	FOH 2016 Results	FOH 2017 Results
Absenteeism	69.2%	68.8%
Work Presenteeism	22.8%	25.3%
Work Engagement	2.8%	1.5%
Life Satisfaction	24.2%	19.2%
Workplace Distress	10.0%	11.5%

GENERAL RESULTS AND DISCUSSION

All five items were found to be statistically significant which indicates that they demonstrate a positive response to EAP counseling. Please consult **Table 3**, above, for a comparison of the key results of the 2016 and 2017 data.

Return on Investment analysis is forthcoming and expected to demonstrate significant value to the federal government. Together the five measures make a compelling case for the importance the FOH EAP has in influencing employee performance. The remarkable nearly 70 percent reduction in both the 2016 and 2017 data regarding significant decrease in absenteeism alone highlights the value of offering support to employees that are challenged with personal concerns.

The percentage of increase in presenteeism initially in the 2016 data and slightly more in 2017 data appears lower than the dramatic decrease in absenteeism but perhaps the implications of the variable “presenteeism” are slightly less obvious at this point. Further research is needed to understand fully what this construct translates to in terms of overall employee productivity. The construct presenteeism focuses on “functional impairment,” or the ability to attend to work tasks while physically at the job. Already early research has demonstrated that behavioral health concerns (depression, anxiety, stress) are the primary driver of lost productivity, with absenteeism following closely behind (Sullivan, 2017). Similar research is needed to explore this issue more thoroughly. Improvement of at

least 23 percent and 25 percent indicates that presenteeism is affected by FOH EAP services which will hopefully result in successfully working with clients to address their concerns and allow them to focus more effectively on the job.

Comparatively, the nearly 3 percent improvement in both the 2016 and 2017 data in work engagement appears to be a seemingly small impact. However, these findings are consistent with other studies that utilize the WOS as an outcome measure (Pompe, 2015). EAP Services may not be a huge contributor towards the concept of increased workforce engagement, whereas the increase in Life Satisfaction demonstrates the impact on their work and life issues or one’s general wellbeing. The Life Satisfaction item captures a perceived improvement in one’s quality of life or sense of wellbeing (Sharar, Pompe & Lennox, 2012) which bodes well for retention and job satisfaction. Finally, findings show a 10 percent improvement in both 2016 and 2017 in workplace distress combined with the nearly 25 percent improvement in Life Satisfaction in 2016 hopefully will translate to less turnover for these employees. The researchers were unable to obtain turnover rates for FOH employees so hard to completely understand the effect of EAP services on this issue and is more of a hopeful impression. It is noted that the results for effect on Life Satisfaction decreased during the 2017 data collection period. Even though these results were not statistically significant it does make one wonder what other sociological factors may have affected this particular variable during this time period.

CONCLUDING THOUGHTS

In summary, FOH EAP demonstrates significant impact on improving employees' work performance in a variety of dimensions. These findings show promise as one looks to validate the positive effects the FOH EAP has on people's lives. In addition to the services available for individual employees, FOH EAP is a broad-brush program that includes services for supervisors and workplace leaders.

In addition to individual services for employees the EAP provides guidance to Agency leadership in managing the organizational impact of change building a resilient workforce; unlimited consultations with supervisors/managers on performance management concerns and consultation and on-site response to critical incidents. In addition to EAP services, FOH offers comprehensive Work/Life programs that integrate with existing EAP services and further improve the supportive resources for an Agency's employees.

Return on Investment – early results indicate that for every \$1.00 that is spent another \$1.78 is saved. The national average for ROI for EAPs is 3:1 (Attridge, 2009). Although currently there is a debate about what items should be included in the determination of a Return on Investment (Attridge, 2018), so it is unclear how to evaluate this results at this point in time. Impact on retention of employees who were seen in the FOH EAP might be related to the 25 percent improvement in Life Satisfaction 10 percent reduction in Workplace Distress, although the researchers admit this is simply a guess especially since turnover data at FOH was not made available to the research team. But the question remains whether these results translate into meaningful bottom line issues.

Absenteeism can be monetized but at the moment there is still debate whether the other constructs can be reliably turned into economic outcomes. Although some might argue there are more important factors than just economic ones: work-life satisfaction; workforce engagement; less workplace distress and overall belief that their company cares about their employees, all are areas that most likely effect an employee's work experience. But all these issues need further

research to provide evidence-based data on their real impact on workplace productivity.

A final comment is that in some unpublished EAP outcome studies, changes in the WOS scale scores from before to after use of an EAP have been even larger than these reported above in the FOH Study. These findings have led FOH and other companies to ponder whether these differences are due to the characteristics of the particular company's EAP or its delivery model (hybrid, internal, external), the way in which the outcome studies were conducted, or possibly the unique culture of the company or institution being studied.

RECOMMENDATIONS

- 1) To make outcome measurement ubiquitous and integral in EAP Delivery.
- 2) WOS Data is one type of evidence to demonstrate the effectiveness and value of an EAP.
- 3) Results from WOS data can be used to set programmatic goals and targets for process improvement.
- 4) WOS Data can be utilized to examine effects for specific subpopulations as well as the employee population at large.
- 5) WOS data can be used to evaluate On-site or Off-site services and how they differ depending on the culture of that particular employee population.

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APPENDIX

Description of the 5 Constructs/Scales:

- **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."

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.

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.					
2.	My personal problems kept me from concentrating on my work.	1	2	3	4	5
3.	I am often eager to get to the work site to start the day.	1	2	3	4	5
4.	So far, my life seems to be going very well.	1	2	3	4	5
5.	I dread going into work.	1	2	3	4	5

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