

***A COST BENEFIT ANALYSIS OF EMPLOYEE ASSISTANCE PROGRAMS  
AND HEALTH PROMOTION PROGRAMS***

A Senior Thesis

By

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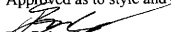
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## **A Cost Benefit Analysis of Employee Assistance Programs and Health Promotion Programs**

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For many years business has been searching for ways to make companies more profitable. Some programs that many businesses have implemented in order to increase profits are Employee Assistance Programs (EAPs) and Health Promotion Programs (HPPs). Employee Assistance Programs offer a wide range of services including marriage counseling, parent education classes, and legal advice. Health Promotion Programs offer wellness services and focus on preventative measures to bring health costs down. A meta-analysis will be conducted to determine if a cost offset effect occurs due to the utilization of these programs. After collecting 20 articles for review the present study has found that a general reading of the studies seem to suggest a common, positive cost benefit for EAPs/HPPs.

Fellows Group: Psychology I

A Cost Benefit Analysis of Employee

Assistance Programs and Health Promotion Programs

Today more than ever businesses are competing for higher profits. Ways in which businesses can retain more of their earnings include increased employee work performance and lower medical costs. Employers know that when employees are not well they do not work at their optimum. Furthermore, due to rising health care costs many companies have found their profits declining (Dugger et al. 1996). One way that businesses are ensuring better work performance, and thus higher profits, is by offering Employee Assistance Programs (EAPs) and Health Promotion Programs (HPPs). As a result, these programs have become an integral part of large business.

Although these programs strive to achieve similar outcomes, increased productivity and lower health care costs, they often have separate goals and are implemented independently. The intent of an EAP is usually to promote employee health, morale, and productivity (Jerrell 1998) as well as curtailing health care costs by improving the overall well being of their employees (Conrad 1987). These programs were first used in the 1940s to combat the financial and personal losses attributed to problem drinking (Jerrell 1988). Although EAPs were started in the 1940s, they began to see major growth beginning in the 1970s (Spicer et al, 1983). Today these programs provide a variety of social service referrals ranging from

information on runaway children to legal problems (Jerrell 1988). Employers view an EAP as a way to accurately diagnose mental health and/or substance abuse. This reliable diagnosis is assumed to assure proper treatment and to avoid costly medical problems in the future (Dugger 1996).

Employee Assistance Programs can be broken into two broad categories. The first is alcohol-only programs. These programs focus almost exclusively on drug and alcohol treatment. The second category is the broad-brush program. This type of program deals with many types of issues including psychological problems, marital and family conflicts, job stress, alcohol/drug problems, legal issues, and financial problems (Spicer et al. 1983).

The services of an EAP stretch beyond the primary person involved. Families are also involved in employee performance at work. For example, when a child is gone all night of the parent (employee) worries and does not sleep. Due to the employee's behavior the night before, as well as the stress of dealing with difficulties at home, performance at work the next day is negatively effected. Furthermore, approximately two-thirds of corporate health care costs are paid for spouses and dependents (Conrad 1987). An EAP can offer services to combat problems at home. As stated earlier, EAPs provide a wide variety of services including parent education classes, marriage counseling, and legal services. By utilizing an EAP companies offer a way to improve relationships outside of work. This amelioration of relationships can improve work performance as well as bring down family medical costs.

In contrast to EAPs, HPPs focus more on behavioral health improvement. For example, they encourage smoking cessation, weight control, good nutrition, exercise and fitness, and stress management, as well as providing mental health alcohol, and drug counseling (Shain, Suurvali, & Boutilier, 1986). By decreasing activities that have been shown to increase disease and premature death these programs are assumed to lower the incidence of serious illness and thus lower health care costs to the companies that implement them (McKenzie & Smeltzer, 1997). Where as Employee Assistance Programs help workers by offering short-term counseling and/or making outside referrals, Health Promotion Programs encourage preventative strategies and utilize informational sessions with films, lectures, or classes, subsidize outside programs (e.g., fitness clubs), and provide some counseling (Aniol, 1997a).

Due to the fact that Health Promotion Programs focus on improving physical health the most common types of intervention these programs utilize are hypertension screening and control, health risk assessment, alcohol or drug issues, smoking cessation, accident prevention, fitness and exercise, weight control and nutrition, stress management, cancer screening and control, and mental health information and counseling (Hollander & Lengermann, 1988). Most of these programs are offered during lunch and after work on weekdays (Aniol, 1997a).

Due to the fact that EAPs and HPPs are auxiliary to the primary focus of the businesses that utilize them, they will constantly be examined to determine what losses would be encountered if there were no such program (Jerrell 1988).

Employers have insisted on accountability of treatment in order to conclude that the programs are cost effective (Dugger 1996). The most basic form of evaluation of an HPP is lowered health care costs. There are many different ways in which companies attempt to determine if an EAP is productive, including number of accidents on the job, efficiency ratings of employees, and absenteeism.

Companies utilizing an EAP have shown that 30 – 60 percent of employees have fewer accidents. Furthermore, participation in an EAP is connected to a 43 – 50 percent decrease in absenteeism. Finally, longitudinal studies using quantitative efficiency data have shown that prior to treatment in an EAP 22 percent of disturbed employees received “good” efficiency ratings. However, after treatment 58 – 66 percent received such a rating. In all cases the fundamental emphasis is on improving employee work performance (Jerrell 1988).

Although this information is helpful to clients and clinicians, it is less useful to the companies that actually pay for the services. An important aspect employers must look at to determine if the EAP or HPP is in fact beneficial to the company is the financial cost of such a program. An important effect looked at is the cost offset effect. In general, the cost offset effect occurs when the use of an ancillary program, in this case the EAP, leads to a decrease in the use of another program, such as health insurance. The utilization of the EAP is expected to lessen the overall cost of health care to the company and thus create the cost offset effect (Shemo 1985-1986).

The present study will provide valuable information for employers who are looking to implement such programs. The research will determine what size of companies utilize EAPs and HPPs most effectively. Also, it will discern if wage earners or salaried employees benefit more from the programs. The present study will determine if there is a cost offset effect in relation to EAPs and HPPs. Furthermore, it will conclude how large of an offset these programs provide. By seeing how well and in what areas these programs work, an employer considering implementing an EAP or HPP will be able to look at these results to make a better educated decision of what type of program to implement.

#### Method

##### Describing the Literature Search

To begin the study a literature search was conducted using the databases PsycInfo, ABI - Inform, and Current Contents. Key words used in searching these databases were EAP, HPP, cost offset, cost effectiveness, cost analysis, worksite, workplace, and smoking cessation. This generated a list of approximately 75 articles. The number of articles included in the study was limited to 21. This was done in order to decrease the amount of time to code the articles. There were three main criteria studies had to possess in order to be included in the present study. The first was that the study had to have appeared in a peer-reviewed journal. By limiting articles to peer reviewed journals we hoped to insure better quality of studies. For example, the studies would have larger sample sizes, and be more clearly written. Next, the study had to include a control or comparison



group. Articles that utilized a wait-list condition were also included. This would ensure some type of baseline by which to judge effectiveness of the programs being studied. Finally, the article had to discuss some type of mental health intervention. These interventions could be behavioral in nature, such as smoking cessation and improved nutrition.

#### Constructing the Coding Form

Next, the coding form was created. On this form we listed every variable in which we were interested. The coding form was broken up into three main sections. The first section asked for basic information about the study. For example, gender of first author, publication year, and a list of authors were included in this section. The next section of the coding form included information about setting and treatment. Types of intervention and population source were listed in the second section. Information needed to calculate effect sizes was recorded in the final section of the coding form. The coding form was entered onto a web site on the Internet (<http://acs.tamu.edu/~jca0745/cost.html>), and the information was recorded on-line. This way coders could code data at times convenient for them, and the primary researcher would always have access to updated information.

#### Calculating Interrater Reliability

There are two people coding for variables in the study. Both coders analyze each article included for study. This is done in order to lessen data extraction bias. After coding the articles interrater reliability is computed. If a

discrepancy arises when the two researchers code the data they must each review the article and determine together the correct information to record. It is our aspiration that interrater reliability will be kept at a level greater than .75.

However, this level has not yet been achieved.

#### Statistically Describing and Combining Studies

Every study included in the review did not report test statistics. In this case, vote-counting and effect size estimates will be computed. Vote counting procedures compute the number of studies in which the test statistic exceeds the significance level or some other critical value. For example, these types of studies might report that a mean difference is significant, or that the mean difference is simply positive. Confidence intervals will be calculated for these studies as well (Aniol 1997b).

#### Pooling Study Results

Variance of effect sizes will be analyzed to examine relationships between study outcomes and features of study subjects, treatments, study design, and publication characteristics. A variance component estimate will be calculated to determine if the between-studies variance in effects is no greater than would be expected due to sampling error alone. If the variance is nonzero, an estimate of the variance component will be provided (Aniol 1997b).

#### Discussion

This project is still in progress. It has taken much longer than was anticipated to conduct the study. Preliminary results suggest a common, positive

cost benefit for EAPs and HPPs. This is a great finding for psychology and business alike. This finding, if supported by careful analysis of the data, will provide support for psychologists wanting to implement their skills in a business setting. The study will show that there is a great benefit to offering psychological assistance at the workplace. For business this study will provide support for another way in which they can save money while making employees happy. Employee Assistance Programs and Health Promotion Programs are programs that have clear benefits both for the people who implement them and for the people who utilize them.

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