

Evaluating Benefit Equity in Outcomes Among Users of an Employee Assistance Program

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ABSTRACT. *In the Employee Assistance Program (EAP) field “benefit equity” refers to the equitable distribution of benefits among the different types of employees covered by an assistance program. Despite variations in client characteristics that could modify counseling outcomes and produce benefit inequity, outcomes studies in the EAP field generally evaluate the overall effectiveness of services with the implicit assumption of having similar effects across all users. This article discusses the importance and relevance of evaluating benefit equity in outcomes among users of an EAP in addition to overall effectiveness, and reports on findings from an analysis based on data collected from workers (n = 249) who used counseling services of an employee assistance program provided by a Canadian vendor. The findings were supportive of the existence of benefit equity in problem resolution among users of the counseling services, which provided up to 12 sessions per year. None of the demographic attributes of the EAP clients modified the extent of problem resolution (i.e., benefit) reported after file closure. Benefit equity analyses can be adapted for use with other service offerings, evaluation methodologies, and intervention outcomes/measures. Benefit equity in outcomes could also serve as an additional factor for purchasers to take into account when selecting an EAP.*

Introduction

Research on EAPs has generally focused on evaluating the overall effectiveness of counseling services through the measure of clinical (e.g., mental health) and workplace outcomes (e.g., absenteeism and presenteeism, employee engagement, employer return on investment).¹ Developed as in-house alcoholism programs, EAPs initially targeted a specific segment of the workforce. Most EAPs now provide services addressing a wider range of concerns across large and heterogeneous workplace populations. Given their breadth and impact, behavioral health issues addressed by EAPs have been framed as a public health concern.²

In the EAP field “benefit equity” has been broadly defined as the equitable distribution of benefits among the different groups of workers covered by and accessing an EAP.³ Much like the assessment of equity in health care^{4,5}, an evaluation of benefit equity helps determine whether inequities exist in “EAP care” between different types of covered workers. Yamatani³ elaborated on a number of evaluations for EAPs and a key assumption of benefit equity was that “demographic attributes” should not “function as the major predictor of variances in client recruitment, retention, and treatment outcomes”. In other words, the age, gender, ethnicity, job rank, and other characteristics of workers should not significantly influence the

degree to which they benefit from an EAP on measures often the focus of EAP evaluations such as utilization (access and retention) and outcomes.⁶ However a link between certain demographic attributes and EAP utilization has been documented.⁷⁻⁹ But there are few studies specifically on benefit equity in the level of outcomes among different kinds of EAP users.

Despite an EAP clientele comprised of individuals differing from each other in major aspects, benefit equity in outcomes has remained overlooked and research continues to evaluate the overall effectiveness of services with the implicit value placed on finding similar (i.e., average) effects across all users. Little consideration is given to the underlying diversity of the clientele and its potential impact on counseling outcomes. Namely, variations in characteristics of study participants (EAP clients) can potentially modify the effects of intervention (EAP services), a phenomenon referred to in clinical research as heterogeneity in treatment effects (HTE).¹⁰ HTE might lead to benefit inequity in outcomes, with some workers benefiting more (or less) than others who used the same EAP.

A greater understanding of benefit equity in outcomes among EAP users is relevant to both EAP providers and purchasers. The most common industry pricing approaches, capitated and utilization-based, have fees based (fully or in part) on the number of covered employees.¹¹ A demonstration of benefit equity in outcomes would consequently show purchasers that service benefits are distributed evenly among the different groups/subgroups of covered employees using the services – even when the majority of these groups do not use the EAP in a typical year. While an evaluation might demonstrate the overall effectiveness of an EAP, there may still exist benefit inequity indicating that “effectiveness is undesirably varied among different groups of workers.”³ Benefit equity could therefore serve as an important differentiator for providers and an additional indicator of program quality for purchasers to

consider when selecting an EAP, along with overall program effectiveness, pricing, utilization rates, range of services, and so on. For the providers of EAP, the integration of benefit equity analyses into routine evaluations could identify groups of workers benefitting less than others and thus provide an opportunity to improve practices and delivery of services for those kinds of users.

Despite not being a new concept, benefit equity in outcomes among users of EAPs has received very little attention from the industry. This article aims to fill this knowledge gap with findings from a benefit equity analysis conducted using evaluation data from a Canadian EAP provider. The measure of outcome benefit evaluated was the self-reported degree of problem resolution reported at the end of a case. The analysis used in this study can be adapted for use with other service offerings, evaluation methodologies, and intervention outcomes, and measures of benefit from use of the services.

Methods

The current study was based on evaluation data collected between 2011 and 2014 from covered employees accessing the counseling services of an employee assistance program in Canada.

EAP Services. Arete® HR Inc. was the EAP vendor for this study. The EAP vendor served thousands of mostly very small organizations (<10 employees) across Canada in both the private and public/para-public sectors. The treatment intervention provided by the assistance program was face-to-face counseling with up to 12 sessions available per year. The counseling services were available in both national languages, English and French. The majority of cases accessed the counseling services through self-referral with a minority also through managerial referral. The EAP clinical services were provided by many

different masters and doctoral level affiliate therapists.

Survey Data Collection. Participation in the study was solicited through an e-mail invitation sent to the client upon closure of a case. An online survey was offered that could be completed voluntarily and anonymously. The survey collected basic demographics about the person and inquired about experiences with the EA services received and a number of outcomes. English and French versions of the survey were available and answers from both languages were merged for analysis.

Sample. The sample included 249 covered clients from different Canadian organizations served by the vendor across a number of provinces. The sample was considered representative of the vendor's overall counseling clientele, as determined by comparing percentages of overall demographics with the current sample.

Outcome Measure. The self-reported degree of problem resolution reported after file closure provided a measure of benefit from use of the EAP services. The degree of problem resolution was reported on a 4-point Likert scale scored from 1 to 4, with 1 indicating a virtual absence of any problem resolution and 4 indicating complete resolution of the presenting problem(s) identified during clinical intake.

Predictor Measures. A number of categorical variables measured client demographics: age (20-29, 30-39, 40-49, 50+), gender (male, female), marital status (single, married/common law, separated/divorced); as well as work characteristics of: occupation type (management, administration, sales, professional, other) and length of tenure at current job (0-2 years, 2-5, 5-10, 10+). In addition, the language used during the use of the EAP service was also assessed (English or French).

Operational Definition of Benefit Equity. The operational definition of benefit equity was the lack of a statistically significant relationship between any of the demographic and work attributes and the variance in the measure of client benefit; in this case, degree of problem resolution. Results found an average problem resolution score of 3.01 with a standard deviation (SD) of 0.78. This result confirmed the occurrence of an overall high degree of benefit (problem resolution) across most of the sample but it did not demonstrate whether it was equally distributed among the different groups of workers.

Data Analysis. Analysis of variance (ANOVA) using General Linear Models (GLM) was used for the analysis of benefit equity. The analyses included separate one-way ANOVAs for each variable to determine whether differences in the degree of resolution existed between employees in the various demographic or worker or language categories. Statistically significant differences would indicate a high likelihood of problem resolution inequity among the different groups of workers as defined by their demographic status (e.g., age and gender) or work characteristics (type of occupation and job tenure) or language.

Interaction effects were also investigated using two-way ANOVAs (GLM). A significant interaction would also indicate a difference in the level of problem resolution between subgroups of workers as defined by the combination of two demographic or work variables. For example, workers of a particular gender and age group might benefit more or less than other gender by age combinations. Three level interactions were not assessed due to sample size restrictions.

The threshold of statistical significance for all analyses was set at the standard probability level of a p -value less than .05.

Results

The findings supported the existence of benefit equity in self-reported problem resolution among EAP users. The one-way ANOVAs (GLM) revealed no statistically significant relationships (all $p > .05$) between any of the client demographics or work factors and the degree of problem resolution (See Table 1). Thus, the degree of problem resolution average score was similar among all of the different groups of workers.

Similarly, the two-way ANOVAs (GLM) tests revealed no significant interactions between the pairings of different demographic, work and language variables on the degree of problem resolution experienced in the various sub-groups (See Table 2).

Discussion

The findings strongly support the existence of benefit equity among workers accessing the face-to-face counseling services of this EAP provider. The observed benefit was not “undesirably varied”³ among the different groups of workers as none of the demographic or work or language attributes of EAP users functioned as predictors of variance in the degree of problem resolution reported after file closure.³

A number of factors could explain why the average level of problem resolution was observed so consistently among the many different groups of workers, despite their diversity and the possibility of HTE.¹⁰

First is that the vast majority of the EAP users from the current evaluation reported that their therapist had focused “on finding concrete solutions to their presenting problem(s)” at a frequency of “all or most of the time” [data not shown]. This therapeutic approach has been shown in other clinical outcomes research as being successful in resolving affective and

relationship problems using a relatively low average number of sessions fitting within many EAP benefits caps.¹²

Past research indicates that solution-focused brief therapy involves an average of 5 total sessions per case.¹³ A second reason could be that the *availability* of up to 12 sessions may have provided flexibility to the EAP therapists to then treat each case with as many sessions as needed which could have resulted in a high level of benefit (i.e., problem resolution) regardless of many differences in client background attributes. [Note that the number of sessions actually used per cases was not included as a predictor variable in this study.]

Implications for Future Research

As the interpretation of benefit equity was based on a relatively limited set of client demographics and one simple measure of benefit/intervention outcome, additional evaluations and analyses could further improve our understanding of the topic of benefit equity in outcomes among users of EAPs. Data collected with other tools and questionnaires in EAP research¹⁴⁻¹⁶ could be used to more comprehensively evaluate benefit equity in multiple kinds of outcomes (e.g., clinical and workplace outcomes, employer ROI). Future evaluations could include additional client demographic factors and socio-economic characteristics (e.g., income, education, ethnicity, geographic location), as well as assessing outcomes at multiple time points (e.g., collecting outcome data at both case open and case close and then again after a follow-up period). Comparing the degree of benefit equity in outcomes observed across a multitude of EAP providers/services with variations in number of sessions available, degree of the use of a solution-focused clinical approach by affiliate therapists, and/or other features of the clinical context (e.g., self-referral versus managerial referral) could help identify factors important for the manifestation of benefit equity among users of counseling services.

For EAP providers, using statistical tests to compare the possible lack of differences in the level of outcomes achieved across different demographic categories of cases to provide an assessment of the degree of benefit equity is recommended to validate the consistency in the clinical success of the EAP. Alternatively, in the event of finding statistically significant relationships between demographic attributes (including interactions) and variance in the

measure of client benefit, additional statistical analyses (e.g., pairwise comparisons, multiple regressions, GLM with multiple factors) could be performed to identify the group(s) who benefit more (or less) than others from use of the EAP counseling, as well as to determine which are the most important predictors of inequity.

Table 1
One-way ANOVA Results - Tests of Main Effects for Employee Characteristics as Predictors of Degree of Problem Resolution After EAP Use

	N	Mean	SD	df	F	p	Sig.
Gender				1	<1	.60	NS
Male	49	3.06	.77				
Female	195	3.00	.79				
Age				3	1.19	.32	NS
20-29	31	2.90	.79				
30-39	75	3.00	.77				
40-49	75	2.96	.85				
50+	67	3.16	.66				
Marital Status				2	<1	.56	NS
Single	54	3.09	.68				
Married/common law	145	2.97	.77				
Separated/divorced	47	3.06	.87				
Occupation Type				4	<1	.56	NS
Management	82	2.98	.81				
Administration	70	3.09	.79				
Professional	56	2.91	.70				
Sales	29	3.03	.82				
Other	11	3.27	.79				
Time at current job				3	< 1	.70	NS
0-2 years	60	2.95	.81				
2-5	66	3.10	.77				
5-10	55	2.98	.78				
10+	67	3.00	.78				
Language of service				1	<1	.40	NS
English	219	3.00	.77				
French	30	2.90	.88				

NS = not significant

Table 2
Two-way ANOVA Results – Tests of Interaction Effects for Combinations of Employee Characteristics as Predictors of Degree of Problem Resolution After EAP Use

		<i>df</i>	<i>F</i>	<i>p</i>	<i>Sig.</i>
<i>Gender by</i>	Age	3	< 1	.77	NS
	Marital status	2	< 1	.67	NS
	Occupation	4	1.90	.11	NS
	Time at job	3	< 1	.88	NS
	Language of service	1	< 1	.91	NS
<i>Age by</i>	Marital status	6	1.15	.34	NS
	Occupation	12	< 1	.78	NS
	Time at job	8	1.46	.17	NS
	Language of service	3	< 1	.97	NS
<i>Marital status by</i>	Occupation	8	< 1	.84	NS
	Time at job	6	1.94	.08	NS
	Language of service	2	< 1	.96	NS
<i>Occupation by</i>	Time at job	12	< 1	.99	NS
	Language of service	4	1.65	.16	NS
<i>Time at job by</i>	Language of service	2	< 1	.72	NS

NS = not significant

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