Employment and Educational Equivalence Outcomes as Measures of Employment and Career Counselling

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ABSTRACT

In Canada, government departments and other funders of services tend to view change in employment status as the primary indicator of success in career and employment counselling. If a client becomes employed, the counselling is viewed as successful, while all other outcomes are viewed as failures. We advance the idea that many other outcomes, such as seeking further training, can result in increased financial productivity over the long term, and therefore an employment equivalence measurement can be developed to depict this outcome. Furthermore, employment equivalence can interact with factors such as increased salary resulting from further training to yield a measure of return on investment that provides an indication of the financial return on some counselling outcomes that do not produce an immediate change in employment status. Numerous examples are provided to illustrate how employment equivalence and return on investment can be used to demonstrate the value of career development services.

A recent survey (see Lalande, Hiebert, Magnusson, Bezanson, & Borgen, 2006; Lalande & Magnusson, 2007) regarding the evaluation practices of agencies and practitioners involved in delivering career development services produced some interesting findings and some discrepant results. More than 90% of managers and practitioners of agencies serving youth and adults in the labour market reported that it was important to evaluate the outcomes of the services they offered. However, when asked about their evaluation practices, only about 35% of
practitioners reported ever evaluating the outcomes of their work with clients. This is essentially the same finding reported in an earlier study (Conger, Hiebert, & Hong-Farrell, 1994), where 40% of practitioners reported never evaluating their work with clients. The most frequently reported evidence was employment status, a datum that practitioners lamented was not very relevant to much of the work they did. Furthermore, practitioners reported that many of the outcomes they observed were not reported. These unreported outcomes included client empowerment, increased client self-esteem, changes in client attitudes (e.g., about their future, or about the nature of the workforce), financial independence, and client skill development (e.g., personal self-management skills). This represents a major disconnect between the type of data that agency managers find important and the changes that practitioners observe.

In light of the above discrepancy, it is important to attempt to bridge the gap between agency managers and practitioners. In this article we argue that with a bit of data mining, and some mental nimbleness, it is possible to identify variables that could serve as proxies for employment status. Doing so would provide managers with the sort of evidence that they are looking for and also could relate directly to the services that practitioners typically provide.

**BACKGROUND**

A number of career and employment counselling projects are funded by government departments concerned with employment. In attempting to measure the success of such projects, funders are primarily concerned with the number of clients who become employed. In Canada the principal national funder of employment services is the Department of Human Resources and Social Development Canada (HRSDC), which lists its performance measure as the number of clients employed or self-employed following an employment program intervention (HRSDC, 2004). This is as it should be, for the performance measure corresponds to the goals of the program being funded.

However, the reliance on such a single measure tends to denigrate other outcomes that are employment related and might have greater long-term potential for estimating the employment success of clients. For example, a client who decides not to get a job, but to get further training, is often considered a failure in the official statistics although he or she most likely will become employed at a higher pay level upon graduation. The point we are trying to make here is that entering retraining as a result of counselling is, in fact, a positive, not negative, outcome and it may even be more important than getting an immediate job. In the process of elaborating this point of view we will argue that there is a place for employment equivalence in the outcome measures, and will provide some initial elements that could be used to develop a formula for calculating employment equivalence. It is possible that similar “proxies” can be developed as legitimate measures of outcomes for other performance measures, but in this article we focus primarily on employment.
Ideally, from the point of view of the funding agency, the immediate outcome of employment counselling is job placement. However, employment counselling has a somewhat higher aim: namely, to guide clients into a path that will lead to their long-term success in the labour market. This may mean getting a job immediately, particularly if a candidate is well qualified for a trade or profession. On the other hand, a client with modest education and training is very likely going to live a life of floundering in the labour market, largely as a result of the fluctuations in the fortunes of the small- and medium-sized businesses that will employ them. There is no question that the more education and training people have, the more likely it is that they will get a better and more stable job, experiencing many fewer periods of unemployment, and relying less and less on unemployment insurance (Statistics Canada, 2006).

AN ILLUSTRATIVE EXAMPLE: THE CASE OF FRED

Given the above, we offer the following considerations for calculating the employment equivalence of a man who, as a result of employment counselling, has decided to take further training. All of our statistical data have been taken from official records of Statistics Canada, the Canadian department responsible for gathering and interpreting statistical information in Canada.

Assumptions

Fred is a 28-year-old male. He has completed 8 years of schooling and has been in the labour force for 12 years as a labourer. His average employment periods have been 6 months in each year, and therefore, cumulatively, he has been on unemployment insurance for a total of 6 years. As a result of career counselling, Fred decides that he has the capacity and will to learn, and decides to study for grade 10 equivalence, which, according to his achievement tests, should take him 10 months. According to official Canadian statistics for 2005 (Statistics Canada, 2006), 51.6% of men 30 years of age with less than grade 9 education are employed, but 69.1% of 30-year-old men with some high school are employed. Therefore, to get this training would mean a 34% increase in the likelihood of being employed and, as a result, earning higher pay and avoiding periods of unemployment.

In order to calculate an employment equivalence we might suggest the following: (a) the cost of the training will be equivalent to the unemployment insurance that he might otherwise collect during the next two years of his working life; and (b) the likelihood of employment is .34, therefore the employment equivalence would start out at .34, which is perhaps not as good as being employed, but much better than zero. Completing the training would have other consequences connected with it, for example, increased salary and decreased probability of unemployment. The importance of further education can be seen in the following data. Statistics Canada (2003) reports that in the year 2000, Canadian males aged 25–34 years who had a college certificate or diploma earned average annual salaries of $36,391, compared to $30,879 for males in the same age group who
had some postsecondary education, and $26,762 for males in the same age group who had some high school education. Thus it is possible to calculate the financial benefit of further education ($b$) by multiplying the employment equivalence ($ee$) by the average salary increase ($s$), that is $b = ee \times s$. In this case we could say that the financial benefit would be .34 (employment equivalence) times $4,117, that is, the salary increase of $1,400 in the first year after training (and likely greater in subsequent years because the wage differential tends to grow over time).

Of course, there would need to be some adjustments to the employment equivalence calculation to account for things like dropout rate. However, if there is a dropout rate of, let us say, 25% from training programs with counsellors on site and 33% with no counsellors available to the trainees, this can be used as support for the availability of counselling services. Data from the *Youth in Transition Survey* (see Lambert, Zeman, Allen, & Bussiere, 2004) provide convincing evidence of the role that counselling services play in educational retention.

Other factors also influence retention in post-secondary education. Statistics Canada has extensive data on the odds ratio for leaving post-secondary educational institutions in Canada (see Butlin, 2000). For example, men are 1.61 times more likely to drop out of community college than women, those living in a two-parent family are only 0.57 times as likely to drop out compared to those living in a lone-parent family, those with one or more dependent children are 1.47 times more likely to drop out than those with no dependent children, those who had left high school at some point were 2.39 times more likely to drop out than those who had never left high school before graduating. These data clearly indicate the great importance of social-demographic factors in the success of students enrolled in post-secondary college programs in Canada and they could be incorporated into the calculation of employment equivalence.

The data reported above could also provide a rationale for offering student services programs to counteract the negative influences. The measures of outcome success would be the completion rates of students falling in the social-demographic categories, and the data could form the basis of a Return on Investment calculation as an outcome (graduation) of student support services. The information that would be required includes the cost of the student services; the per student cost of the retraining program at a college, including training costs and student training allowance; socio-demographic information on the students; and the employment history/social benefits costs of dropouts from the program.

Lambert et al. (2004) report a wide range of critical factors that appear to prompt postsecondary students to drop out, and can serve as the basis for specifying a student services program that would reduce the number of dropouts and have a positive effect on their future employment. From Lambert et al.’s data (see Table 1), it appears that postsecondary leavers were 50% more likely to have had difficulty keeping up with the workload that their counterparts who remained in school. Therefore, an employment equivalence of .50 could be attached to students who completed a time management and study skills program and documented their acquisition of those skills, thus providing a rationale for offering such training.
to students. The number of continuing students who reported having a career plan in their first year of studies was 25% greater than those who discontinued, and it jumped to 45% if they saw their career plan as being a good match for their course of studies. Postsecondary leavers reported being unsure of what they wanted to do or being unhappy with their program. In fact, the number one reason that youth gave for leaving school was “lack of fit.” These observations support the need for career counselling, which is a central part of most student services programs. These types of data can be used to build a case for employment equivalence or return on investment for education and training, and for student services that help students to complete their programs. For example, data reported earlier in this article indicate that the average salary differential for students who complete postsecondary education compared to those who discontinue is $5,512 ($36,391 – $30,879). Thus, the benefit of completing study skills programs would be $2,756 (.50 × $5,512), and the benefit of programs that promote congruence between students’ career plans and their course of study would be $2,480 (.45 × $5,512).

Other data are available to support career-related services for students. For example, Saks (2006) investigated the combined and differential effects of five job search activities (consulting informal sources, consulting formal sources, preparatory job search intensity, active job search intensity, and job search effort) on five criteria of job search success (job interviews, job offers, employment status, person-job fit, and person-organization fit). In addition, he explored the direct and moderating effects of job search self-efficacy. Data from 225 recent university graduates indicated that active job search intensity was positively related to job interviews and offers, and consulting informal job sources was negatively related to job offers and employment status. The results also depict a sequential process where active job search intensity and job search self-efficacy predict the number of job interviews, job interviews predict the number of job offers, and job offers predict employment status. In addition, job search self-efficacy was a significant predictor of person-job fit perceptions, and had a moderating effect on the relationship between job offers and employment status. Results such as these could be incorporated into the calculation of employment equivalence and provide convincing evidence of the efficacy of student services programs.

Following from the theme description by Saks (2006), let us suppose that an agency creates a Job Finding Club for young offenders to help them become employed upon release from jail. We know that 80% of people engaged in these clubs get good jobs within three weeks (Mills, 1984), so we can easily calculate a formula of employment equivalents for them. If recidivism decreases among the young offender population when they know that they are going to get work rather than return to jail, we can make a calculation. There could be numerous similar examples, but we are sure that readers see the idea. What we are proposing is not “real measurement,” perhaps, and does not negate the need for more sophisticated measures, but this is one set for which data are available and formulae can be created.

One more example is in order, pertaining to hard evidence that most people would say is an indicator of success, but is not employment status per se. A medium-sized high
school in central Alberta implemented a school-wide integrated career development program two years ago (Lovell & Palm, 2006). Their data now show that high school completion rates have increased by 15%. The number of students signing up for work experience and the number of students in their Registered Apprenticeship Program has increased substantially. The number of students taking Pure Math

Table 1
*Attitudes and Sense of Belonging in First Year of Postsecondary Education of Youth Aged 20 to 22 in December 2001 (numbers reported are percentages)*

<table>
<thead>
<tr>
<th>Attitude and sense of belonging during first year of postsecondary education (PSE)</th>
<th>PSE leavers in December 2001 ( (n = 121,000) )</th>
<th>PSE continuers/graduates in December 2001 ( (n = 706,000) )</th>
</tr>
</thead>
<tbody>
<tr>
<td>I participated in a program or workshop to help me adjust to first-year PSE</td>
<td>15</td>
<td>16</td>
</tr>
<tr>
<td>I had trouble keeping up with the workload most or all of the time</td>
<td>20*</td>
<td>13*</td>
</tr>
<tr>
<td>I never or rarely miss deadlines</td>
<td>71*</td>
<td>86*</td>
</tr>
<tr>
<td>I never or rarely could relate what was being taught to my future</td>
<td>32*</td>
<td>24*</td>
</tr>
<tr>
<td>I felt just like a number most or all of the time</td>
<td>34*</td>
<td>25*</td>
</tr>
<tr>
<td>I skipped class once a week or more</td>
<td>75</td>
<td>71</td>
</tr>
<tr>
<td>I never thought about dropping out</td>
<td>50*</td>
<td>77*</td>
</tr>
<tr>
<td>I felt that I had the skills and abilities to do well (agree/strongly agree)</td>
<td>82*</td>
<td>92*</td>
</tr>
<tr>
<td>There were people at school I could talk to about personal things (agree/strongly agree)</td>
<td>72*</td>
<td>82*</td>
</tr>
<tr>
<td>I felt I had found the right program for me (agree/strongly agree)</td>
<td>53*</td>
<td>78*</td>
</tr>
<tr>
<td>First year helped me get a better idea of my future plans (agree/strongly agree)</td>
<td>73*</td>
<td>83*</td>
</tr>
<tr>
<td>First year gave me skills that would help me in the job market (agree/strongly agree)</td>
<td>59*</td>
<td>73*</td>
</tr>
<tr>
<td>During first year, I was sure of the type of work I would like to have in the future (agree/strongly agree)</td>
<td>51*</td>
<td>63*</td>
</tr>
<tr>
<td>During first year, I became friends with other students at school (agree/strongly agree)</td>
<td>84*</td>
<td>92*</td>
</tr>
<tr>
<td>During first year, when I didn't understand something, I rarely or never asked for more explanation from teachers</td>
<td>22</td>
<td>21</td>
</tr>
</tbody>
</table>

*Note.* Numbers followed by an asterisk represent statistically significant differences. Sample sizes have been rounded off to the nearest thousand.
and other similar “top-tier” academic subjects has decreased, and the number of
students taking the high school completion versions of those programs (which
still qualify for post-secondary entrance) has increased. In Alberta, high schools
have a revenue stream based on Continuing Education Units (CEUs), and the
result of the combination of increased completion rates and increased off-campus
programs has produced a four-fold increase in the CEU revenue stream for this
high school. The additional revenue has been used to increase the resource base of
the school. The net result is a 15% increase in high school completion, increased
revenue to the school, more preparation time for teachers, and a perceived more
positive work climate.

CONCLUSION

In the 2005 study (Lalande et al., 2006; Lalande & Magnusson, 2007) of the
evaluation practices of career development practitioners and agencies, outcome
evaluation was identified as important, but practitioners lamented that many im-
portant outcomes went unrecorded and unreported. These unreported outcomes
include factors such as client empowerment, increased client self-esteem, changes
in client attitudes about their future or about the nature of the workforce, client
self-management skills, and so on. Agency managers tend to dismiss these sorts
of outcomes as unrelated to the important bottom line, which is client employ-
ment status. However, practitioners tend to see these sorts of “soft outcomes” as
centrally important, for they often play a crucial role in determining the extent
to which clients use the learning that results from career services to change their
employment status. For example, self-confidence is important when going for a
job interview, and it also affects many aspects of a client’s life. Furthermore, cli-
ents who have mastered job interview skills and are self-confident are more likely
to get a job offer. Typically, these sorts of outcomes have an impact on a client’s
employment status, and we have argued that it is possible to use these sorts of
variables to create a measure of employment equivalence that provides hard data
to managers and funders. We could provide many more examples in addition
to the ones described in this article, but we think that the point has been made
adequately. Many variables are associated with employment status, and when we
begin to examine the data in creative ways, convincing arguments can be made to
support the delivery of the career development services that many agencies offer.
Right now, the only metric that gets tracked is employment status; we are trying
to promote the idea that other types of outcomes are important, provide evidence
of return on investment, and should be tracked as well.

Policy makers at the 2003 Canadian Symposium on Career Development,
LifeLong Learning, and Workforce Development issued a challenge to the career
development field that it had not yet made the case for the impact and value of
career development services (see Bezanson & Renaud, 2004). The framework
for evaluating the effectiveness of career development interventions advanced by
the Canadian Research Working Group for Evidence-Based Practice in Career
Employment and Educational Equivalence

Development (Lalande et al., 2006) is a step in the right direction. However, we think that more is necessary. Seeing that funders and managers want hard evidence of the impact and value of career development services, we think that the notions of employment equivalence and return on investment have promise for providing funders and managers with the kind of data they seek, while at the same time providing meaningful data for practitioners regarding the effectiveness of the services they offer. The idea of employment proxies is now in its infancy. However, we are confident that with the collective wisdom of practitioners and researchers, the idea will be fleshed out and made more concrete. This would provide a win-win for all involved in career development: service providers, researchers, funders, and—most importantly—clients.

References


About the Authors

Bryan Hiebert is a full professor in Applied Psychology, Faculty of Education, University of Calgary, and a vice-president of the International Association for Educational and Vocational Guidance. He was president of the Canadian Career Development Foundation from 1985 to 1999 and was co-chair of the National Steering Committee for Career Development Guidelines and Standards from 1996 to 2004. In 1994, Dr. Hiebert co-chaired the first Canadian National Symposium on Evaluation in Career and Employment Counselling and in 1999 co-facilitated the first International Symposium on Career Development and Public Policy. Dr. Hiebert is a member of the Canadian Working Group on Evidence-Based Practice in Career Development, a consortium of researchers from six Canadian universities and one private foundation. He has published more than 150 professional papers and 8 books. A synopsis of Dr. Hiebert’s professional development and research endeavours is available at <http://homepages.ucalgary.ca/~hiebert>.

Stuart Conger is the retired executive director of the Canadian Career Development Foundation (1986–1998). Under his leadership the foundation contributed $5.5 million to Canadian universities in support of research and development of new methods of career development for youth. Prior to this appointment he served as director general, worker client services, of Human Resources Development Canada. In this capacity he was responsible for the development and implementation of a competency-based training program for employment counsellors, and for the development and promotion of materials and programs relevant to career development for use in schools, employment offices, and rehabilitation centres. He was a founder of the Canada NewStart Program and served as executive director of Saskatchewan NewStart (1968–1974), which created the first Life Skills training program. He was president of the Canadian Counselling Association (1981–1983). In recognition of his work over 50 years in the career field, the Canadian Career Development Foundation annually gives the Stu Conger Award for Leadership in Career Counselling and Development to an outstanding leader in the field.

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