Project Title:

COMMON INDICATORS: TRANSFORMING THE CULTURE OF EVALUATION IN CAREER DEVELOPMENT AND EMPLOYMENT SERVICES

Project Number:

011186210

Submitted by:

The Canadian Research Working Group for Evidence-Based Practice in Career Development (CRWG), and The Canadian Career Development Foundation (CCDF)

In partnership with

Saskatchewan Abilities Council, New Brunswick Post-Secondary Training Education & Labour, Life-Role Development Group Ltd., Goss-Gilroy Inc.

Primary Report Authors:

Dave Redekopp, Lynne Bezanson & Tim Dugas

June 10, 2013

Direct any inquiries to: Lynne Bezanson, CCDF #202 – 119 Ross Street Ottawa, ON K1Y 5G3 e-mail: <u>l.bezanson@ccdf.ca</u>



Research Team Members:

•	Project Directors:	Lynne Bezanson & Céline Renald	
		Canadian Career Development Foundation	
•	Lead Researcher:	Dave Redekopp	
		Life-Role Development Group Ltd.	
•	Expert Consultants:	Ken Organ & Tim Dugas	
		Goss-Gilroy Inc.	

EXECUTIVE SUMMARY

Career development and employment services consume significant financial resources from various levels of government, affect citizens' lives in powerful and enduring ways, involve the expertise and emotional investment of thousands of practitioners meeting face-to-face with clients in need, and foster incalculable and considerable economic, health and social well-being benefits (Jarvis, 2012; Redekopp, 2009). Given the cost and significance of these services, one would expect they would be accompanied by rigorous measurement, standardized metrics for performance and outputs, and large data sets that could be compared country to country, province to province and region to region. This is not the case, however.

Elements of evaluation exist, of course, but at a level that is extremely crude. As a country, we measure whether clients become employed or not (and sometimes how long that takes) and, often, the nature of the employment (e.g., full-time or part-time). We measure very little, however, about fundamental concerns such as the quality of employment (does it fit with the person? will they stick with it? is it suited to their skill set?), the means by which the client went from being unemployed to employed (what interventions work? how does self-help differ from practitioner-help?), the context in which the client is seeking a change (is training available near them? is work readily available?) or the living context the client carries with them as they walk in the door of the employment office (how hopeful are they? what needs do they have? what barriers are in their way?).

Our lack of measurement on the above indicators in consistent ways means that we cannot empirically connect how these indicators affect each other in a meaningful manner. We do not know, for example, to what degree employment services help individuals find work or enter training that fits with their skills or personal visions, to what degree seeing a client five times is different than seeing a client twice, to what degree clients are likely to succeed in work or education if they feel high self-efficacy versus low self-efficacy or high optimism versus high pessimism.

An overly dramatic metaphor may help illustrate the context for this study. Imagine traffic safety experts being able to work with only crude measures: For speed, "fast" and "slow;" for a collision, "crash" or "no crash;" for vehicle type, "big" and "small;" for driver experience, "good" and "not good;" and for outcomes; "deaths" and "no deaths". Imagine no measures for injuries or the costs of these injuries, no nuances regarding speed and rate of deceleration when braking, no accounting for context such as weather conditions, and no differentiating between heavy trucks, light trucks, cars and motorcycles. This is roughly the situation the career development and employment field is in, albeit in a less exaggerated way.

This study is an effort to address both issues raised above: consistent measures, and connections between what they measure. The first aim of the study was to use, develop or adapt measures that could be used as common indicators for key inputs (e.g., client characteristics; employment opportunities; employment needs), processes (e.g., the kinds of services provided; the working alliance between practitioner and client) and outcomes (e.g., the degree to which employment fits a client's skills and qualifications; the adequacy of the standard of living afforded by the employment). The second aim was to make as many connections as possible between the inputs, processes and outcomes

that were measured (e.g., labour market outcome achieved and employment need; level of services provided and labour market outcome; specific kind of service and degree of change knowledge and skill acquired to support work search).

Two research partners, New Brunswick Post-Secondary Education, Training & Labour (PETL) and Saskatchewan Abilities Council (SAC) provided a total of 48 practitioners in 11 offices for the study. They collected data on 401 clients over an 8 week period, with 1 week for intake, 6 weeks for the intervention, and 1 week for the exit.

The study placed significant emphasis on measures and data-collecting processes. Goss Gilroy Inc. provided data-gathering technology (ARMS) and customized it to meet the study's purposes. The system, tentatively named U-Name-It, collected and stored all the data for the study. It is a user-friendly, comprehensive, technically sophisticated system, available in both official languages, and is accompanied by telephone support and security for all client information.

The "common indicators" used in the study were selected through a combination of practitioner/policy maker input, the enhanced evaluation framework of the Canadian Research Working Group on Evidence-Based Practice in Career Development (CRWG), and a literature review. The study tracked these elements and sought connections between them.

Some of the key findings include:

- A number of inputs regarding the client can be readily and reliably measured, including Employability Dimension need (i.e., Job Readiness, Career Decision-Making, Skill Enhancement, Work Search, Job Maintenance), personal attributes (e.g., self-esteem, self-efficacy), responsibility, support systems, as well as the more typical input measures such as level of education.
- Practitioner and client perceptions of the above inputs and changes in them over the intervention are generally correlated, but practitioners take a much more conservative view of change than clients.
- A combined working alliance/client engagement measure was a far better predictor of employment success than intervention hours (but much more work is needed on exploring the relationship between intervention hours and outcomes).
- Working alliance/client engagement predicts learning outcomes.
- Clients and practitioners overwhelming reported high levels of working alliance/client engagement. This positive assessment was so consistent that it prevented a number of statistical analyses having the range they needed in order to show effects.
- Personal attributes can be a predictor of employment success, but more work is needed to determine the conditions for this.
- Personal attributes improve over a 6-week intervention.
- Learning occurs over a 6-week intervention.
- Clients who obtain employment do so almost exclusively within 50 km of their residence, and about three-quarters find work that is rated as consistent with their skills/qualifications, consistent with goals and preferred employment and with salaries consistent with skill/qualification levels. Salary is rated as adequate for their locale's cost of living needs only 50% of the time.

To summarize, this study has produced indicators, and measures for these indicators, that are applicable to a wide range of settings with diverse clientele. It has also begun to find connections between "input" indicators, such as skill enhancement needs and personal attribute needs and outcomes such as employment; "process" indicators such as working alliance and their relationship to outcomes such as employment; and differentiated "outcome" indicators, and their relationship to each other (e.g., as learning increases, personal attributes improve).

Of particular importance to the researchers is that the study has shown a pathway to measuring client *progress* in a meaningful way. Much more research is needed to connect the many dots at play, but the study provides a line of sight to the ability to connect interventions with changes in skills, knowledge and personal attributes, and to connect these changes with successful labour market outcomes.

The study was not without its limitations, described thoroughly in the body of the report. These limitations, as well as some of the study's findings, result in more research being needed. The research questions are abundant and promising. Among the highest priorities are:

- Repeat the study giving a minimum of a three month service period with a six month follow-up so that tracking of change over time can more accurately inform the capacity of the data-gathering tool to gather change data;
- Develop the indices that were not able to be developed for this project, add them to the model and test them. These include most importantly:
 - The employment opportunity index that can give a needed perspective on what is realistic to expect with respect to outcomes in divergent labour markets.
 - The client employability index including the labour market attachment variable that may provide a framework for establishing service parameters to be expected and planned.
 - Detailed data on the processes—the actual services provided—not only the what but the goals, content, duration and expected outcomes—so that the critical Process component of the model can be substantiated.
 - Build the processes on what the field of practice already has determined is working and working well.

Addressing these issues as a next step would provide a very solid evidence base for career and employment service and could result in identifying the components needed to strengthen what is now working and change or eliminate what is not working.

TABLE OF CONTENTS

EXECUTIVE SUMMARY
LIST OF TABLESX
LIST OF FIGURES XII
LIST OF SUPPLEMENTSXII
INTRODUCTION AND BACKGROUND1
DEVELOPMENT OF THE DATA GATHERING TOOL
Enhanced Framework
Literature Review
Practitioner & Manager Focus Group Sessions7
Online Tools
RESEARCH QUESTIONS
METHOD
Research Partners/Co-Researchers/Practitioners9
Participants/Clients
Measures15
Input Measures
Process Measures
Outcome Measures27
Procedure Synopsis
RESULTS
Assessment of Measures
Analysis of Measures
Practitioner Assessments
Client Assessments
Summary55
Attribution of Change60
Labour Market Outcomes and Processes68
Question 1: What labour market outcomes are achieved with 6 weeks of intervention?

Question 2: What labour market outcomes are enhanced by a strong by the practitioner? by the client?	-
Question 3: To what extent does length of service impact labour mark	ket outcomes?71
Labour Market Outcomes and Inputs	. Error! Bookmark not defined.
Question 4: What labour market outcomes are achieved in 6 weeks o divergent education?	_
Question 5: What labour market outcomes are achieved by clients wh needs?	
Question 6: What labour market outcomes are achieved by clients wh additional life circumstance needs?	••
Personal Attribute Outcomes and Processes	. Error! Bookmark not defined.
Question 7: How much change in personal attributes (e.g., self-efficat clients within 6 weeks of intervention?	
Question 8: To what degree are changes in personal attributes related working alliance?	
Learning Outcomes and Processes	. Error! Bookmark not defined.
Question 9: How much do clients learn in 6 weeks (regardless of Emp Bookmark not defined.	loyability Dimension)? Error!
Question 10: How does the working alliance affect learning outcomes defined.	? Error! Bookmark not
Relationship among Outcomes	73
Question 11: How are improvements in learning outcomes related to attribute outcomes?	
Question 12: How are improvements in learning outcomes related to market outcomes?	•
Question 13: How are improvements in personal attribute outcomes I labour market outcomes?	
Perspectives in Measurement	80
Question 14: To what extent do counsellors and clients assess working	g alliance similarly?80
Question 15: To what extent do counsellors and clients assess learnin of Employability Dimension)?	
Question 16: To what extent do counsellors and clients assess person (regardless of Employability Dimension)?	
DISCUSSION	
Question #1: Applicable Common Indicators	84
Employability Dimension Need/Competence	

Responsibility	85
Personal Attributes	86
Education Level	86
Support Systems	86
Working Alliance/Client Engagement	86
Length of Service	86
Employment	87
Entry into Training/Education	87
Question #2: Connecting Inputs, Processes and Outcomes	87
Conclusion	89
REFERENCES	
APPENDIX A: FINAL CLIENT SURVEY	

LIST OF TABLES

Table 1.	Literature Review of Indicators: Synopsis	5
Table 2.	Pre-Employability/Job Readiness Index- Correlations with Practitioner Assessment Items	26
Table 3.	Pre-Employability/Job Readiness – Client Assessment	27
Table 4.	Career Decision Making Index– Correlations with Practitioner Assessment Items	28
Table 5.	Career Decision-Making – Client Assessment	28
Table 6.	Work Search Index – Correlations with Practitioner Assessment Items	29
Table 7.	Work Search – Client Assessment	30
Table 8.	Skill Enhancement Index – Correlations with Practitioner Assessment Items	32
Table 9.	Skill Enhancement – Client Assessment	33
Table 10.	Employment Maintenance Index – Correlations with Practitioner Assessment Items	34
Table 11.	Employment Maintenance – Client Assessment	35
Table 12.	Overall Composite Index – Correlations with Employability Indices Using the Practitioner Assessments	36
Table 13.	Overall Composite Index – Correlations with Employability Indices Using the Client Assessments	36
Table 14.	Personal Attributes Index – Correlations with Practitioner Assessment Items	37
Table 15.	Personal Attributes – Client Assessment	38
Table 16.	Correlations Between Employed versus not Employed (1,0) with Employability and Related Indices Based on Practitioner Assessments	40
Table 17.	Logistic Regression Model for Employed versus not Employed (1,0) with Employability and Related indices Based on Practitioner Assessments for the Period Before the Study	42
Table 18.	Logistic Regression Model for Employed versus not Employed (1,0) with Employability and Related Indices Based on Practitioner Assessments for the Period After the Study	43
Table 19.	Correlations Between Employed versus not Employed (1,0) with Employability and Related Indices Based on Client Assessments	44
Table 20.	Logistic Regression Model for Employed versus not Employed (1,0) with Employability and Related Indices Based on Client Assessments for the Period Before the Study	45
Table 21.	Logistic Regression Model for Employed versus not Employed (1,0) with Employability and Related Indices Based on Client Assessments for the Period After the Study	45

Table 22.	Client Attribution of Change	47
Table 23.	Labour Market Outcomes Before and After (N = 313)	47
Table 24.	Employment in Relation to Skill/Qualifications, Vision, Salary and Cost of Living	48
Table 25.	Working Alliance/Engagement and Labour Market Outcomes – Practitioner (N = 253)	49
Table 26.	Working Alliance/Engagement and Labour Market Outcomes – Client (N = 242)	50
Table 27.	Intervention Hours and Labour Market Outcomes (N = 312)	51
Table 28.	Client Education and Labour Market Outcomes (N = 306)	52
Table 29.	Personal Attribute Needs and Labour Market Outcomes (N = 266)	53
Table 30:	Additional Life Circumstances and Labour Market Outcomes (N = 309)	55
Table 31.	Personal Attributes Needs Before and After – Practitioner Assessment	56
Table 32.	Personal Attributes Needs Before and After – Client Assessment	56
Table 33:	Alliance/Engagement and Changes in Personal Attributes – Practitioner	58
Table 34.	Alliance/Engagement and Changes in Personal Attributes – Client	58
Table 35.	Composite Employability Dimension Needs Before and After – Practitioner Assessment	60
Table 36.	Changes in Composite Employability Dimension Needs – Practitioner	60
Table 37.	Composite Employability Dimension Needs Before and After – Client	60
Table 38.	Changes in Composite Employability Dimension Needs – Practitioner (N =188)	61
Table 39.	Alliance/Engagement and Learning – Practitioner	62
Table 40.	Alliance/Engagement and Learning – Client	62
Table 41.	Learning and Attribute Changes Practitioner	63
Table 42.	Learning and Attribute Changes Client	64
Table 43.	Learning Outcomes and Labour Market Outcomes – Practitioner	65
Table 44.	Learning Outcomes and Labour Market Outcomes – Client	65
Table 45.	Personal Attribute Improvements and Labour Market Outcomes – Practitioner	66
Table 46.	Personal Attribute Improvements and Labour Market Outcomes – Client	67
Table 47.	Correlations of Client and Practitioner Ratings of Employability Dimension Scores	68
Table 48.	Correlations of Client and Practitioner Ratings of Personal Attribute Scores	69
Table 49.	Applicable Common Indicators	71

LIST OF FIGURES

Figure 1. CRWG Intervention Planning and Evaluation Framework	4
Figure 2. Illustration of Change vs Threshold, Client A	
Figure 3. Illustration of Change vs Threshold, Client B	

LIST OF SUPPLEMENTS

NOTE: This report references the following supplemental materials, all of which are available from the Canadian Career Development Foundation.

- Supplement 1. Common Indicators: Transforming the Culture of Evaluation in Career and Employment Services. Focus Group Report (Saskatchewan & New Brunswick).
- Supplement 2. Research Manual: Common Indicators Transforming the Culture of Evaluation in Career and Employment Services
- Supplement 3. Literature Synthesis Chart

Common Indicators: Transforming the Culture of Evaluation in Career Development and Employment Services

INTRODUCTION AND BACKGROUND

Policy makers and funders want to justify decisions about delivery models and funding of career development services with trustworthy evidence of the actual benefits to individuals, communities and economies. The career development and employment industry is largely publically funded, and providing robust evidence is a pressing priority.

Providing such evidence is highly complex. Policy makers are most interested in economic outcomes, including sustainable employment and long-term savings to benefit programs, both of which require costly and operationally difficult research. Acquiring immediate employment and/or gaining access to training or education programs are generally accepted as proxies for true long-term economic impact but, indeed, these are proxies only. Immediate employment is not necessarily sustainable or quality employment; admission to training and education programs is a very poor predictor of successful completion. However, in the absence of more trustworthy evidence, policy makers understandably rely on what is readily measurable and carries high face validity. Further, there are few standard data collection procedures that permit tracking and comparison of the factors that affect the outcomes derived from employment services. There are also virtually no standard assessment procedures that permit linking employment and economic outcomes to the services received by clients.

Career practitioners, as evidenced in a Career Development Services Evidence Base State of Practice Review (CRWG, 2004), reported ongoing frustration at having to provide limited numerical data on service outcomes that they believed did not capture important elements of the services received. Practitioners recognized the importance of a strong evidence base and indicated willingness to engage to make the field stronger but lamented the absence of alternative methods of data collection and analysis.

The need to address both evaluation perspectives, cost-benefit for policy makers and funders and an approach to data collection and to evaluation that recognizes that client needs vary and services and outcomes must be expected to vary as a result, was the genesis for the formation of the Canadian Research Working Group for Evidence Based Practice in Career Development (CRWG, 2004). The CRWG brings together expert researchers from both Francophone and Anglophone Canadian universities with a mandate to strengthen the evidence-base for career development practice with an emphasis on informing policy.

The CRWG adopted a variation on a simple Input \rightarrow Process \rightarrow Outcome framework. The framework has been used extensively to evaluate career development interventions, but it also is appropriate in other types of settings including counselling, mental health, physical health, education and other human services settings (Hiebert & Charles, 2008; Hiebert, Domene, & Buchanan, in press). The framework is described briefly below:

- Outcomes = Indicators of client change. Outcomes include *learning outcomes* (i.e., the knowledge and skills that clients acquire), *personal attribute outcomes* (e.g., changes in intrapersonal factors such as increased motivation, optimism, sense of control over self) and *employability outcomes* (i.e., the changes in a client's life or in society that are associated with learning and personal attribute outcomes including changes in employment status, educational status, training completion, community involvement, financial independence). These outcomes speak to the needs of end-users, service providers/ practitioners and policy developers in Canada.
- Processes = Activities that link to outcomes. Processes refer to what service providers actually do to achieve the outcomes that clients seek, i.e., the services, programs, skills they offer to assist clients to achieve their desired outcomes. Some processes may be generic whereas others may vary across delivery settings and client populations served.
- Inputs = Resources needed to perform the activities required to achieve the outcomes. Possible resources include: human resources (number of staff, their level of training, type of training), funding, service guidelines and agency mandate, facilities, infrastructure and community resources. Availability of resources may not be consistent across agencies, which affects the capacity to deliver processes and achieve outcomes.

This framework was validated over the past several years in two longer-term research studies funded by HRSDC (*Meeting Workplace Skills Needs: The Career Development Contribution* (<u>www.crwg-gdrc.ca</u>) (CRWG, 2010); and *The Impact of Labour Market Information (LMI) on Career Decision Making* (<u>www.crwg-gdrc.ca</u>; <u>Hiebert</u>, <u>B. et al., 2011</u>). All field trials showed the framework to be useful in helping provide a link between the services that clients receive and the results obtained, provided concrete evidence of significant and positive impacts of all three programs on self-esteem, self-efficacy, and capacity to self-manage one's career future. In the case of the LMI study, findings included an increase in employment of over 40% over the course of the study as well as an increase of 50% in the number of clients who reported that their job was a good fit with their personal career vision.

Two limitations of these research reports were that the:

- interventions were part of time-limited and controlled formal research studies and not integrated into everyday practice by all services providers in participating agencies and
- data-gathering instruments used in the research were questionnaires that were tied to the interventions under investigation and thus were not intended to be used by all practitioners with all clients.

This project titled "Common Indicators: Transforming the Culture of Evaluation in Career and Employment Services" addressed both of these limitations. In partnership with the provinces of Saskatchewan and New Brunswick (and, in a different report, Québec), this research project developed, tested and implemented, in a number of career development and employment services field test sites, with regular clientele and in everyday service practice, a data management tool that continued to capture data currently gathered and added new qualitative and quantitative data deemed important and held in common across delivery agencies but not currently gathered.

DEVELOPMENT OF THE DATA GATHERING TOOL

ENHANCED FRAMEWORK

The data-gathering tool¹was developed from June to December, 2012 building from the original CRWG framework and an elaborated framework developed in 2011 by a select number of career development researchers including members of the CRWG and provincial employment services operations and evaluation staff from New Brunswick and Saskatchewan.

The enhanced elements focused on the needs and goals of clients and included (See Figure 1):

Inputs (Resources available):

- Structure of opportunity. With reference to the labour market, not all opportunity structures are equal. The chances of a successful work search differ dramatically in a large urban setting with a very low unemployment rate and substantial job growth, a small urban setting with a single large employer that is downsizing and/or a remote community with an underground economy, high unemployment rates and very limited employment opportunities. Similarly, the structures of educational and up-grading opportunity are not equal nor are the structures of and access to community supports such as transportation, childcare and life skills training.
- Client employment potential. Client context factors (e.g., cultural heritage, race, significant others, target group membership etc.) provide potential sources of support but also potential barriers that need to be addressed. Multiple factors can enhance or detract from a client's employment potential, including levels of training, literacy, workforce attachment, work experience, physical and mental health and/or disability.

Processes (Activities that link to outcomes or deliverables):

Goal setting and clarification. It is assumed that goal setting has occurred before proceeding to intervention, but it is important that this be tracked and made explicit as a step in the service delivery process. Clients' goals change and refine throughout an intervention process; these changes need to be clarified and recorded.

Outcomes (Indicators of Client Change):

Fit, location and standard of living. Related to quality of labour market outcomes are fit (alignment with interests, competencies and vision), location (work or training in own community or region versus having to relocate) and standard of living (*i.e.*, comparing income to cost of living);

¹ The on-line tool was named "U-Name-It" for the purposes of the research. The tool is built on ARMS technology but the content is unique to the research. Naming the tool was presented to all research partners as a challenge for their creativity. Several names have been suggested but none yet selected.

Personal Attributes. Related to employability, goal achievement and labour market outcomes are individual attributes including self-management; self-esteem; well-being; self-efficacy; and self-awareness.

Progress Indicators:

- Progress indicators are incremental outcomes linked to each employability dimension and to personal attributes that demonstrate positive change and movement toward the desired goal/outcome. The most common model for the delivery of employment services to adults is the Employability Dimensions model, the components of which are included in the CRWG framework as follows:
 - Job Readiness/Pre-Employability
 - Career Exploration and Decision-Making
 - Skills Enhancement
 - Job Search
 - Job Maintenance/Growth
- There are obviously many knowledge, skill and attitude components included in each of these dimensions and clients will vary with respect to the conditions needed to move toward self-sufficiency. Different clients in different contexts may need other supports in order to move forward. In addition, how much progress is required by a client in order to be self-sufficient, sustain ongoing change and progress independently will be widely divergent. However, there are indicators of progress within each dimension that may be useful to track. More subtle, but also very important, are indicators of progress or improvement in personal attributes.

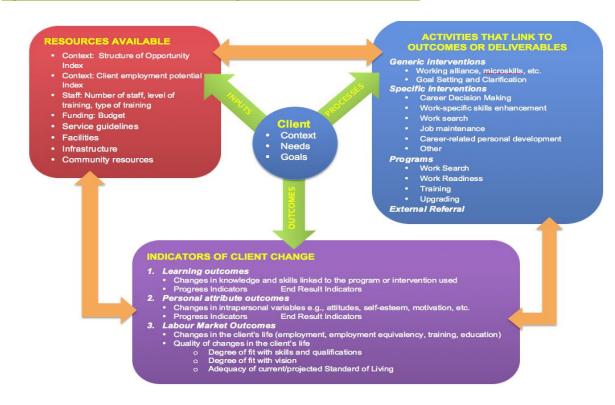


Figure 1: CRWG Intervention Planning and Evaluation Framework

LITERATURE REVIEW

This enhanced framework provided the parameters for the literature review on the use of common indicators and on existing indices and evidence for the impact of specific indices on outcomes. The literature review was led by Dr. Guylaine Michaud, Université Laval, and lead researcher in the Québec study. A Literature Review Synthesis is available in Supplement 3. The following is a synopsis of the literature review results highlighting the variables that were identified as having impact on client change and counselling outcomes. These were subsequently validated in a series of focus groups held in participating provinces.

INDICATORS OF CLIENT CHANGE	SERVICES CONTRIBUTING TO CLIENT CHANGE	INFLUENCES IMPACTING ON CAPACITY FOR CHANGE	
Client Personal Qualities	Generic Interventions	Practitioner Influences	
<i>Psychological Characteristics</i> : (e.g. self-confidence, self- knowledge, self-awareness, self- esteem, adaptability, anxiety, stress, motivation, client independence)	Working Alliance: (e.g. agreement on goals, agreement on tasks, relationship of mutual trust and respect) Coaching and Follow-up:	Skills and Knowledge: (e.g. information giving skills, assessment skills, counselling skills) Practitioner Accessibility:	
Attitudes: (e.g. engagement, attitude about the future and about work, optimism) Commitment: (e.g. commitment to training, commitment to goal and action plan, participation in learning)	(e.g. completing needs assessment, smoothness of process, clarity of expectations, focusing on tasks) <i>Identification of Social Supports</i>	(e.g. perceived availability, frequency of contact) <i>Practitioner Qualities:</i> (e.g. trust, credibility, involvement, sensitivity, responsibility, professional conduct, vigilance to understanding client experience)	
		Practitioner Support:	
Client Learning	Specific Practitioner and/or Program Interventions	Service Influences	
Information: (e.g. access to information, understanding the link between work and society or the economy, education or labour market, using information effectively <i>Knowledge:</i> (e.g. knowledge of environment, knowledge of possible choices and opportunities, knowledge of	Career Decision Making: (e.g. ability to make a decision, identification of options and strategies) Work Search: (e.g. assistance with transition to work, learning job seeking methods, employment preparation, job seeking) Skills Enhancement:	Accessibility to programs and services: Tools/Equipment: (e.g. computer assistance, notebooks and written exercise, self-administered inventories)	

Table 1. Literature Review of Indicators: Synopsis

INDICATORS OF CLIENT CHANGE	SERVICES CONTRIBUTING TO CLIENT CHANGE	INFLUENCES IMPACTING ON CAPACITY FOR CHANGE
vocations, knowledge of labour market and current trends)	(e.g. training and upgrading selection, education choices	
	Job Maintenance:	
	(e.g. functioning effectively in role)	
	Career-Related Personal Development:	
	(e.g. clarification of values, congruence between interests and aptitudes, exploration of potential, client personal exploration, accessing support systems	
Client Skills:		Community Influences:
Communication: (e.g. capacity for communication, capacity for teamwork, positive and effective interaction with others) Self-Assessment Decision-Making		Equitable access to community resources Employment opportunities in own community
(e.g. improved decision-making skills, importance of career choice, progress in relation to career choice decisions, greater decision certainty)		
Problem-Solving: (e.g. diminishing barriers to employment and integrating into the labour market, family- related obstacles)		
Situation and Community:		Client Influences:
<i>Employment:</i> (e.g. getting a job, participating in continuous learning that		Educational level
in continuous learning that contributes to achievement of work-life goals		Employment History Labour Market Attachment
		LUDOUI MUIKELALLULIIIIEIIL
<i>Employment Fit:</i> (e.g. fit between employment and education, training and interests, fit between		Language and Literacy competency

INDICATORS OF CLIENT CHANGE	SERVICES CONTRIBUTING TO CLIENT CHANGE	INFLUENCES IMPACTING ON CAPACITY FOR CHANGE
employment and vision of wanted employment)		Attitude to employment
Satisfaction: (e.g. satisfaction with training environment, satisfaction with work environment, job satisfaction, subjective satisfaction)		
<i>Economic Characteristics:</i> (e.g. financial independence, standard of living)		

PRACTITIONER & MANAGER FOCUS GROUP SESSIONS

Four half-day focus group sessions were held with a total of 41 practitioners (two in New Brunswick and two in Saskatchewan) and two half-day focus groups were held with a total of 14 managers (one in New Brunswick and one in Saskatchewan). The practitioner focus group tasks were to:

- identify and come to agreement on a select number of common indicators based on outcomes currently tracked and reported by career service providers in diverse career and employment services settings as well as outcomes not currently being tracked and reported but considered important outcomes of services;
- gather input to be used in designing the several indices to be included in the datagathering system (i.e., Opportunity Structure; Client Employability Index; Standard of Living; Quality of Work) as well as the drop-down menus to capture process and the indicators of progress;
- compare practitioner derived common indicators with those identified in the literature review and incorporate any deemed missing and important for inclusion in the tool design.

The senior manager focus groups had the same tasks as those of the practitioners but also to:

identify which of the common indicators would be accepted as legitimate in terms of evidence of the outcomes of quality career and employment services.

The focus group process was as follows:

- identify common indicators believed to be relevant to their work;
- group these indicators into common themes;
- compare the derived indicators with the indicators emerging from the literature review;
- finalize a list of indicators; and
- vote on the most significant indicators to be included in the on-line tool.

The full focus group report is available in Supplement 1.

The researchers subsequently combined the focus group results with the CRWG framework and the findings of the literature review to determine indicators to measure and, in some cases, ways to measure the indicators. There were several instances in which the researchers needed to compare different language usage and decide the underlying construct of interest. For example, the practitioners' use of the label "taking charge" seemed to be pointing to the same construct as the academic literature's use of the label "self-efficacy."

The final input, process and outcome indicators and measures were field tested with a select number of practitioners in both participating provinces and revised in accordance with their feedback.

The final input, process and outcome indicators and measures are described in the sections following the description of the on-line system.

ONLINE TOOLS

With the aim of being as practical and applicable as possible to the real workings of employment centres, all the measures used in the study were designed to be part of the case management process and were delivered through the Accountability and Resource Management System (ARMS). Goss Gilroy Inc. (GGI) led the development and implementation of the online tools in ARMS.

A web-based online case management and reporting system, ARMS is designed for use by organizations delivering employment programs and services. It is designed to support the development of action plans and the tracking of interventions. Whereas ARMS did not include most elements within the Elaborated CRWG Framework at the beginning of the study, the Employability Dimensions were included in the system as essential service-delivery organizing frameworks for the participating provinces.

ARMS is a secure internet web-based data collection and reporting solution. The system is hosted in a dedicated Microsoft Server 2003 environment using the IIS 6.0 web server and Microsoft SQL Server database platform. On the network side, security is provided through the use of firewall and multiple network layers (DMZ, data zone, & internal LAN) to segregate access. All data are encrypted via SSL using the HTTPS protocol. At the application level, multiple security features (password controls, inactivity timeout, lockout, etc.) prevent unauthorized access. To mitigate potential loss of data, all data are backed up daily and stored at a secure offsite premises. All ARMS support staff have valid security clearances to the level of secret. All data are stored at GGI's office in St. John's, Newfoundland.

RESEARCH QUESTIONS

The research questions addressed in this study are:

- 1. What common indicators are applicable across different client contexts, different client groups, different agencies, and different interventions?
- 2. What statements about service effectiveness can be made by tracking common indicators of inputs, processes and outcomes? If numbers permit, it will be possible to aggregate data to begin to address the ultimate question, "What kinds of interventions in what contexts produce what kinds of outcomes?"

METHOD

RESEARCH PARTNERS/CO-RESEARCHERS/PRACTITIONERS

New Brunswick Post-Secondary Education, Training & Labour (PETL) and the Saskatchewan Abilities Council (SAC) agreed to participate in the research study. The study was especially fortunate to have these offices that serve different populations. PETL practitioners work in provincial government offices and clients are mainstream clients, many of whom are job-ready and do not have significant barriers to employment. PETL services are typically relatively shortterm. SAC offices are part of a non-profit organization supported by the provincial government, working primarily with individuals with disabilities and one or more significant barriers to employment. SAC services are typically long-term. This diversity in work settings, service delivery models and client profiles afforded a valuable opportunity to test out the online tool in highly diverse settings. It provided a pool of clients with a wide range of challenges. Although we cannot be confident that the client sample was representative of the entire population of career and employment services clients across Canada, this diversity provided a good sampling of individuals who are members of an aboriginal group and persons with a disability. It allowed us to test the online data gathering tool with a heterogeneous population and to test the workability and robustness of the system across different client groups and in different service settings. Since our objective was to test the system across settings, most of the data for the two provinces were merged for the study analyses.

Managers in both provinces assisted in disseminating information about the study and actively supported the participation of their practitioner staff in its implementation. All practitioners were volunteers in the study.

The offices were located as follows:

New Brunswick	Saskatchewan
Campbellton/Bathurst	Moose Jaw
Dieppe	Regina
Fredericton	Saskatoon
Miramichi	Swift Current
Moncton	Yorkton
Péninsule acadienne	

Practitioners and their managers were oriented to the study and its requirements with one-day orientation sessions. These sessions were held in Fredericton, Moncton, Bathurst, Saskatoon and Regina in early January, 2013 and attended by 50 practitioners and 12 managers. A comprehensive Common Indicators Research Manual (see Supplement 2) was prepared and distributed in the workshops. The Research Manual also includes a paper copy of the complete on-line U-Name –It data-gathering tool (pp.29-76).

Prior to the orientation sessions, practitioners were sent a paper copy of U-Name-It, the data gathering prototype developed for the research project. They were asked to review the tool in advance of the orientation and to come prepared with any concerns or questions they had.

The objectives of the orientation sessions were for practitioners to:

- be clear about the purpose of the research and their roles;
- understand the Input/Process/Outcome framework of U-Name-It;
- review all research protocols contained in the Common Indicators Research Manual and provided to each participant; and
- practice navigating the on-line version of U-Name-It with prepared case studies under guided supervision.

Practitioners were given their password for the U-Name-It system and connected to the 1-800 line for technical support. Protocols were established for weekly conference calls with managers to identify and trouble-shoot any difficulties being encountered with the online tool and/or with any of the research protocols. A total of 32 practitioners from New Brunswick and a total of 16 practitioners from Saskatchewan participated in the study.

PARTICIPANTS/CLIENTS

There were no client criteria for being invited to participate in the research study. The intent of the study was to use the data–gathering tool in regular service settings with all clients seeking services. Clients were identified as new or existing clients and, if existing clients, how much service already received was recorded. The duration of the study included the assessment at intake (week 1) and assessment at exit (week 8) based on having received six weeks of service. In New Brunswick, 27% of clients were existing clients and 73% new; in Saskatchewan, 46% were existing and 54% new. This difference was expected as clients of the Abilities Council offices tend to be on active caseloads for extended periods of time.

In both provinces, clients met with a career development and employment practitioner (who we refer to herein as the "practitioner") who completed a needs assessment. It was practitioner discretion to invite the client into the research before or after completing the comprehensive assessment to determine the Employability Dimensions with which the client needed help. Invited clients were told of the study's:

- requirements (to carry on with their work with the practitioner, and to complete a consent form, initial demographic survey and final survey);
- purpose (to understand how to serve clients better by capturing more information than is typically done);
- duration (6 weeks after intake plus a week for the exit survey);
- option to exit the study at any point (knowing the honorarium would be forfeited); and
- honorarium (\$20).

The suggested invitation script is provided in Supplement 2 (pp. 20-21). Clients who agreed signed a consent form (Supplement 2, pp. 23-24).

There were 181 New Brunswick and 236 Saskatchewan clients for a total of 417 clients who started the study. 137 or 76% of New Brunswick clients completed the exit survey and 154 or 65% of Saskatchewan clients completed the exit survey study for a total sample of 291 clients. Both provinces have confirmed that a range of 25-30% is standard for non-return clients. Many clients come for information only, to verify eligibility and/or to get income-support cheques. They are not actively seeking services. Given that practitioners were instructed to offer participation in the study to all clients, it is not surprising that the incomplete rate remained within or just above the expected range.

Various client characteristics are provided in the following tables. Note that not all clients provided complete information, resulting in totals less than 417 in the following tables.

Gender. Where New Brunswick clients were almost evenly balanced in terms of gender (47% male; 53% female), Saskatchewan had a slightly higher male (61%)/female (39%) ratio (see Table xx).

Province	Gender		
	Male	Female	Total
New Brunswick	82	91	173
	(47%)	(53%)	
Saskatchewan	139	90	229
	(61%)	(39%)	
Total	221	181	402
	(55%)	(45%)	

Table xx. Gender Frequencies by Province

Cultural Ethnicity. Many clients did not report on cultural ethnicity. At least 18% of all clients identified as Aboriginal, and 4% identified as visible minority or immigrant.

Table xx. Cultural Ethnicity Frequencies by Province

	Aboriginal	Visible Minority/ Immigrant	Total
NB	7	3	10
SK	66	14	80
Total	73	17	90

Note: Percentages are not relevant in this table and have been omitted.

Age. Over half (60%) of clients who reported their age were 34 years old or younger (see Table xx). The age distributions for each province were very similar.

Province	Age					
	≤25	25-34	35-44	≥45	Total	
NB	45	42	30	47	164	
	(27%)	(26%)	(18%)	(29%)		
SK	82	62	32	52	228	
	(36%)	(27%)	(14%)	(23%)		
Total	127	104	62	99	392	
	(32%)	(26%)	(16%)	(25%)		

Table xx: Age Frequencies by Province

Months Unemployed in the Last 5 Years. Visible differences in employment history can be seen in Table xx. Whereas 41% of NB clients were unemployed for only the previous 6 months, only 20% of SK clients were; 80% of the SK clients had been unemployed for more than 6 months. Only 9% of NB clients had been unemployed for 37-60 months, but 38% of SK clients had been.

Table xx. Months Unemployed in the Last 5 Years by Province

Province	Months Unemployed					Total
	≤6	7-12	13-24	25-36	37-60	
NB	53	23	25	15	12	128
	(41%)	(18%)	(20%)	(12%)	(9%)	
SK	45	28	33	30	83	219
	(20%)	(13%)	(15%)	(14%)	(38%)	
Total	98	51	58	45	95	347

Education Level (see Table xx). Almost three-quarters of the clients (71%) obtained high school equivalence or less. This means that only 29% of clients had education beyond high school. In Saskatchewan, an even smaller percentage (20%) of clients had education beyond high school. About one-third (35%) of NB clients reported an education beyond high school.

Table xx. Education Level Frequencies by Province

Province	Less than HS	High School / GED	Some Post-Sec, College Diploma/Trade Certificate	University Degree
NB	45 (26%)	69 (39%)	49 (28%)	12 (7%)
SK	78 (34%)	96 (42%)	42 (18%)	13 (6%)
Totals	123 (30%)	165 (41%)	91 (23%)	25 (6%)

Number of Jobs in the Past 5 Years. Very few clients (5%) had not worked in the last 5 years (see Table xx).

Table xx. Number of Jobs in the Past 5 Years by Province

Province	# of Jobs in Past 5 Years				Total	
	0	0 1 2 3 ≥4				
NB	3	47	40	43	32	165
	(2%)	(28%)	(24%)	(26%)	(19%)	

SK	16	42	51	50	63	222
	(7%)	(19%)	(23%)	(22%)	(28%)	
Total	19	89	91	93	95	387
	(5%)	(23%)	(24%)	(24%)	(24%)	

Current Work Status. Approximately 4 out of 5 clients were not working at intake (see Table xx).

Table xx: Current Work Status by Province

Province		Current Work Status				
	Not working	Part time	Full Time	Total		
NB	140 (81%)	21 (12%)	12 (7%)	173		
SK	187 (83%)	29 (13%)	10 (4%)	226		
Total	327 (82%)	50 (12%)	22 (6%)	399		

Citizenship. All participants were Canadian citizens or permanent residents of Canada.

Disability. The provinces differed considerably in terms of clients reporting a disability. The majority (55%) of SK clients reported having a disability whereas few (5%) NB clients did (see Table xx).

Table xx. Disability Frequencies by Province

Province		Disability			
	No	Yes	Total		
NB	165 (95%)	8 (5%)	173		
SK	100 (45%)	122 (55%)	222		
Total	265 (67%)	130 (33%)	395		

Exploratory analyses were conducted on these data to ascertain relationships between client inputs and intervention outcomes. These analyses are not reported here because there were very few significant findings of relationship, likely because of the short duration between intake and exit.

MEASURES

Given that this is a study of indicators, this "measures" section is quite involved. After a sub-section describing how the indicators were selected for the study, the remainder of this section describes measures categorized by the CWRG evaluation framework: inputs – processes – outcomes. The measures are listed below to provide the reader an advance organizer for what is to follow:

Input Measures

- Employment Opportunity Structure
- Practitioner Profile
- Client Employment Potential
- Client Employability Needs
 - Practitioner Measure
 - Client Measure
- Client Personal Attributes
 - Practitioner Measure
 - Client Measure

Process Measures

- Services/Interventions
- Working Alliance
 - Practitioner Measure
 - ✤ Client Measure
- Client Engagement
 - Practitioner Measure
 - Client Measure
- Client Attribution of Change
 - Practitioner Measure
 - Client Measure

Outcome Measures

- Employment
- Training/Education (or Waitlisted)
- Quality of Change
 - Fit with Skills/Qualifications
 - Fit with Vision
 - Proximity to Residence

INPUT MEASURES

EMPLOYMENT OPPORTUNITY STRUCTURE

Managers in each participating office were asked to complete profiles of the employment, training and support opportunities available and accessible in their communities. It was recognized that the profiles provided would be manager perspectives of opportunity structure and not Statistics Canada data. For the purposes of the research, it was also thought that how local management and staff perceive opportunities for clients in all likelihood has a strong influence on how clients are informed about and perceive their own opportunities. Management in all participating offices provided information on:

- current unemployment rates,
- numbers of upskilling institutions (i.e., universities, colleges, upgrading institutions, vocational colleges, short-term training courses) accessible to clients,
- ratings of adequacy of upskilling opportunities relative to the client demand,
- community resources available (affordable child care, public transit),
- ratings of adequacy of community resources relative to client need and demand, and
- perceptions of employment opportunities for clients with divergent education and skill levels as well as perceived quality of employment opportunities (adequate standard of living, basic benefits).

The data provided considerable detail and a good snapshot of local opportunity (see Appendix B for examples). This data was entered into the U-Name-It system for each participating office (Catchment Area Description) so it was possible to look at client employment and training outcomes in the context of perceived opportunities. Unfortunately, an insufficient number of sites and clients prevented this information from being used to explore and identify patterns between opportunity structures and labour market outcomes in this study. However, the U-Name-It system is now built to record this information so that future studies with more sites and more clients in each site can connect this information with client outcomes.

PRACTITIONER PROFILE

A key input to career development and employment services is the practitioner. The full set of questions regarding information collected on the practitioners is available in Supplement #2, pp. 31-32. The core information included:

- 📕 age
- Iocation
- gender
- years of experience
- percentage of work time devoted to working directly with the public
- means by which they learned career development skills and knowledge
- training/education/qualifications
- workload (average number of clients per day or per week)
- membership in a professional association

This set of data was not used in the final analysis because of insufficient numbers. However, the fields for collecting these data are now part of U-Name-It.

CLIENT EMPLOYMENT POTENTIAL

A considerable amount is known from the literature about client characteristics that contribute to employment success. These were confirmed, as well as added to, in the focus groups and these comprised the client employment potential profile as follows:

gender

- age
- cultural/ethnic background (optional)
- Iocation
- education level
- employment history (type of work; duration)
- employment status
- current relationship to work
 - I want to be employed and I am looking for work
 - I want to pursue a training/ education program to improve my qualifications
 - I am not employed and I am not looking for work because:
 - I am a student
 - I am retired
 - I am a stay-at-home parent
 - Other (please specify)
 - ✤ I am temporarily laid off but am expecting to be called back
 - I am underemployed (I want to be working more hours at the same type of job)
 - I am underemployed (I am qualified to do more skilled, better paid work)
- previous relationship to work
 - ✤ I have never been employed
 - I have had some jobs for short periods (weeks or months) at a time
 - ✤ I have had fairly steady employment in the past
 - ✤ If employed, do you consider your job to be:
 - consistent with your skills and qualifications
 - consistent with your vision of your preferred employment
 - If employed, do you consider your salary to be:
 - consistent with your skills and qualifications
 - adequate for your cost of living needs
- other relevant factors
 - citizenship/residency
 - English/French proficiency speaking/writing
 - health problems
 - support systems (family, friends, financial)
 - parental status
 - child care status
 - disability

A series of Additional Life Circumstance variables (Supplement 2, p. 42) were added to the U-Name-It system for completion by the practitioner if relevant to the life circumstances of the client. These variables included, among others, a need for improved housing, support in following medical protocols and reduction of destructive behaviour. These variables affecting employability were raised in the Saskatchewan Abilities Council focus groups and reflect the diversity and complexity of significant proportions of their client caseloads. As noted earlier, the diversity in service delivery settings and in client profiles provided the opportunity to test the robustness and relevance of the data-gathering system in real service settings.

CLIENT EMPLOYABILITY NEEDS

Patsula (1992) described four need areas of clients who access employment services.

- Career exploration and decision-making (determining personal purpose in relationship to the world of work),
- Skill enhancement (developing competencies needed to pursue one's career path),
- Job search (deploying strategies for finding suitable work), and
- Job/work maintenance (managing oneself in the work environment to create work stability).

Borgen (1995) added "job readiness" to this list, referring to the pre-employability skills and resources needed to even begin thinking about or acting on the other employability dimensions (*e.g.*, dealing with addictions, managing mental illness). This addition resulted in 5 employability dimensions that have since been widely used by the federal government and numerous provincial governments as a framework for the assessment of client needs. These five dimensions were chosen to frame needs in this study because of their pervasiveness throughout the Canadian context, their use in other recent studies (*e.g.*, Hiebert et al. (2011)), and the face validity they hold in capturing core needs. An "other" category was added to capture needs related to specific challenges clients might face, such as housing, transportation, personal responsibility and support systems. These challenges emerged very strongly from the focus groups held with practitioners in Saskatchewan.

Client needs were measured by practitioners and clients. Descriptions of these measures are provided in the following sections.

PRACTITIONERS MEASURE

Practitioners completed subjective assessments of client employability need in the intake interview. These clinical assessments were based on practitioners' experience with previous clients and their knowledge of labour market/career development requirements. Although practitioners were provided with an overview of the 5 employability dimensions as well as the "Additional Life Circumstances" category during an orientation session, no training was provided in terms of assessing client need.

The complete checklists used by practitioners are available in Supplement 2 (pp. 36-43). Each checklist asked the practitioner to rate items in terms of the client's need for assistance, with the response set comprising "not at all," "not much," "a little," "quite a lot" and "a lot." The items for each category are provided below:

Job Readiness

- Identify and clarify future direction (e.g., training, education, employment or change in life circumstances goal)
- Identify personal strengths/resources that support future direction (e.g., training, education, employment or change in life circumstances goal)
- Resolve specific challenges/vulnerabilities that may impact on future direction (e.g., mortgage, public transit, day care etc.)

- Access community resources/supports that address specific personal challenges/vulnerabilities and assist in helping move goal forward (e.g., mental health services; addictions counselling; public housing etc.)
- Develop necessary personal supports needed to move toward future direction (e.g., family, childcare, transportation)
- Acquire life/employment skills and attitudes that support future direction
- Acquire attitudes which support future direction
- Develop and follow a plan of action to move future direction forward
- Keep appointments and sustain efforts
- Other: (please specify)_

Career Decision-Making

- Identify own strengths, skills, interests, values, transferable skills
- Connect strengths, skills, interests, values, transferable skills to career choices
- Research work opportunities using a range of sources (e.g., job boards, labour market information, internet, networks, employer and employee contacts)
- Identify a career goal (e.g., employment/training/ education/change in life circumstance)
- Research details specific to career goal (e.g., time needed in education/training; future employment prospects; types of work; places of work; local opportunities)
- Identify personal resources that support achievement of career goal (e.g., support system, finances, motivation)
- Identify challenges, internal or external, that may interfere with achievement of career goal (e.g., mobility, local opportunities, finances, health)
- Develop and follow a plan of action to mitigate challenges and move toward career goal
- Keep appointments and sustain efforts
- Other: (please specify)_____

Work Search

- Confirm employment goal
- Confirm that qualifications and experience are consistent with employment goal
- Identify personal strengths that support successful work search
- Resolve obstacles that may interfere with successful work search
- Access and make use of resources to address obstacles to successful work search
- Identify potential employers and potential employment opportunities
- Adjust/adapt employment goal with employment opportunities as needed
- Identify transferable skills
- Complete appropriate resume and cover letter
- Use networks to identify employment leads
- Use resources, tools and methods to support work search including internet
- Tailor resume and cover letter according to work possibilities
- Demonstrate appropriate job interview skills
- Develop and follow a plan of action for active work search
- Demonstrate work attitudes and behaviours to support successful job search
- Be active and persistent in work search
- Keep appointments and sustain work search efforts
- Other: (please specify)_

Skill Enhancement

Confirm training/education goal

- Research future employment prospects related to training/education goal/program prior to pursuing education/training
- Research training/education options available to achieve training/education goal
- Evaluate and choose training/education options taking into consideration personal circumstances (e.g., supports, strengths and limitations)
- Identify potential challenges that may impact on achievement of training/education goal
- Proactively develop strategies to address identified challenges
- Acquire study and personal skills needed to be successful in education/training
- Identify resources that are available in training and education sites and/or community agencies to provide help and guidance supporting successful completion of program
- Sustain motivation to complete training/education program
- Other: (please specify)_

Employment Maintenance

- Identify important skills and attitudes that improve chances of keeping employment
- Identify personal strengths and limitations with respect to these skills and attitudes
- Develop a learning plan to acquire/ strengthen skills and attitudes before on the job problems arise
- Identify community and/or workplace resources that provide help and guidance related to keeping work
- Know job roles, responsibilities and expectations that support being successful on the job (e.g., who to report to; who makes decision; approval processes, getting answers to job related questions)
- Assertively seek assistance when needed
- Develop and follow a plan to remain up to date with on the job changes in duties and competencies
- Sustain efforts over time
- Other: (please specify)_____

Additional Life Circumstances

- Improved housing is needed
- Improved transportation is needed
- Improved capacity to work and/or study is needed
- Increase in sense of responsibility for own choices and behaviours is needed
- Increase in ability to set short and long term goals is needed
- Increase in understanding expectations and demands of employers is needed
- Reduction in destructive behaviour is needed
- Following medical and medication protocols is needed
- Increased openness to change is needed
- Increased access to constructive and positive support systems is needed
- Improved relationships with family and friends are needed
- Increased trust in other people is needed
- Other: _____

CLIENTS MEASURE

Clients were also asked to assess their needs. However, this assessment of an "input" was done at the end of the intervention period through a "post pre/post" or "post-pre" method used in a number of CRWG studies (*e.g.*, Hiebert et al., 2011). Rather than asking clients to identify the level of their

needs before the study, the post-pre method has them reflect back to the beginning of the study to rate their need levels, *knowing what they now know about the issues they face*. This method was chosen over a traditional "pre-post" approach because there is evidence that clients overrate their abilities in pre-intervention surveys. They do so because they do not yet know the skill, knowledge or attribute level that is actually required to be successful. For example, consider the ability to "tailor resume and cover letter according to work possibilities." A client may rate their need in this as quite low because they believe all they have to do to be successful is to change the name and address to which the cover letter is addressed. However, after learning about job search strategies, they may look back and realize how little they actually knew. More details on this approach are available in Baudouin et al. (2007) or the CRWG web site, <u>http://www.crwg-gdrc.ca/crwg/</u>.

As well as being a "post-pre" survey, the survey used a decision-making process to derive a rating (see the CRWG web site for details on this method: <u>http://www.crwg-gdrc.ca/crwg/</u>). Clients were first asked to decide if a characteristic was "Not OK" or "OK." Having made that decision, clients were then asked to assign a rating as per the following:

- (0) not adequate,
- (1) not really adequate, but almost OK,
- (2) adequate, but just barely (still OK otherwise it would be 0 or 1),
- (4) exceptional,
- (3) somewhere between minimally OK and exceptional.

Note that "4" comes before "3" in the list. The intent is to have the client carefully think through the appropriate rating.

The final client survey is available in Appendix A. The items in the survey address the same employability dimensions and components of these dimensions as the practitioner assessment of need. However, the wording was adjusted for clients for the sake of clarity.

There was a flaw (visible in Appendix A) with the original survey that caused 8 clients to recomplete the survey. The stem of the rating read "I needed/need help to:" creating the potential for confusion in which some clients would reverse score and others would not. For example, on an item such as "be active and persistent in work search," some clients might rate their *need* (*i.e.*, what the stem asked) whereas others might rate their *performance* (*i.e.*, how active they are). The intent was for clients to rate the characteristic, not their need for it, therefore the stem was removed. The survey instructions prior to the stem are very clear about what the client should do. Fortunately, one of the practitioners found this problem very early on, and only 8 clients had to be contacted to re-do the survey.

CLIENT PERSONAL ATTRIBUTES

PRACTITIONER MEASURE

Clients enter employment services with personal attributes that likely affect each employability dimension. Five of these sets of attributes were selected for examination in this study, described below as they were presented to practitioners in the orientation session (see Supplement 2) and in the ARMS' instructions. Each attribute included a number of indicators to guide practitioners in their assessments. These were presented as "clues" to assist in their observations and ratings:

- Self-Management: the skills and strategies by which individuals direct their own activities towards achieving objectives. This attribute set includes goal setting, decision-making, planning, scheduling and staying on track. Clues/observations provided to practitioners included:
 - Follows steps in action plan
 - Uses community supports
 - o Manages responses to challenging situations
 - Presents self well
 - Plans and prioritizes
 - Takes action steps independently
 - Attends sessions as agreed to
 - o Makers fewer excuses
 - Follows through on commitments
 - o Takes ownership
 - Self-directs (pursuing what they are interested in rather than what others think they should do)
 - o Is solution focused
- Self-Esteem: a person's overall emotional evaluation of his or her own worth, an attitude to self and a judgement of oneself. Self-esteem encompasses beliefs (e.g., I am competent; I am worthy) and emotions (pride, shame). Self-esteem is the positive or negative evaluation of the self. Clues/observations provided to practitioners included:
 - o Demonstrates an optimistic outlook
 - Sees self as competent and able
 - Has confidence in ability to interact with others
 - Uses positive self-talk
 - o Acts with little hesitation
 - Raises few objections
 - o Asks questions
 - o Articulates skills assertively
 - Makes eye contact
 - Is hopeful
 - Takes reasonable risks
- Well-Being: a person's quality of life. This is influenced by a range of factors, including work, family, community, health, personal values, personal freedom, and a person's financial situation: Clues/observations provided to practitioners included:
 - Shows drive in pursuing own goals
 - \circ $\$ Is open to suggestions to support action plan
 - Is establishing/using own support system
 - Manages his/her personal situation adequately
 - o Involved with family, child-rearing and community
 - o Maintains a healthy lifestyle
 - o Makes better choices than before
 - o Networks with all community supports
- Self-Efficacy: belief in one's capabilities to organize and execute the courses of action required to manage prospective situations; a person's belief in his or her ability to succeed in a particular situation Clues/observations provided to practitioners included:

- Expresses confidence that a positive outcome is possible
- Believes in own capacity to achieve goal despite obstacles
- Takes steps independently
- o Views challenging problems as tasks to be mastered
- \circ $\ \ \,$ Takes strong interest in activities they participate in
- Recovers quickly from setbacks
- o Understands choice and consequence (If I do this, then.....)
- Is open-minded
- $\circ \quad \text{Expresses self well} \\$
- Uses "me" and "I " language
- Recognizes own accomplishments (I did it!)
- Self-Awareness: having a clear perception of your personality including strengths, weaknesses, thoughts, beliefs, motivations and emotions Clues/observations provided to practitioners included:
 - \circ $\;$ Understand own strengths and challenges $\;$
 - Sets employability goals that are achievable
 - Demonstrates an optimistic outlook
 - Knows own personal competencies
 - Knows how to interact with others
 - o Understands own personal challenges
 - o More focused on results and own ability to achieve them
 - o More articulate when talking about self
 - o Recognizes the need for other professional help
 - o Expresses self with confidence
 - More realistic and more specific

On intake, practitioners were asked to rate the client's need for help with these attributes with the same scale used previously: "not at all," "not much," "a little," "quite a lot" and "a lot." As with the employability needs, the practitioners based this rating on their clinical expertise and experience with similar clients.

The literature review (see Supplement 3) references research sources supporting the selection of these personal attributes as impacting on labour market outcomes.

CLIENT MEASURE

Clients completed a "pre-post" survey at the end of the intervention period on the 5 attributes listed above (see Appendix A for the full final survey). Again, the wording was changed from the practitioner version for the sake of clarity:

- manage my own actions so that I keep moving forward (self-management)
- feel good about myself as a person (self-esteem)
- look after my health and relationships in positive ways (well-being)
- feel like I have the abilities I need and I know when and how to use these abilities (selfefficacy)
- understand my strengths, limitations and motivations clearly (self-awareness)

• other – please specify

On intake, practitioners were asked to rate the client's need for help with these attributes with the same scale used previously: "not at all," "not much," "a little," "quite a lot" and "a lot." As with the employability needs, the practitioners based this rating on their clinical expertise and experience with similar clients.

The literature review (see Supplement 3) references research sources supporting the selection of these personal attributes as impacting on labour market outcomes.

CLIENT MEASURE

Clients completed a "pre-post" survey at the end of the intervention period on the 5 attributes listed above (see Appendix A for the full final survey). Again, the wording was changed from the practitioner version for the sake of clarity. Items in parentheses have been added for the reader; the clients did not see the parenthetical content:

- manage my own actions so that I keep moving forward (self-management)
- feel good about myself as a person (self-esteem)
- look after my health and relationships in positive ways (well-being)
- feel like I have the abilities I need and I know when and how to use these abilities (selfefficacy)
- understand my strengths, limitations and motivations clearly (self-awareness)
- other please specify

As before, clients were first asked to decide if a characteristic was "Not OK" or "OK." Having made that decision, clients were then asked to assign a rating as per the following:

(0) not adequate,

(1) not really adequate, but almost OK,

(2) adequate, but just barely (still OK otherwise it would be 0 or 1),

(4) exceptional,

(3) somewhere between minimally OK and exceptional.

PROCESS MEASURES

SERVICES/INTERVENTIONS

Managers were asked to complete a listing of all client services provided by their individual offices. Examples of services/interventions follow:

Resource Centre with access to computers, fax and phone

- Resource Centre with access to career, education, training and employment labour market information
- Group Information Sessions
- Administration and Interpretation of Career Assessment Tools
- Pre-Employability and Life Skills Workshops
- Career Decision Making Workshops
- Workplace assessment/adaptation/modification
- Referrals to community specialized resources
- Referrals to 3rd party providers for specific employability needs

Appendix B contains the request to the offices and examples of two responses received. As with the request for Opportunity Structure information, the lists were quite comprehensive and provided a helpful snapshot of types and durations of services available in each office. The listing of services/interventions for each office were entered into U-Name-It under Office Information and formed an individualized office by office drop-down menu so practitionerscould recognize their own services rather and more accurately list the actual kinds of services/interventions provided to each client.

The service data able to be collected in this project was limited to general descriptors of the kinds of services (i.e. individual employment counselling session; group information session; referral to third party, number of interventions and length of time of interventions) without the level of detail that would be needed to make explicit connections between specific kinds of services and different labour market outcomes achieved by clients with different employability needs. However the system has that potential to generate that kind of specific data and this was well demonstrated in the project.

Following each client contact, U-Name-It asked practitioners to complete an Action Plan (see Appendix C), give a copy to the client as well as save each in the client file. At each subsequent client contact, when the client number was entered into the system, the practitioner would see the previous Action Plan agreed to and this would offer a starting point for the intervention. All Action Plans were saved in the system and accessible at any time as a way to document and encourage client progress. Each time a client number was entered, all listings of all interventions done to date with that client would appear.

WORKING ALLIANCE

Establishing rapport in the context of actively seeking change is acknowledged as pivotal in the practice of career development and employment counselling (*e.g.,* Arthur & Collins, 2005; Flores & Heppner, 2002; McMahon & Patton, 2000). "Working alliance" can be defined "as client-therapist agreement on the goals of therapy and the tasks to be performed to reach those goals coupled with a strong relational bond" (Shick Tryon, G., 2005, retrieved from http://knowledge.sagepub.com/view/cbt/n41.xml on May 21, 2013). Career and employment services are not therapeutic interventions per se, but the relational bond between client and practitioner (or therapist and client) is transferable to most, if not all, helping relationships.

PRACTITIONER MEASURE

Practitioners were asked to provide an assessment of the quality of the working alliance with the client over the intervention period (see Supplement 2, p. 73). Three items characterized the working alliance, and each was rated "not at all," "not much," "a little," "quite a lot" and "a lot":

The client and I:

- established a climate of trust and comfort in working together
- arrived at a goal that is owned by the client
- agreed on the action plan steps to help achieve the client's goal

CLIENT MEASURE

Clients were asked to rate the same components of working alliance as practitioners (see Appendix A):

- To what extent would you say that you:
 - had trust in and were comfortable working with your career practitioner
 - ✤ were helped to set your own goals
 - ✤ agreed with your career practitioner on the steps you need to take

The rating choices were "not at all," "not much," "a little," "quite a lot" and "a lot."

CLIENT ENGAGEMENT

"Client engagement" refers to the active investment of the client in doing what the intervention(s) require. Highly related to the concepts of "adherence to the program" or "fidelity to the intervention" (*i.e.*, did the client do what the client was supposed to do?) (*e.g.*, Hiebert, 1994), "client engagement" takes these concepts further by going beyond simply completing required activities. Client engagement requires cognitive/emotional involvement as well as "fidelity to the intervention."

PRACTITIONER MEASURE

Practitioners were asked to provide an assessment of the degree to which the client was engaged throughout the intervention period (see Supplement 2, p. 73). Two items captured engagement, and both were rated "not at all," "not much," "a little," "quite a lot" and "a lot":

- The client:
 - participated actively in the interview
 - ✤ was focused on achieving results

CLIENT MEASURE

Clients were also asked to rate their degree of engagement from "not at all" to "a lot," but with an additional question about participating in programs/services outside of the counselling process. The client was asked to rate the degree to which they:

- participated actively in the interviews
- participated actively in other programs and services
- were focused on making progress toward your goals

Working alliance and client engagement responses were combined into a single measure for analysis purposes.

CLIENT ATTRIBUTION OF CHANGE

One way of compensating for the lack of a control group in this study was to ask clients to assess the degree to which the intervention they experienced contributed to the changes they experienced. To this end, clients were asked the following in the final survey (Appendix A):

To what extent would you say that any changes in your ratings are the result of the programs, services, interviews and work you have done in the last 6 weeks and to what extent were they a function of other factors in your life?

Clients responded to this question with "mostly other factors," "somewhat other factors," "uncertain," "somewhat the programs, services, interviews and work" or "mostly the programs, services, interviews and work."

OUTCOME MEASURES

The most prominent aim of career development and employment services in Canada is employment. Typically, full-time is considered better than part-time; close-to-home is better than far-from-home; high fit with skills is better than low fit with skills; alignment with personal vision is better than misalignment with vision; and good pay is better than poor pay. Each of these components forms part of the outcome measures for this study, as do measures regarding training/education.

EMPLOYMENT & TRAINING/EDUCATION

QUALITY OF FIT

Practitioners were asked to identify client status at the end of the intervention period in terms of:

- employed, in training/education program or waitlisted, neither employed nor in training
 if employed
 - full-time, part-time or contract
 - within 50 km of residence, home only on weekends, home only periodically
 - fit with:

- skill and qualification levels
- vision of preferred employment
- salary consistency with skills and qualification levels
- ✤ salary adequacy for cost of living needs
- if in training/education program or waitlisted
 - enrolled full-time or part-time
 - waitlisted for full-time or part-time program
 - duration of program
 - 2 weeks or less; 3 weeks to 3 months; 4 months to 6 months; more than 6 months
 - Iocation of program
 - within 50 km of residence, home only on weekends, home only periodically
- if neither employed nor in training/education
 - client wants to be employed and is looking for work
 - client wants to pursue a training/education program to improve his/her qualifications
 - client is not employed and is not looking for work because he/she is:
 - a student, retired, stay-at-home parent, other
 - client is temporarily laid off but is expecting to be called back
 - client is underemployed (wants to be working more hours at the same type of job)
 - client is underemployed (qualified to do more skilled, better paid work)

The actual questions are on pp. 75-76 of Supplement 2.

PROCEDURE SYNOPSIS

The steps undertaken to complete the study, some of which have been described above, include:

- 1. Working with practitioners, managers and researchers, the literature review as well as the CRWG evaluation framework to derive indicators to measure in the study.
- 2. Asking managers in participating offices to provide information regarding the employment opportunity structure in the areas they serve as well as the menu of services/interventions available to clients.
- 3. Developing and field-testing the measures described above.
- 4. Developing an on-line system for deploying the measures (part of ARMS; tentatively called U-Name-It).
- 5. Developing a research manual for practitioners (see Supplement 2).
- 6. Orienting practitioners and managers to the study.
- 7. Asking "regular" clients (i.e., there was no screening of clients) to participate in the study.
- 8. Having practitioners complete a thorough needs assessment with clients upon intake, and record the results in U-Name-It.

- 9. Having practitioners provide service in the usual manner (i.e., provide service they regularly would), record the nature and length of services provided and record client progress² in U-Name-It.
- 10. Asking practitioners to complete an on-going log throughout the study (see Supplement 2, p. 87).
- 11. Adjusting U-Name-It based on practitioner feedback.
- 12. Having practitioners complete exit interviews with clients, including client completion of final survey (Appendix A) available in a paper version as well as an online version. The online version was accessible through a different URL than the U-Name-It tool to ensure client confidentiality.

Unlike similar studies, which have complex methodologies regarding sample selection, control groups and various treatment groups, this study's emphasis is on the measures of inputs, processes and outcomes.

RESULTS

We remind the reader of the two main research questions:

- 1. What common indicators are applicable across different client contexts, different client groups, different agencies, and different interventions?
- 2. What statements about service effectiveness can be made by tracking common indicators of inputs, processes and outcomes? If numbers permit, it will be possible to aggregate data to begin to address the ultimate question, "What kinds of interventions in what contexts produce what kinds of outcomes?"

Answering these questions required considerable data and numerous statistical analyses. To simplify our reporting of this information, we present the results in terms of outcomes, processes and inputs, and the relationships between each. Within these categories, specific questions are addressed that help formulate our answers to the two broad questions framing the research. Prior to those findings, however, we begin with a look at the measures themselves.

² Practitioners were not required, but were encouraged to enter "progress" data after every client contact if they observed change or if actual change had occurred in a client's circumstances or in their labour market status. Although many practitioners did so, many did not. In a follow-up teleconference, practitioners suggested three reasons for not entering progress indicators, time required to do so, the short time period for services which made it difficult to identify and gauge sustainable change and the reality that many refer to external services and only saw clients at intake and at exit.

ASSESSMENT OF MEASURES

OBJECTIVE

The main objectives of this analysis were to assess the internal consistency of the survey items used for each of the five employability dimensions and for the Personal Attributes and to test if simple overall indices for each could be derived from these measures. The former was to ensure that an overall "index score" on was feasible (i.e., that all the items within a set of questions "hang together" conceptually). The latter was done for two main reasons. First, having a composite index would simplify the analysis and reporting of the study findings. More importantly, however, a composite index is far more likely to be used in the field than separate indices would be.

APPROACH

To establish that the measures used for each of the key concepts we attempted to measure with our instruments were actually highly correlated and appeared to share a common variance associated with the underlying concept, we conducted an exploratory factor analysis³ of all the intake measures pooled together. This analysis pooled data for the following sets of measures:

- Pre-Employability/Job Readiness
- Career Decision Making
- Work Search

2

- Skill Enhancement
 - Employment Maintenance
 - The above items are pooled into an overall Employability Dimensions index
- Additional Life Circumstances
 - The reader will see that this set of items becomes grouped into two separate indices, Responsible Behaviour and Support Systems, after the analysis
- Personal Attributes (self-management; self-esteem; well-being; self-efficacy; selfawareness)
 - Personal Attributes are also pooled into an overall Personal Attributes index
- Working Alliance and Client Engagement

EMPLOYABILITY DIMENSIONS

The results generally confirmed the items for each of the five employability dimensions were measuring a similar underlying concept and could be used to create a single index for their respective employability needs dimension. One exception was measuring the need for assistance to "keep appointments and sustain efforts," used in three of the employability dimension surveys. These three items were more highly correlated with each other than any of other variables in their respective employability dimension. On further examination, the measure for "keep appointments and sustain efforts" was more highly correlated with the variables measuring pre-employability/ job readiness than the other employability dimensions. Consequently, this variable was maintained for the analysis of this dimension and removed from the other two dimensions (Career Decision Making and Work Search).

³ Both a factor analysis and principal components analysis were conducted and both yielded similar results.

The measures in the other dimensions also appeared to load on the same underlying factor (i.e., all the Personal Attributes items correlated highly with each other, and all the Working Alliance and Client Engagement items correlated highly with each other), except for the items for additional life circumstances. For this set of items, two separate factors were identified. One of the identified factors contained items pertaining to responsible behaviour and the second factor contained items related to support systems. In other words, two separate characteristics were assessed by the set of "Additional Life Circumstances" questions: "responsible behaviour" and "support systems."

The second step in this analysis was to examine the internal consistency or reliability of these dimensions using a Cronbach's alpha statistic. Cronbach's alpha can range from 0 to 1, with 1 indicating the highest overall internal consistency of the measures. All of the dimensions tested were found to have an adequately high (.8 or higher) Cronbach's alpha statistic.

The third step in the analysis was to generate a simple additive index for each of the dimensions. To maintain the maximum amount of information and retain the original scale of measurement (0 to 4), the measures were generated by taking the mean value for all valid items for each client. Thus if there was missing data for several items on an employability dimension for any client, the values of the remaining items were averaged to calculate the value of the index for that case. The only time a client would not have a score on a dimensions would be if there were no valid data for any of the items collected for that dimension. These summary indices for each of the dimensions were used in the subsequent analysis. In some cases, an overall composite index was also used in the analysis. This composite index was the average of the indices for the five employability dimensions. Each client, therefore, who completed items in every category of the employability dimensions, would have 6 scores: One for each dimension, and one composite score.

This analysis and development of the indices was conducted for the practitioner and client measures taken at intake and at the end of the study. The following provides the details for the analysis of each dimension, including the value for the Cronbach's alpha tests and the correlations for each item with their respective index.

RESULTS

Pre-Employability/Job Readiness – Practitioner Assessment. Table 2 shows the correlations between the practitioner Pre-Employability/Job Readiness items and the summary index developed from these items (i.e., the total score of all the Pre-Employability/Job Readiness items). The results are shown for the practitioner assessments before and after the study period. Overall, there was a very high degree of internal consistency among the variables included in this index. The Cronbach's alpha for the pre-employability/job readiness measures included in the index were .93 for the "before" measures and .95 for the "after" measures, indicating very high internal consistency. This was also demonstrated by the relatively high correlations between the simple index of pre-employability/job readiness pre-employability/job readiness needs. The correlations for the individual items and the index at the intake (before) stage of the study ranged from .69 (keep appointments and sustain efforts) to .86 (develop and follow a plan of action to move future direction forward, acquire attitudes which support future direction). The correlations for the individual items and the end of the study (after) were similar, ranging

from .71 (keep appointments and sustain efforts) to .88 (develop and follow a plan of action to move future direction forward).

Table 2: Pre-Employability/Job Readiness Index- Correlations with Practitioner	<u>r Assessment</u>
<u>Items</u>	

Pre-Employability/Job Readiness Items	Overall Index Before (r)	Overall Index After (r)
Identify and clarify future direction	0.80	0.85
Identify personal strengths/resources that support future direction	0.85	0.87
Resolve specific challenges/vulnerabilities that may impact on future direction	0.78	0.84
Access community resources/supports that address specific personal challenges/vulnerabilities and assist in helping move goal forward	0.71	0.77
Develop necessary personal supports needed to move toward future direction	0.74	0.87
Acquire life/employment skills and attitudes that support future direction	0.85	0.85
Develop and follow a plan of action to move future direction forward	0.86	0.88
Acquire attitudes which support future direction	0.86	0.87
Keep appointments and sustain efforts	0.69	0.71
Total Cases	413	188

Pre-Employability/Job Readiness – Client Assessment. Table 3 shows the correlations between the client Pre-Employability/Job Readiness items and the summary index developed from these items (i.e., the total score of all the Pre-Employability/Job Readiness items). The results are shown for the client assessments before and after the study period. The findings were very similar to the practitioner results. Overall, there was a high degree of internal consistency among the variables included in this index. The Cronbach's alpha for the Pre-Employability/Job Readiness items included in the index were .86 for the before items and .87 for the after items, indicating a high level of internal consistency. The correlations between the simple index of pre-employability/job readiness and each of the items used to assess pre-employability/job readiness needs were also relatively high. The correlations for the individual items and the index at the intake (before) stage of the study ranged from .65 (deal with money issues that may impact my future direction, find and use community resources that would help me with personal challenges) to .79 (develop and follow a plan of action to move future direction forward, acquire attitudes which support future direction). The correlations for the individual items and the index at the end of the study (after)

were similar, ranging from .63 (find and use community resources that would help me with personal challenges) to .79 (set a future direction for myself).

Pre-Employability/Job Readiness Items	Overall Index Before (r)	Overall Index After (r)
Set a future direction for myself	0.69	0.79
Identify my strengths/resources that support my future direction	0.69	0.74
Deal with money issues that may impact my future direction	0.65	0.74
Find and use community resources that would help me with personal challenges	0.65	0.63
Develop supports I need to move toward my goal	0.70	0.76
Get life/employment skills	0.74	0.78
Develop attitudes that support my future direction	0.77	0.75
Develop and follow a plan of action to move forward	0.79	0.73
Total Cases	185	184

Table 3: Pre-Employability/Job Readiness - Client Assessment

Career Decision Making – Practitioner Assessment. Table 4 shows the correlations between the practitioner Career Decision Making items and the summary index developed from these items. The results are shown for the practitioner assessments before and after the study period. Overall there was a very high degree of internal consistency among the variables included in this index. The Cronbach's alpha for the Career Decision Making items included in the index were .92 for the before items and .94 for the after items. This was also demonstrated by the relatively high correlations between the simple index of Career Decision Making and each of the items used to assess Career Decision Making needs. The correlations for the individual items and the index at the intake (before) stage of the study ranged from .76 (identify challenges, internal or external, that may interfere with achievement of career goal) to .84 (identify own strengths, skills, interests, values, transferable skills). The correlations for the individual items and the items taken at the end of the study (after) were similar, ranging from .81 (research work opportunities using a range of sources, identify personal resources that support achievement of career goal) to .86 (connect strengths, skills, interests, values, transferable skills, interests, values, transferable skills, not mitigate challenges and move toward career goal).

Table 4: Career Decision Making Index- Correlations with Practitioner Assessment Items

Career Decision Making Items	Overall Index Before (r)	Overall Index After (r)
Identify own strengths, skills, interests, values, transferable skills	0.84	0.85
Connect strengths, skills, interests, values, transferable skills to career choices	0.85	0.86
Research work opportunities using a range of sources	0.77	0.81
Identify a career goal	0.82	0.84
Research details specific to career goal	0.82	0.85
Identify personal resources that support achievement of career goal	0.78	0.81
Identify challenges, internal or external, that may interfere with achievement of career goal	0.76	0.82
Develop and follow a plan of action to mitigate challenges and move toward career goal	0.81	0.86
Total Cases	412	188

Career Decision Making – Client Assessment. Table 5 shows the correlations the between the client Career Decision Making items and the summary index developed from these items. The results are shown for the client assessments before and after the study period. The findings were very similar to the practitioner results. Overall there was a very high degree of internal consistency among the variables included in this index. The Cronbach's alpha for the Career Decision Making items included in the index were .90 for the "before" items and .92 for the "after" items. The correlations between the simple index of career decision making and each of the items used to assess career decision making needs was also relatively high. The correlations for the individual items and the index at the intake (before) stage of the study ranged from .68 (research work opportunities using several sources) to .82 (research details specific to my work goal, follow a plan of action to get around problems and move forward). The correlations for the individual items and the index at and the items taken at the end of the study (after) were similar, ranging from .71 (identify my own strengths, skills and interests) to .82 (research details specific to my work goal).

Career Decision Making Items	Overall Index Before (r)	Overall Index After (r)
Identify my own strengths, skills and interests	0.71	0.71
Connect my strengths, skills and interests to my career choices	0.78	0.81
Research work opportunities using several sources	0.68	0.81

Table 5: Career Decision Making - Client Assessment

Career Decision Making Items	Overall Index Before (r)	Overall Index After (r)
Research details specific to my work goal	0.82	0.82
Choose a career goal	0.80	0.81
Find the resources I need to support achievement of my goal	0.78	0.81
Identify challenges that may interfere with achievement of my career goal	0.74	0.79
Follow a plan of action to get around problems and move forward	0.82	0.79
Total Cases	233	233

Work Search – Practitioner Assessment. Table 6 shows the correlations the between the practitioner Work Search items and the summary index developed from these items. The results are shown for the practitioner assessments before and after the study period. Overall there was a very high degree of internal consistency among the variables included in this index. The Cronbach's alpha for the Work Search items included in the index were .96 for the "before" items and .97 for the "after" items. This was also demonstrated by the relatively high correlations between the simple index of work search and each of the items used to assess Career Decision Making needs. The correlations for the individual items and the index at the intake (before) stage of the study ranged from .73 (be active and persistent in work search) to .88 (develop and follow a plan of action for active work search). The correlations for the individual items and the individual items and the index at end the index at and the index at the end of the study (after) were similar, ranging from .76 (access and make use of resources to address obstacles to successful work search) to .87 (adjust/adapt employment goal with employment opportunities as needed, develop and follow a plan of action for active work search).

Work Search Items	Overall Index Before (r)	Overall Index After (r)
Confirm employment goal	0.74	0.78
Confirm that qualifications and experience are consistent with employment goal	0.79	0.80
Identify personal strengths that support successful work search	0.82	0.81
Resolve obstacles that may interfere with successful work search	0.75	0.78
Access and make use of resources to address obstacles to	0.76	0.76

Table 6: Work Search Index– Correlations with Practitioner Assessment Items

Work Search Items	Overall Index Before (r)	Overall Index After (r)
successful work search		
Identify potential employers and potential employment opportunities	0.83	0.86
Adjust/adapt employment goal with employment opportunities as needed	0.82	0.87
Identify transferable skills	0.82	0.83
Complete appropriate resume and cover letter	0.77	0.78
Use networks to identify employment leads	0.82	0.85
Use resources, tools and methods to support work search including internet	0.81	0.85
Tailor resume and cover letter according to work possibilities	0.83	0.83
Demonstrate appropriate job interview skills	0.81	0.84
Develop and follow a plan of action for active work search	0.88	0.87
Demonstrate work attitudes and behaviours to support successful job search	0.78	0.84
Be active and persistent in work search	0.73	0.80
Total Cases	409	188

Work Search – Client Assessment. Table 7 shows the correlations between the client Work Search items and the summary index developed from these items. The results are shown for the client assessments before and after the study period. The findings were very similar to the practitioner results. Overall there was a very high degree of internal consistency among the variables included in this index. The Cronbach's alpha for the Work Search items included in the index were .94 for the "before" items and .95 for the "after" items. The correlations between the simple index of Work Search and each of the items used to assess work search needs was also relatively high. The correlations for the individual items and the index at the intake (before) stage of the study ranged from .61 (confirm my employment goal) to .81 (adjust my resume and cover letter according to work possibilities, develop and follow a work search action plan). The correlations for the index taken at the end of the study (after) were similar, ranging from .70 (confirm that my qualifications and experience are in line with my employment goal) to .83 (adjust my resume and cover letter according to work possibilities).

Table 7: Work Search – Client Assessment

Work Search Items	Overall Index	Overall Index
	Before (r)	After (r)

Work Search Items	Overall Index Before (r)	Overall Index After (r)
Confirm my employment goal	0.61	0.71
Confirm that my qualifications and experience are in line with my employment goal	0.68	0.70
Be able to recognize my personal strengths that support successful work search	0.73	0.76
Find potential employers and employment opportunities	0.75	0.75
Adjust/adapt my employment goal according to employment opportunities as needed	0.79	0.79
Identify my transferable skills	0.77	0.71
Write a resume and cover letter	0.73	0.80
Use networks to identify leads to work	0.78	0.81
Use resources to support my work search, including internet	0.77	0.82
Adjust my resume and cover letter according to work possibilities	0.81	0.83
Learn and practice appropriate job interview skills	0.78	0.77
Develop and follow a work search action plan	0.81	0.79
Demonstrate positive work attitudes and behaviours	0.68	0.75
Be active and persistent in work search	0.79	0.80
Total Cases	206	204

Skill Enhancement – Practitioner Assessment. Table 8 shows the correlations the between the practitioner Skill Enhancement items and the summary index developed from these items. The results are shown for the practitioner assessments before and after the study period. Overall there was a very high degree of internal consistency among the variables included in this index. The Cronbach's alpha for the Skill Enhancement items included in the index were .96 for the "before" items and .97 for the "after" items. This was also demonstrated by the relatively high correlations between the simple index of Skill Enhancement and each of the items used to assess Career Decision Making needs. The correlations for the individual items and the index at the intake (before) stage of the study ranged from .82 (confirm training/education goal, sustain motivation to complete training/education program) to .89 (three of the nine items). The correlations for the individual items and the index at the end of the study (after) were similar, ranging from .87 (confirm training/education goal) to .92 (evaluate and choose training/education options taking into consideration personal circumstances, identify resources that are available in training and education sites and/or community agencies to provide help and guidance supporting successful completion of program).

Table 8: Skill Enhancement Index– Correlations with Practitioner Assessment Items

Skill Enhancement Items	Overall Index Before (r)	Overall Index After (r)
Confirm training/education goal	0.82	0.87
Research future employment prospects related to training/education goal/program prior to pursuing education/training	0.87	0.89
Research training/education options available to achieve training/education goal	0.88	0.88
Evaluate and choose training/education options taking into consideration personal circumstances	0.89	0.92
Identify potential challenges that may impact on achievement of training/education goal	0.89	0.00
Proactively develop strategies to address identified challenges	0.89	0.91
Acquire study and personal skills needed to be successful in education/training	0.88	0.90
Identify resources that are available in training and education sites and/or community agencies to provide help and guidance supporting successful completion of program	0.88	0.92
Sustain motivation to complete training/education program	0.82	0.90
Total Cases	406	188

Skill Enhancement – Client Assessment. Table 9 shows the correlations between the client Skill Enhancement items and the summary index developed from these items. The results are shown for the client assessments before and after the study period. The findings were very similar to the practitioner results. Overall there was a very high degree of internal consistency among the variables included in this index. The Cronbach's alpha for the Skill Enhancement items included in the index were .96 for the before items and .96 for the after items. The correlations between the simple index of Skill Enhancement and each of the items used to assess skill enhancement needs were also relatively high. The correlations for the individual items and the index at the intake (before) stage of the study ranged from .82 (keep motivated to complete training/education program) to .90 (choose training/education options, taking into consideration my personal circumstances). The correlations for the individual items and the index at the end of the study (after) were similar, ranging from .84 (four of the nine items) to .88 (research available training/education options related to my training/education goal, choose training/education options, taking into consideration my personal circumstances).

Skill Enhancement Items	Overall Index Before (r)	Overall Index After (r)
Confirm my training/education goal	0.85	0.85
Research future employment prospects before pursuing education/training	0.85	0.84
Research available training/education options related to my training/education goal	0.86	0.88
Choose training/education options, taking into consideration my personal circumstances	0.90	0.88
Identify issues that might interfere with achieving my training/education goal	0.86	0.84
Develop strategies ahead of time to address issues I might face	0.85	0.86
Learn study and personal skills needed to be successful in education/training	0.86	0.84
Identify resources and supports in training and education sites and/or community agencies to help me to finish the program	0.88	0.86
Keep motivated to complete training/education program	0.82	0.84
Total Cases	159	159

Table 9: Skill Enhancement – Client Assessment

Employment Maintenance – Practitioner Assessment. Table 10 shows the correlations the between the practitioner Employment Maintenance items and the summary index developed from these items. The results are shown for the practitioner assessments before and after the study period. Overall there was a very high degree of internal consistency among the variables included in this index. The Cronbach's alpha for the Employment Maintenance items included in the index were .97 for the before items and .98 for the after items. This was also demonstrated by the relatively high correlations between the simple index of Employment Maintenance and each of the items used to assess Employment Maintenance needs. The correlations for the individual items and the index at the intake (before) stage of the study ranged from .87 (sustain efforts over time) to .95 (develop a learning plan to acquire/ strengthen skills and attitudes before on the job problems arise). The correlations for the individual items and the index at the end of the study (after) were similar, ranging from .88 (sustain efforts over time) to .94 (identify personal strengths and

limitations with respect to these skills and attitudes, develop a learning plan to acquire/ strengthen skills and attitudes before on the job problems arise).

Employment Maintenance Items	Overall Index Before (r)	Overall Index After (r)
Identify important skills and attitudes that improve chances of keeping employment	0.94	0.93
Identify personal strengths and limitations with respect to these skills and attitudes	0.93	0.94
Develop a learning plan to acquire/ strengthen skills and attitudes before on the job problems arise	0.95	0.94
Identify community and/or workplace resources that provide help and guidance related to keeping work	0.92	0.92
Know job roles, responsibilities and expectations that support being successful on the job	0.93	0.91
Assertively seek assistance when needed	0.92	0.91
Develop and follow a plan to remain up to date with on the job changes in duties and competencies	0.91	0.93
Sustain efforts over time	0.87	0.88
Total Cases	402	187

Table 10: Employment Maintenance Index– Correlations with Practitioner Assessment Items

Employment Maintenance – Client Assessment. Table 11 shows the correlations the between the client Employment Maintenance items and the summary index developed from these items. The results are shown for the client assessments before and after the study period. The findings were very similar to the practitioner results. Overall there was a very high degree of internal consistency among the variables included in this index. The Cronbach's alpha for the employment maintenance items included in the index were .94 for the "before" items and .94 for the "after" items. The correlations between the simple index of employment maintenance and each of the items used to assess employment maintenance needs were also relatively high. The correlations for the individual items and the index at the intake (before) stage of the study ranged from .83 (identify skills and attitudes that improve my chances of keeping employment) to .89 (make and follow a plan to remain up to date with on the job changes in duties and skills). The correlations for the individual items and the index taken at the end of the study (after) were similar, ranging from .81 (make and follow a plan to remain up to date with on the job changes in duties and skills) to .89 (identify skills and attitudes that improve my chances of keeping employment).

Table 11: Employment Maintenance – Client Assessment

Employment Maintenance Items	Overall Index Before (r)	Overall Index After (r)
Identify skills and attitudes that improve my chances of keeping employment	0.83	0.89
Identify my strengths and limitations with respect to these skills and attitudes	0.84	0.87
Develop a plan to learn skills and attitudes I need before on the job problems arise	0.88	0.87
Find community and/or workplace resources that provide help and guidance related to keeping work	0.86	0.85
Know about job roles, responsibilities and expectations that support being successful on the job (e.g., who to report to; who makes decisions; approval processes, getting answers to job related questions)	0.84	0.85
Actively seek help when needed	0.84	0.85
Make and follow a plan to remain up to date with on the job changes in duties and skills	0.89	0.81
Total Cases	123	123

Overall Composite Index – Practitioner Assessment. As described earlier, the five employability indices were averaged to yield an overall employability composite index. Table 12 shows the correlations the between the practitioner individual employability indices and the overall employability composite index. The results are shown for the indices based on the practitioner assessments before and after the study period. Overall there was a very high degree of internal consistency among the indices included in the composite index. The Cronbach's alpha for the overall composite index items included in the index were .87 for the "before" items and .93 for the "after" items. This was also demonstrated by the relatively high correlations between the individual employability indices and the overall composite index (based on the unweighted average of scores across all of the indices). The correlations for the individual indices and the composite index at the intake (before) stage of the study ranged from .71 (skill enhancement index) to .87 (pre-employability/job readiness index). The correlations for the individual indices and the overall composite index at the indix (based on the unweighted index) to .87 (pre-employability/job readiness index). The correlations for the individual indices and the overall composite index taken at the end of the study (after) were similar, ranging from .83 (skill enhancement index) to .91 (career decision making).

<u>Table 12: Overall Composite Index – Correlations with Employability Indices Using the</u> <u>Practitioner Assessments</u>

Employability Indices	Overall Index Before (r)	Overall Index After (r)
Pre-Employability/Job Readiness	0.87	0.90
Career Decision Making	0.85	0.91
Work Search	0.81	0.89
Skill Enhancement	0.71	0.83
Employment Maintenance	0.82	0.89
Total Cases	413	188

Overall Composite Index – Client Assessment. Table 13 shows the correlations the between the client individual employability indices and the overall employability composite index. The results are shown for the indices based on the client assessments before and after the study period. Overall there was a very high degree of internal consistency among the indices included in the composite index. The Cronbach's alpha for the overall composite index items included in the index were .91 for the "before" items and .93 for the "after" items. This was also demonstrated by the relatively high correlations between the individual employability indices and the overall composite index. The correlations for the individual indices and the composite index at the intake (before) stage of the study ranged from .85 (pre-employability/job readiness index) to .92 (career decision making index). The correlations for the individual indices and the overall composite index taken at the end of the study (after) were similar, ranging from .86 (skill enhancement index) to .94 (work search).

<u>Table 13: Overall Composite Index – Correlations with Employability Indices Using the Client</u> <u>Assessments</u>

Employability Indices	Overall Index Before (r)	Overall Index After (r)
Pre-Employability/Job Readiness	0.85	0.88
Career Decision Making	0.92	0.93
Work Search	0.90	0.94
Skill Enhancement	0.88	0.86
Employment Maintenance	0.88	0.88
Total Cases	283	283

PERSONAL ATTRIBUTES

A parallel approach as has been described for the Employability Dimensions was applied to the Personal Attributes.

Personal Attributes – Practitioner Assessment. Table 14 shows the correlations the between the practitioner Personal Attributes items and the summary index developed from these items. The results are shown for the practitioner assessments before and after the study period. Overall there was a very high degree of internal consistency among the variables included in this index. The Cronbach's alpha for the Personal Attributes items included in the index were .91 for the "before" items and .91 for the "after" items. This was also demonstrated by the relatively high correlations between the simple index of Personal Attributes and each of the items used to assess Personal Attributes needs. The correlations for the individual items and the index at the intake (before) stage of the study ranged from .79 (ability to self-manage) to .89 (improving sense of well-being, developing stronger self-efficacy). The correlations for the individual items and the index at and the items taken at the end of the study (after) were similar, ranging from .82 (developing stronger self-esteem) to .92 (improving sense of well-being).

Personal Attributes Items	Overall Index Before (r)	Overall Index After (r)
Ability to Self-Manage	0.79	0.84
Developing stronger Self-Esteem	0.86	0.82
Improving sense of Well-Being	0.89	0.92
Developing stronger Self-Efficacy	0.89	0.90
Increasing Self-Awareness	0.86	0.86
Total Cases	345	167

Table 14: Personal Attributes Index– Correlations with Practitioner Assessment Items

Personal Attributes – Client Assessment. Table 15 shows the correlations between the client Personal Attributes items and the summary index developed from these items. The results are shown for the client assessments before and after the study period. The findings were very similar to the practitioner results. Overall there was a very high degree of internal consistency among the variables included in this index. The Cronbach's alpha for the Personal Attributes items included in the index were .89 for the "before" items and .90 for the "after" items. The correlations between the simple index of Personal Attributes and each of the items used to assess Personal Attributes needs were also relatively high. The correlations for the individual items and the index at the intake (before) stage of the study ranged from .80 (manage my own actions so that I keep moving forward) to .86 (understand my strengths, limitations and motivations clearly). The correlations for the individual items and the index taken at the end of the study (after) were similar, ranging from .81 (manage my own actions so that I keep moving forward) to .83 (understand my strengths, limitations and motivations clearly).

Table 15: Personal Attributes – Client Assessment

Personal Attributes Items	Overall Index Before (r)	Overall Index After (r)
Manage my own actions so that I keep moving forward	0.80	0.81
Feel good about myself as a person	0.85	0.85
Look after my health and relationships in positive ways	0.82	0.85
Feel like I have the abilities I need and I know when and how to use these abilities	0.84	0.86
Understand my strengths, limitations and motivations clearly	0.86	0.87
Total Cases	280	280

RESPONSIBLE BEHAVIOUR, SUPPORT SYSTEMS AND WORKING ALLIANCE

A parallel approach as has been described for the Employability Dimensions and Personal Attributes was applied to these dimensions as well.

Responsible Behavior – Practitioner Assessment. Table XX shows the correlations the between the practitioner Responsible Behavior items and the summary index developed from these items. The results are shown for the practitioner assessments before and after the study period. Overall there was a very high degree of internal consistency among the variables included in this index. The Cronbach's alpha for the Responsible Behavior items included in the index were .89 for the "before" items and .91 for the "after" items. This was also demonstrated by the relatively high correlations between the simple index of Responsible Behavior and each of the items used to assess Responsible Behavior needs. The correlations for the individual items and the index at the intake (before) stage of the study ranged from .57 (following medical and medication protocols is needed) to .87 (increase in understanding expectations and demands of employers is needed). The correlations for the individual items and the index at the end of the study (after) were similar, ranging from .69 (following medical and medication protocols is needed).

Responsible Behaviour Items	Overall Index Before (r)	Overall Index After (r)
Improved capacity to work and/or study is needed	0.80	0.80
Increase in sense of responsibility for own choices and behaviours is needed	0.85	0.88
Increase in ability to set short and long term goals is	0.86	0.89

needed		
Increase in understanding expectations and demands of employers is needed	0.87	0.86
Following medical and medication protocols is needed	0.57	0.69
Increased openness to change is needed	0.81	0.86
Total Cases	402	187

Support Systems – Practitioner Assessment. Table XX shows the correlations between the practitioner Support Systems items and the summary index developed from these items. The results are shown for the practitioner assessments before and after the study period. Overall there was a high degree of internal consistency among the variables included in this index. The Cronbach's alpha for the Support Systems items included in the index were .82 for the "before" items and .78 for the "after" items. This was also demonstrated by the relatively high correlations between the simple index of Support Systems and each of the items used to assess Support Systems needs. The correlations for the individual items and the index at the intake (before) stage of the study ranged from .61 (reduction in destructive behavior is needed) to .83 (increased access to constructive and positive support systems is needed). The correlations for the individual items and the index at and the items taken at the end of the study (after) were similar, ranging from .49 (reduction in destructive behavior is needed).

Support Systems Items	Overall Index Before (r)	Overall Index After (r)
Improved housing is needed	0.67	0.54
Improved transportation is needed	0.70	0.68
Reduction in destructive behaviour is needed	0.61	0.49
Increased access to constructive and positive support systems is needed	0.83	0.80
Improved relationships with family and friends are needed	0.78	0.83
Increased trust in other people is needed	0.77	0.78

Total Cases	402	187

Working Alliance and Client Engagement – Practitioner Assessment. Table XX shows the correlations between the practitioner Working Alliance and Client Engagement items and the summary index developed from these items. The results are shown for the practitioner assessments before and after the study period since only one set of these questions was asked of the clients at the end of the study. The findings were very similar to the practitioner results. Overall there was a very high degree of internal consistency among the variables included in this index. The Cronbach's alpha for the Working Alliance and Client Engagement items included in the index were .90 for the "before" items and .90 for the "after" items. This was also demonstrated by the relatively high correlations between the simple index of Working Alliance and Client Engagement needs. The correlations for the individual items and the index at the intake (before) stage of the study ranged from .78 (participated actively in the interview) to .88 (arrived at a goal that is owned by the client). The correlations for the individual items and the index at and the items taken at the end of the study (after) were similar, ranging from .83 (Established a climate of trust and comfort in working together) to .89 (was focused on achieving results).

Working Alliance and Client Engagement Items	Overall Index Before (r)	Overall Index After (r)
Established a climate of trust and comfort in working together	0.85	0.83
Arrived at a goal that is owned by the client	0.88	0.84
Agreed on the action plan steps to help achieve the client's goal	0.85	0.86
Participated actively in the interview	0.78	0.84
Was focused on achieving results	0.84	0.89
Total Cases	332	166

Table XX: Working Alliance and Client Engagement Index– Correlations with Practitioner Assessment Items

Working Alliance and Client Engagement – Client Assessment. Table XX shows the correlations between the client Working Alliance and Client Engagement items and the summary index developed from these items. The results are shown for the client assessments only after the study period since only one set of these questions was asked of the clients at the end of the study. The findings were very similar to the practitioner results. Overall there was a very high degree of internal consistency among the variables included in this index. The Cronbach's alpha for the

Working Alliance and Client Engagement items included in the index was .81. The correlations between the simple index of Working Alliance and Client Engagement and each of the items used to assess Working Alliance and Client Engagement needs were also relatively high. The correlations for the individual items and the index ranged from .69 (participated actively in other programs and services) to .79 (understand my strengths, limitations and motivations clearly).

Working Alliance and Client Engagement Items	Overall Index Before (r)	Overall Index After (r)
Had trust in and were comfortable working with your career practitioner		0.76
Were helped to set your own goals		0.73
Agreed with your career practitioner on the steps you need to take		0.73
Participated actively in the interviews		0.79
Participated actively in other programs and services		0.69
Were focused on making progress toward your goals		0.73
Total Cases		281

SUMMARY

The items for each of the five dimension dimensions exhibited a high degree of internal consistency and a simple index for dimensions generated by averaging the scores across the items was highly correlated with the items used to generate the index. In simple terms, this means that:

- 1. The specific items used to measure needs in each of the employability dimensions seem to be measuring aspects of the same concept (e.g., Work Search items are each measuring the same construct; Career Decision Making items measure a common construct).
- 2. An average score can be used to represent the items in each of the five employability dimensions; the average score relates highly to scores of individual items.

For the purposes of this research project, therefore, these overall indices provide a good representation of the practitioner's and the client's assessment of client needs within each of the five employability dimensions and can be used in the subsequent analysis to simply the analysis and reporting on the study findings.

The analysis also demonstrated that these indices could be combined into an overall composite index of employability needs, although the utility of the individual indices and the overall composite index remains to be tested: that is, there may be cases when a particular employability dimension index is more useful than a composite score. For example, there may be instances in which knowing about work search needs is more important than knowing about general needs with all the employability dimensions. This testing is the focus of the subsequent analysis and reporting.

The analysis of Personal Attributes, Responsible Behaviour, Support Systems, Working Alliance/Client Engagement items paralleled that of each of the Employability Dimensions assessments, confirming that each set of characteristics could be measured as a single overarching characteristic. Put simply, for analysis purposes, scores could be assigned to these sets of needs rather than using each and every item in the statistical analysis. A "personal attribute need" score, for example, could be used for statistical analyses rather than running statistical tests on each of the items *within* the personal attribute survey.

ANALYSIS OF MEASURES

The focus of this analysis was on establishing the relationship between the practitioner and client assessments of need and (a) finding employment and (b) entering training. The coding of the employment status variable coded any client:

- employed at the end of the study period as a 1 and
- anyone in a training/education program, waitlisted for a training/education program or not employed as a 0.

The clients who were already employed at the time of intake were not included in this analysis since the intent of this analysis was to examine the factors associated with moving from an

unemployed to an employed status. This binary dummy or categorical⁴ variable for employment status at the end of the study period (1 = employed and 0 = not employed) was used as the dependent variable for the bivariate analyses and the subsequent logistic regression models. The analysis began with some simple correlations between the assessment measures and employment status dummy variable.

A parallel process was employed when comparing the measures to training outcomes.

PRACTITIONER ASSESSMENTS & EMPLOYMENT

Table 16 shows the correlations between the employment status dummy variable and the employability dimensions and related indices based on the practitioner assessments before and after the six week study period and the difference in these ratings. Note that all of the employability dimension correlations are expected to be negative, indicating the higher the needs on an employability dimension, the less likely an individual will be employed at the end of the study period. The working alliance/client engagement correlation would be expected to be positive, as the working alliance/client engagement score measures the strength of the alliance.

Starting with the indices measuring employability dimensions before the study period, the statistically significant correlations for the individual indices were:

- Career Decision Making (-.18);
- Skill Enhancement (-.18);
- Working Alliance and Client Engagement (.16);
- Overall Employability Composite Index (-.15);
- Responsible Behaviour (-.15);
- Personal Attributes (-.14).

In other words, the analysis tells us that as client needs decrease in the above employability dimensions, their employment rates go up on average. Also, as the working alliance/engagement levels rise, so do employment rates, on average. Note, however, that these are quite weak correlations.

Table 16: Correlations Between Employed versus not Employed (1,0) with Employability and Related Indices Based on Practitioner Assessments

Employability and Related Indices	Indices Measured Before (r)	Indices Measured After (r)	Change in Indices After - Before (r)
Pre-Employability/Job Readiness	12	08	.03
Career Decision Making	18**	20*	06

⁴ Dummy or categorical variables are used in order to give a number (0 or 1, in this case) to what really is a qualitative variable (e.g., employed or unemployed) for the purposes of statistical analysis.

Employability and Related Indices	Indices Measured Before (r)	Indices Measured After (r)	Change in Indices After - Before (r)
Work Search	05	17*	11
Skill Enhancement	18**	11	.01
Employment Maintenance	09	09	06
Overall Employability Composite Index	15*	15	04
Responsible Behaviour	15**	20*	03
Support Systems	09	10	02
Personal Attributes	14*	26**	.00
Working Alliance and Client Engagement	.16*	.25**	.02
Minimum number of cases ⁺	206	122	107

⁺ The number of cases for each correlation varied for each variable, the minimum number of cases was the smallest sample sized used within the before, after and difference measures. *Significant at the 0.05 level (2-tailed), **Significant at the 0.01 level (2-tailed).

Table 16 above includes the 5 employability dimension scores as well as the overall employability dimension composite score. Notice that there is a statistically significant negative relationship shown in Column 1 between "Overall Employability Composite Index" and employment (r = -.15). Given that the "Overall Employability Composite Index" aligns well with each of the 5 distinct employability dimension indices, the reader might expect to see this relationship repeated with each of the 5 dimensions. However, this is not the case, simply because the correlations between the overall index and the 5 dimension indices is not perfect.

To test these relationships further, a logistic regression model was developed to answer the following questions:

- Which of the five employability dimensions based on the practitioner assessments before the study period were the best predictors of an employment outcome (within the six month study period)?
- Were the individual employability dimensions based on the practitioner assessments before the study period better predictors than the overall employability index?
- Are the other employability related measures based on the practitioner assessments before the study period better predictors of a client's employment outcome or contribute to the prediction of a client's employment outcome?

A model predicting employment using the employment status dummy variable as the dependent variable and the five employability dimensions as the predictor found that when the Skill Enhancement Index was tested in a model with the Overall Employability Composite Index, the Skill Enhancement Index was the best predictor and the Overall Employability Composite Index did not add significantly more predictive power to the model. To put both these findings another way, a practitioner's assessment of Skill Enhancement need is a better predictor of employment than a practitioner's assessment of any other Employability Dimension need or than a composite score of

need by the practitioner. Also, once the Skill Enhancement score of need has been used as a predictor, adding any other Employability Dimension score or a composite score does nothing to make the prediction stronger.

Next, a model with the other employability related characteristics (Responsible Behaviour, Support Systems, Personal Attributes, Working Alliance and Client Engagement) tested which of these indices were the best predictors of a client's employment status at the end of the study. This analysis found that the Working Alliance and Client Engagement Index was the best predictor and no additional indices significantly added more predictive power to the model predicting the client's employment status. When both the Skill Enhancement Index and the Working Alliance and Client Engagement Index were tested in the same model, both were significant or very close to being significant.

The logistic regression model is shown in Table 17 below. Since the model coefficients (B) are based on a logarithmic transformation of the odds ratio for the client's employment status, the numbers for Exp(B) are a little more easily interpreted since this is the equivalent number for an odds ratio. Based on this model, for the Skill Enhancement Index, controlling for differences in the Working Alliance and Client Engagement Index, an increase of 1 in the index would result in a 28% decrease (1 - .72) in the odds that a client would be employed at the end of the study period. For example, clients who scored "3" in terms of need on the Skills Enhancement Index would, on average, be 28% less likely to be employed than clients who score "2" (all other things being equal, such as working alliance).

For the Working Alliance and Client Engagement Index the model indicates that, controlling for differences in the Skill Enhancement Index, an increase in 1 in the index would result in a 82% increase (1 - 1.82) in the odds that a client would be employed at the end of the study period. For example, clients scoring "3" on the Working Alliance and Client Engagement Index would, on average, have an 82% greater chance of becoming employed in 6 weeks than clients who scored "2" (all other things being equal, such as their skills enhancement needs).

Although these findings are certainly not definitive and should not be taken too literally given the small sample size and the very short-term employment outcome observed, the findings do support the hypothesis that employability dimensions measured even at the intake stage can be shown to be correlated with employment outcomes. In this analysis, Skills Enhancement is the dimension with the most predictive value. The findings also suggest that although the employability characteristics of the client are important, so is the working relationship between the practitioner and the client. Overall, however, the predictive ability of these models is limited. The Cox & Snell R² statistic indicated that percent of variance explained by the model was 4.8% and the Nagelkerke R² statistic was slightly more favourable indicating 7.3% of the variance in the employment outcome could be explained by this model. It is not uncommon to have relatively low variance explained for binary variables, but in this case the problem is compounded by the fact that few participants have actually had a reasonable length of time to secure employment before the study period ended. Put plainly, these findings point to an area worthy of further research, but we cannot make too much of these findings on their own.

<u>Table 17: Logistic Regression Model for Employed versus not Employed (1,0) with Employability</u> <u>and Related Indices Based on Practitioner Assessments for the Period Before the Study</u>

Employability and Related Indices	В	Std. Error	Sig.	Exp(B)
Skill Enhancement	33	.17	.053	.72
Working Alliance and Client Engagement	.60	.29	.040	1.82

For the indices measuring employability at the end of the study period by the practitioner as shown in Table 18 the statistically significant correlations for the individual indices were:

- Personal Attributes (-.26);
- Working Alliance and Client Engagement (.25);
- Career Decision Making (-.20);
- Responsible Behaviour (-.20); and
- Work Search (-.17).

Some of the same indices based on measures taken after the study period ended are the same as those identified for the period prior to the study, but there are two key differences. One is there are few dimensions with a statistically significant correlation. This is likely mainly due to the smaller sample size for the before and after assessments. The other observation is that almost all of these correlation coefficients are larger than those identified for the before study period. These stronger correlations of the "after" assessments compared to the "before" simply confirm that a client's current characteristics are a better predictor than their past characteristics since the current measures will incorporate the change or impact of the services provided.

The same logistic regression modelling process was implemented as described previously.

A model predicting employment using the employment status dummy variable as the dependent variable and the five employability dimensions (as measured after the study period by the practitioner) as the predictor found that the Career Decision Making Index was the best predictor and no additional indices significantly added more predictive power to the model predicting the client's employment status. When the Career Decision Making Index was tested in a model with the Overall Employability Composite Index, the Career Decision Making Index was the best predictor and the Overall Employability Composite Index did not add significantly more predictive power to the model. In the "before" assessment, the Skills Enhancement Index is the best predictor; in the "after" assessment, the Career Decision Making Index is the best predictor.

Next a model with the other employability related dimensions (Responsible Behaviour, Support Systems, Personal Attributes, Working Alliance and Client Engagement) tested which of these indices were the best predictors of a client's employment status at the end of the study. Similar to the analysis of the intake (before) data, this analysis found that the Working Alliance and Client Engagement Index was the best predictor and no additional indices significantly added more predictive power to the model predicting the client's employment status. When both the Career Decision Making Index and the Working Alliance and Client Engagement Index were tested in the same model, only the Career Decision Making Index was statistically significant. The model with the Career Decision Making Index is shown in Table XX below. Based on this model an increase of 1 in the Career Decision Making Index would result in a 39% decrease (1 - .61) in the odds that a client would be employed at the end of the study period. As noted previously, the predictive ability of these models is limited. The Cox & Snell R² statistic indicated that percent of variance explained by this model was 4.3% and the Nagelkerke R² statistic was again slightly more favourable indicating 6.5% of the variance in the employment outcome could be explained by this model. As with the "before" models, these results point to promising prospects in future research, but limited sample sizes in this study prevents strong conclusions from being drawn.

<u>Table 18: Logistic Regression Model for Employed versus not Employed (1,0) with Employability</u> <u>and Related Indices Based on Practitioner Assessments for the Period After the Study</u>

Employability and Related Indices	В	Std. Error	Sig.	Exp(B)
Career Decision Making	49	.21	.021	.61

CLIENT ASSESSMENTS & EMPLOYMENT

Table 19 shows the correlations between the employment status dummy variable and the employability and related indices based on the client assessments before and after the six week study period and the difference in these ratings. Starting with the indices measuring employability before the study period, the only statistically significant correlation was for the Personal Attributes Index (-.15).

<u>Table 19: Correlations Between Employed versus not Employed (1,0) with Employability and</u> <u>Related Indices Based on Client Assessments</u>

Employability and Related Indices	Indices Measured Before (r)	Indices Measured After (r)	Change in Indices After - Before (r)
Pre-Employability/Job Readiness	08	20*	07
Career Decision Making	05	24**	14
Work Search	12	27**	12
Skill Enhancement	02	.04	.07

Employment Maintenance	05	16	10
Overall Employability Composite Index	03	18*	11
Responsible Behaviour			
Support Systems			
Personal Attributes	15*	15	.04
Working Alliance and Client Engagement		.04	
Minimum number of cases ⁺	89	89	89

⁺ The number of cases for each correlation varied for each variable, the minimum number of cases was the smallest sample sized used within the before, after and difference measures. *Significant at the 0.05 level (2-tailed), **Significant at the 0.01 level (2-tailed).

A logistic regression model confirmed that the Personal Attributes Index was the best predictor of all the indices for predicting the client's employment status. When the Personal Attributes Index was tested in a model with the Overall Employability Composite Index, the Personal Attributes Index remained the best predictor and the Overall Employability Composite Index did not add significantly more predictive power to the model.

Consequently, as shown in Table 20 below, the final model for predicting the client's employment status based on the client assessments for the period before the study only included Personal Attributes Index. Based on this model, an increase of 1 in the Personal Attributes Index would result in a 30% decrease (1 - .70) in the odds that a client would be employed at the end of the study period. Overall, however, the predictive ability of these models was very limited. The Cox & Snell R² statistic indicated that percent of variance explained by the model was 2.2% and the Nagelkerke R² statistic was only slightly more favourable indicating 3.3% of the variance in the employment outcome could be explained by this model. As with the practitioner assessments, this low ability to account for change is partially due to the use of a binary dependent variable and partially due to small sample sizes. Again, these findings point to promising areas for future research but allow few conclusions to currently be drawn. Certainly, we cannot conclude that we can base predictions of employment on clients' "before" assessments of personal attributes, but it is an area to pursue in future research.

<u>Table 20: Logistic Regression Model for Employed versus not Employed (1,0) with Employability</u> and Related Indices Based on Client Assessments for the Period Before the Study

Employability and Related Indices	В	Std. Error	Sig.	Exp(B)
Personal Attributes Index	36	.18	.042	.70

For the indices measuring employability at the end of the study period by clients as shown in Table 21, the statistically significant correlations for the individual indices were:

- Work Search (-.27);
- Career Decision Making (-.24);

- Pre-Employability/Job Readiness (-.20);
- Overall Employability Composite Index (-.18).

There were more significant correlations with employment status and larger correlations for the assessment taken after the study period than before the study. A logistic model predicting the employment status dummy variable as the dependent variable and the five employability dimensions as the predictors found that the Career Decision Making Index was the best predictor and no additional indices significantly added more predictive power to the model predicting the client's employment status. When the Career Decision Making Index was tested in a model with the Overall Employability Composite Index, the Career Decision Making Index was the best predictor and the Overall Employability Composite Index and Working Alliance and Client Engagement Index also did not contribute any additional predictive power to this model. These findings were the same as reported for the practitioner ratings.

The model with the Career Decision Making Index is shown in Table 21 below. Based on this model, an increase of 1 in the Career Decision Making Index would result in a 62% decrease (1 - .38) in the odds that a client would be employed at the end of the study period. As noted previously, the predictive ability of these models is limited. The Cox & Snell R² statistic indicated that percent of variance explained by this model was 6.2% and the Nagelkerke R² statistic was again more favourable indicating 9.6% of the variance in the employment outcome could be explained by this model.

In short, the Career Decision Making Index as completed by clients at the end of the intervention period is the best of all the indices in terms of predicting employment, but it accounts for less than 10% of the variance seen in clients' success rates. For practical purposes, more predictive power would be needed in order for employment services to use such an index for predictive purposes. However, further research may find ways to increase the predictive power.

<u>Table 21: Logistic Regression Model for Employed versus not Employed (1,0) with Employability</u> <u>and Related Indices Based on Client Assessments for the Period After the Study</u>

Employability and Related Indices	В	Std. Error	Sig.	Exp(B)
Career Decision Making	97	.32	.003	.38

PRACTITIONER ASSESSMENTS & TRAINING

For the purposes of the following analyses, clients who were employed at intake were excluded. Of the remaining clients, the outcomes of entering training or being waitlisted for training were assigned a "1" and not being employed/in training was assigned a "0."

As Table xx shows, there are few indices that correlate with entry into training or being waitlisted at a significant level. Practitioner assessment of work search need at intake is negatively correlated with training entry (r = -.27), possibly indicating that the more a practitioner sees that a client needs help with work search skills, the less likely they will focus on helping the client gain

entry into training. Practitioner assessment of skill enhancement need at intake, however, is positive correlated with training entry (r = .23), likely indicating that an initial "diagnosis" of skill requirements leads to an intervention path that results in training.

When measuring at the end of the intervention, practitioner assessments of need are negatively correlated with training entry with Pre-Employability/Job Readiness (r = -.17) and Work Search (r = -.22), and practitioner assessments of strength are positively correlated with training entry with Personal Attributes (r = .17). These findings make intuitive sense: The more help the client needs with regard to job readiness and work search, the less likely they will enter training. The practitioner and client would likely focus on filling these needs first. Also, the more the client displays positive attributes, the more likely the practitioner and client will agree that training/education is a viable option.

Examining changes in scores, Table xx shows one statistically significant relationship: As the need for work search lessens (i.e., the client's work search abilities strengthen), the likelihood of entry into training increases. This is likely best explained by the nature of the items, which are based on needs. A practitioner would probably rate the need to "complete appropriate resume and cover letter" far lower with a client whose plans involved entry into training than a client who might look for work. By the end of the intervention, both the practitioner and client have a much better sense of where the client is headed; at the beginning, far more options are available.

Employability and Related Indices	Indices Measured Before (r)	Indices Measured After (r)	Change in Indices After - Before (r)
Pre-Employability/Job Readiness	.09	17*	.07
Career Decision Making	.03	10	13
Work Search	27**	22*	.29**
Skill Enhancement	.23**	07	16
Employment Maintenance	09	14	.04
Overall Employability Composite Index	05	12	.04
Responsible Behaviour	01	.00	.05
Support Systems	11	08	04
Personal Attributes	02	.17*	.04
Working Alliance and Client Engagement	.05	.02	.06
Minimum number of cases ⁺	208	127	110

<u>Table xx: Correlations Between In Training/Waitlisted versus not Employed or In Training (1,0)</u> with Employability and Related Indices Based on Practitioner Assessments

⁺ The number of cases for each correlation varied for each variable, the minimum number of cases was the smallest sample sized used within the before, after and difference measures. *Significant at the 0.05 level (2-tailed), **Significant at the 0.001 level (2-tailed).

CLIENT ASSESSMENTS & TRAINING

Client assessments resulted in some different correlations than practitioner assessments. A similar correlation between the two can be found at intake, in which the need for skills enhancement is significantly and positively related (r = .27) to training entry for clients.

At exit, the need for employment maintenance as rated by clients is significantly and positively related to training entry. The reasons for this relationship are not immediately obvious. The Employment Maintenance items have no conceptual relationship to the kinds of skills that would be acquired in a typical training program devoted to learning specific job skills. However, if practitioners included training in life skills, such as anger management or stress management, as a "training entry" outcome, this relationship would make complete sense. The data do not make these distinctions, unfortunately.

The strength of the working alliance/client engagement at exit is also positively and significantly correlated, albeit weakly (r = .15), with training entry. This relationship is not particularly interesting unto itself; the effect of working alliance/engagement needs to be examined in the broader context of how it affects change or the absence of change (see specific research questions related to working alliance/engagement in subsequent sections).

In terms of changes, there is a significant, moderate and negative relationship (r = -.37) between client change in skill enhancement need (i.e., improvement) and training entry. In other words, the less clients improve in the skill enhancement dimension during the intervention, the more likely they are to enter training. The other significant (but weak) relationship is the positive correlation (r = .15) with working alliance/client engagement change and training entry. As the working alliance/engagement levels rise, so do the odds of a client entering training.

Employability and Related Indices	Indices Measured Before (r)	Indices Measured After (r)	Change in Indices After - Before (r)
Pre-Employability/Job Readiness	.11	.02	09
Career Decision Making	.01	.00	01
Work Search	.11	.20	.07
Skill Enhancement	.27*	08	37**
Employment Maintenance	.14	.25*	.07
Overall Employability Composite Index	.06	05	11
Responsible Behaviour			
Support Systems			

<u>Table xx: Correlations Between In Training/Waitlisted versus not Employed or In Training (1,0)</u> with Employability and Related Indices Based on Client Assessments

Employability and Related Indices	Indices Measured Before (r)	Indices Measured After (r)	Change in Indices After - Before (r)
Personal Attributes	.03	-0.7	10
Working Alliance and Client Engagement	.15	.15*	.15*
Minimum number of cases ⁺	204	204	204

⁺ The number of cases for each correlation varied for each variable, the minimum number of cases was the smallest sample sized used within the before, after and difference measures. *Significant at the 0.05 level (2-tailed), **Significant at the 0.001 level (2-tailed).

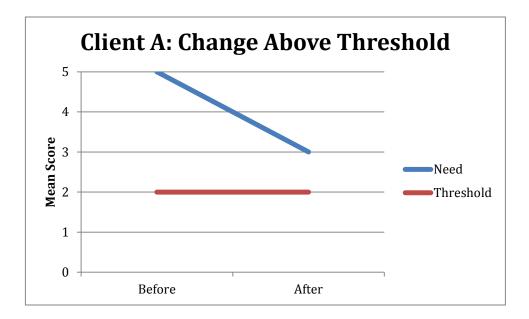
The logistic regression modeling that was conducted for employment outcomes was not repeated for the training outcomes; the results would not warrant meaningful interpretation with the small sample.

SUMMARY

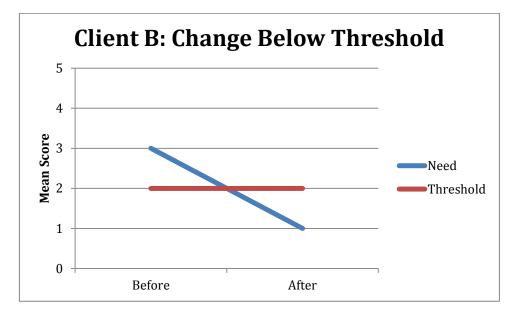
The intent of this analysis is not to make a definitive statement about which employability dimensions are the best predictors of employment or training. We do not have the statistical power to be able to confidently make those types of statements, especially given how correlated most of these indices are. There are three broad conclusions we make based on this analysis.

First, measuring the absolute change in a client's attribute is just one aspect of measuring progress toward employability. The failure to find significant correlations between the change scores and employment or training does not indicate that these change scores do not indicate progress to employability. In fact, the finding that the indices based on measures taken at the end of the study were better predictors of employment than those at the beginning of the study suggest the change occurring between the two measurement periods had an impact on employment. But the findings also indicate that it is not just the amount of change that is important. A client who changes modestly on an employability index who is in high need will probably still have a lower likelihood of finding employment than a client with modest change who was in a low need on the index to begin with. In other words, there is likely a minimum threshold of ability that is required to become employable, and no amount of improvement will create change until this threshold is reached. Tracking progress towards employability should combine both the change in the employability indices (movement toward the threshold) and the number of clients moving from a state of higher need (above the threshold) to a state of lower need (at or below the threshold). The two figures below illustrate this distinction. Figure 2 shows Client A, who's dropped two scores, on average, on measures of need. However, Client A has still not met the threshold for success. Client B, shown in Figure 3, has also dropped two scores, on average, on measures of need. However, even though Client A and Client B have changed the same amount, Client B is below the threshold at the end of the intervention and is more likely to be successful than Client A.

Figure 2. Illustration of Change vs.. Threshold, Client A







The second conclusion is that an overall index of employability could be an adequate indicator of employability needs and progress, but more specific employability dimensions may provide a better indicator of employability. Although this conclusion is supported by the logistic regression modelling (near the beginning of this section) showing individual indices outperformed the composite index in predicting employment at the end of the study, a longer time period to observe employment outcomes and a larger sample would be required to confirm this preliminary finding.

Also, the third observation is that other dimensions such as the quality of the working alliance and client engagement may also be important factors influencing the success of the clients in the

labour market. Although this dimension was not consistently among the best predictors of employment or training entry at the end of the study, the simple correlations and some models indicated some predictive power of this index.

ATTRIBUTION OF CHANGE

As an exploratory study predominantly focused on measures, no control or comparison groups were used in this study. However, it is important to know that any changes experienced by clients (and reported below) are likely attributable to the interventions they experienced. This was achieved by asking clients the extent to which any changes they experienced were due to the "programs, services, interviews and work" they had done in the 6 week period. Table 22 below shows that a very large majority (83%) attributed changes "somewhat" or "mostly" to the activities of the study.

Table 22. Client Attribution of Change

Change is due to:	Percentage of Clients
Mostly other factors	1%
Somewhat other factors	3%
Uncertain	13%
Somewhat the programs, services, interviews and work	37%
Mostly the programs, services, interviews and work	46%

PERSONAL ATTRIBUTE OUTCOMES AND PROCESSES

QUESTION 1: HOW MUCH CHANGE IN PERSONAL ATTRIBUTES (E.G., SELF-EFFICACY AND SELF-ESTEEM) OCCURS FOR CLIENTS WITHIN 6 WEEKS OF INTERVENTION?

Methodological Note: To answer this and any of the questions in which practitioners or clients used a 5-point rating system of need, four categories of need were created: very low, low, moderate and high. The reader is reminded that the 5-point scale comprised "Not at all" (0), "Not much" (1), "A little" (2), "Quite a lot" (3), and "A lot" (4). The four categories were created as follows:

- Very low need. In this category, the average score was between 0.00 and 0.49, meaning the predominant response was "Not at all," with perhaps some "Not much" or "A little" responses.
- Low need. Here, the average score was between 0.50 and 1.49. This indicates predominantly "Not much" scores with perhaps some "Not at all" items and "A little" items.
- Moderate need. Defined by average scores of 1.50 to 2.49, most items were likely "A little" with some "Quite a lot" and "A little" responses.
- High need. Averages scores of 2.50 to 4 fit this category. The dominant responses were likely "Quite a lot" with some "A lot" responses and perhaps several "A little" responses.

Note that the bottom range spans 0.49 points whereas the middle two ranges are 0.99 points and the highest range is 1.49 points. These differences can be attributed to a desire to define very low need and high need, with less concern regarding dividing the middle groups. Intuitively, predominantly "not at all" responses indicate a very low need level. At the high end, however, it would not seem right to look for predominant "A lot" responses. Hence, an average that includes both "Quite a lot" and "A lot" responses defines the high range. The two middle ranges were then divided equally.

The exception to the above system is with the measure of working alliance and client engagement. First, working alliance and client engagement items were collapsed into a single index: working alliance/engagement. Since the working alliance and client engagement items used a different scale, going from "Not at all" to "A lot", the index was grouped into four levels of working alliance/engagement: Very Low (0 to .49), Low (.5 to 1.49), Moderate (1.5 to 2.49) and High (2.5 to 4). However, it should be noted there were no cases that fell in the "Very Low" category and very few in the "Low" category. This limited variability in the Working Alliance/Engagement Index made it difficult to find any statistically significant relationships between this index and other variables.

DESCRIPTIVE FINDINGS

Practitioner Assessment. Client scores were grouped into four categories based on practitioners' ratings of their need for help with the attributes (very low need, low need, moderate need, high need). Table 31 shows the percentage of participants in each need group before and after the intervention. The very low need group, which represented about a fifth of participants on intake (22%), represents about a third (30%) by the end of the study. The high need group dropped from about a fifth (19%) to just over a tenth of the sample (12%) by the end of the intervention.

Need for Help with Personal Attributes	Before (%)	After (%)
Very low need (1 to 1.49)	22	30
Low need (1.5 to 2.49)	26	28
Moderate need (2.5 to 3.49)	33	29

Table 31: Personal Attributes Needs Before and After – Practitioner Assessment

High need (3.5 to 5)	19	12	
----------------------	----	----	--

For a different way to compare changes, client scores were divided into three groups: Those whose need for help, according to practitioner ratings, lessened throughout the study (Improved), increased throughout the study (Worsened) and did not change with regards to personal attributes (Unchanged). Of 154 clients for which practitioners rated client personal attribute needs before and after, 40% improved, 14% worsened and 46% experiencing no change. The last number is noteworthy: *The practitioners saw no change in any personal attribute in almost half of their clients*.

Client Assessment. As with the practitioner assessment, clients were grouped into four categories based on their ratings of their need for help with personal attributes. Table 32 illustrates the percentages in each group before and after the intervention. The changes here are more dramatic than with the practitioners' assessments: Where about one quarter (26%) of clients were high need at the beginning, almost none (4%) were high need at the end of the intervention. The very low need group, which represented about a tenth (11%) of the group at intake, represented almost half (44%) at exit.

Need for Help with Personal Attributes	Before (%)	After (%)
Very low need (1 to 1.49)	11	44
Low need (1.5 to 2.49)	30	42
Moderate need (2.5 to 3.49)	34	10
High need (3.5 to 5)	26	4

Table 32: Personal Attributes Needs Before and After – Client Assessment

To look at change a different way, the same process as with the practitioner assessment was used, creating three groups: Improved, Worsened and Unchanged. Of 280 clients who self-rated on personal attributes, 240 (86%) were Improved, 4 (1%) were Worsened and 36 (13%) were Unchanged. Note that the vast majority of clients perceived improvements in personal attributes, whereas practitioners saw fewer than half demonstrate improvement.

INFERENTIAL ANALYSES

Practitioner Assessment. Two-tailed t-tests, comparing whether or not the change between "before" and "after" was significantly different than 0, found significant improvements (M = -.25, SD = .74) (t (153) = -4.24, p<.001 (two-tailed)).

Client Assessment. Two-tailed t-tests also found significant changes in client assessments of personal attributes (M = -1.00, SD = .86) (t(279) = -19.57, p<.001 (two-tailed)).

ANSWER SUMMARY

The question "How much change in personal attributes (e.g., self-efficacy and self-esteem) occurs for clients within 6 weeks of intervention?" is answered, but the results show that the answer depends on who is answering the question. Practitioners see statistically significant change within 6 weeks, but "moderate" is probably the best term to describe the clinical significance of this change. Further, "specific" is a qualifier that seems to apply to practitioners' ratings: They see specific, moderate changes in client's personal attributes. Clients, however, report both statistically and clinically significant change. "Dramatic" and "global" might be the appropriate terms here, with 86% improving (i.e., needing less help with) personal attributes. A look at the mean scores illustrates this: Practitioners' ratings changed by -.25 whereas clients' changed by -1.00. Consider the practical meaning of these means: If the average practitioner sees a client change by one point (e.g., from "a lot" to "not at all") on one out of four items, the average corresponding client is likely to have seen a full point change on *every* item in order to create these means.

It appears the practitioners are using the assessment as a true diagnostic of areas of need, whereas clients seem to see themselves more positively when *any* area of need improves. A medical metaphor may help explain these differences in perspective: A medical doctor may help a patient with a very specific problem, such as a sore throat. If the doctor and patient were both given general health assessments to complete before and after the treatment, the doctor's would likely show that the throat is better after than before. No other improvements may be noted. The patient, however, whose pain has been removed, may well indicate improvements in their throat as well as improvements in general energy, sleep, general aches/pains, etc. The practitioner in this case takes a highly diagnostic view; the client in this case reports on elements that are highly interconnected.

In a teleconference held with several participating practitioners after the study's completion, this finding was raised. The practitioners confessed to taking a very cautious view of change and, in essence, urged us to "Trust the client"!

QUESTION 2: TO WHAT DEGREE ARE CHANGES IN PERSONAL ATTRIBUTES RELATED TO THE STRENGTH OF THE WORKING ALLIANCE?

DESCRIPTIVE FINDINGS

Practitioner Assessment. The working alliance and client engagement questions were merged into a composite index to answer this question. Three categories of alliance/engagement were then created from the data set of 136 practitioners for whom complete data were available: low, moderate and high. Comparing these categories to the personal attribute categories described above – Improved, Unchanged and Worsened – could illustrate the patterns between alliance/engagement and personal attributes. As Table 33 shows below, however, there is no pattern that jumps out. The low alliance/engagement case saw the highest percentage of improved clients regarding personal attributes (50%), whereas the moderate and high categories saw almost half (45% and 49%, respectively) unchanged. Notice, though, that practitioners rated alliance/engagement predominantly "high" (82%), leaving very few "low" or "moderate" cases for comparison.

Attribute Change	Low Alliance/ Engagement (# of Clients)	Moderate Alliance/ Engagement (# of Clients)	High Alliance/ Engagement (# of Clients)
Improved	2 (50%)	6 (30%)	43 (38%)
Unchanged	1 (25%)	9 (45%)	55 (49%)
Worsened	1 (25%)	5 (25%)	14 (12%)

Table 33: Alliance/Engagement and Changes in Personal Attributes – Practitioner

Client Assessment. Of 278 clients for whom data are available, the patterns are only marginally clearer. Table 34 shows that, similar to practitioners, a large majority of clients (79%) viewed their alliance/engagement as "high." Of the "high" alliance/engagement group, the vast majority (87%) improved.

Table 34: Alliance/Engagement and Changes in Personal Attributes - Client

Attribute Change	Low Alliance/ Engagement (# of Clients)	Moderate Alliance/ Engagement (# of Clients)	High Alliance/ Engagement (# of Clients)
Improved	4 (100%)	15 (71%)	219 (87%)
Unchanged	0 (0%)	6 (29%)	30 (12%)
Worsened	0 (0%)	0 (0%)	4 (2%)

INFERENTIAL ANALYSES

Practitioner Assessment. A Pearson correlation showed the relationship between change in personal attributes and alliance/engagement scores to not be significant (r = -0.92, p=.14 (two-tailed)).

Client Assessment. A Pearson correlation showed a small and significant relationship between change in personal attributes and alliance/engagement scores (r = -.17, p<.01 (two-tailed)). The negative correlation shows that *need* for improvement in personal attributes tends to decline as alliance/engagement gets stronger.

ANSWER SUMMARY

This question is not well answered, predominantly because the large majority of both practitioners and clients saw the alliance/engagement levels to be quite high, leaving few to compare in lower

alliance/engagement relationships. However, even with very unbalanced results, a negligible but significant positive relationship between working alliance/engagement and personal attributes was found when viewed through clients' lenses.

LEARNING OUTCOMES AND PROCESSES

QUESTION 3: HOW MUCH DO CLIENTS LEARN IN 6 WEEKS (REGARDLESS OF EMPLOYABILITY DIMENSION)?

Two composite indices of need across all 5 employability dimensions were used to assess the degree of learning over the intervention period: one that combined practitioners' assessments of need and the other that combined clients' assessments of need. The assumption here is that all of the items pertaining to the 5 employability dimensions (see the Final Client Survey in Appendix A for the actual items) involve learning: i.e., the development of competencies. Some pertain to knowledge acquisition (e.g., "Identify skills and attitudes that improve my chances of keeping employment"), others address skills (e.g., "Write a resume and cover letter") and others capture attitudes (e.g., "Keep motivated to complete training/education program"). Personal attributes were not included in this analysis (see Question #8 above).

DESCRIPTIVE FINDINGS

Practitioner Assessment. One way of looking at how practitioners assessed learning is to compare the percentage of clients in the four need groups before and after the intervention (see Table XX). The "very low need" group grows by almost a third, moving from 32% at intake to 42% at the end of the intervention. The "low need" group changes very little (34% to 31%), as does the "high need" group (13% to 11%) but the "moderate" need group shrinks by about a fifth (21% to 16%).

Need for Help with Personal Attributes	Before (%)	After (%)
Very low need (1 to 1.49)	32	42
Low need (1.5 to 2.49)	34	31
Moderate need (2.5 to 3.49)	21	16
High need (3.5 to 5)	13	11

Table 35: Composite Employability Dimension Needs Before and After – Practitioner Assessment

Another way to view learning is to compare three categories: Improved, Unchanged and Worsened (see Question #7). As Table 35 shows, practitioners saw overall improvement in over half (60%) of clients, no change in about a quarter (23%), and negative change in almost a fifth (18%) of clients.

Table 36: Changes in Composite Employability Dimension Needs – Practitioner

Change in Employability Dimension Need	Number of Clients
Improved	112 (60%)
Unchanged	43 (23%)
Worsened	33 (18%)

Client Perspective. Using the same comparison framework as with practitioners, a different picture emerges (Table 37). Dramatic changes are seen in the "very low need" group, which moves from 3% to 28%, and the "high need" group, which is reduced from 37% to 4%. The "moderate need" group is reduced by about half (38% to 16%), and the "low need" group almost doubles (23% to 53%).

Table 37: Composite Employability Dimension Needs Before and After - Client

Need for Help with Personal Attributes	Before (%)	After (%)
Very low need (1 to 1.49)	3	28
Low need (1.5 to 2.49)	23	53
Moderate need (2.5 to 3.49)	38	16
High need (3.5 to 5)	37	4

When looking simply at change (Improved, Unchanged, Worsened), an even more dramatic illustration of change can be seen: Almost all (95%) clients experienced improvements (Table 38).

Table 38: Changes in Composite Employability Dimension Needs – Practitioner (N =188)

Change in Employability Dimension Need	Number of Clients
Improved	270 (95%)
Unchanged	5 (2%)
Worsened	8 (3%)

INFERENTIAL ANALYSES

Practitioner Assessment. A t-test used to assess a change significantly different than 0 found practitioners' assessment of change to be significant (t(187) = -6.01, p<.001). Data were available for 188 practitioners. The mean change was -0.168, however, showing that the change may not be clinically significant.

Client Assessment. A t-test used to assess a change significantly different than 0 found clients' assessment of change to be significant (t(282) = -23.61, p<.001). Data were available for 283 clients. The mean change was -1.12, showing that the change is clinically significant as well. This level of change is the equivalent of improving one full rating (on a 5-point scale) on *every* item or improving more than one full rating on many items.

ANSWER SUMMARY

The answer to the question about learning is very similar to the one regarding changes in personal attributes: It depends who's answering. Practitioners again took a very conservative view of change. They certainly saw clients learn, but viewed it to be very incremental. Clients, on the other hand, indicated they learned a great deal, on average moving the equivalent of 1 point on a 5-point scale.

A greater understanding of the interventions would have helped answer this question more precisely. Expecting clients to learn makes perfect sense if the interventions they experienced were teaching/learning interventions. We did not endeavour, however, to determine the details of the interventions in this study. In a subsequent study, knowing there are effective indicators available, the next critical step would be to examine which interventions produce desirable outcomes, and how well these interventions need to be executed in order to make a difference.

QUESTION 4: HOW DOES THE WORKING ALLIANCE AFFECT LEARNING OUTCOMES?

DESCRIPTIVE FINDINGS

Practitioner Assessment. The three categories for change (Improved, Unchanged and Worsened) are compared to the three categories of work alliance/engagement (Low, Moderate, High) in Table 39 to see the relationship between alliance/engagement and learning through the practitioners' lenses. The reader is reminded that practitioners characterized very few alliances to be Low or Moderate, making comparisons difficult. What is noteworthy about Table XX is the High Alliance column, showing that practitioners saw 62% of clients with a high alliance/engagement score improve from a learning perspective.

Table 39: Alliance/Engagement and Learning – Practitioner

Learning Change	Low Alliance/	Moderate Alliance/	High Alliance/
	Engagement	Engagement	Engagement
	(# of Clients)	(# of Clients)	(# of Clients)

Improved	2 (50%)	12 (48%)	81 (62%)
Unchanged	1 (25%)	7 (28%)	28 (21%)
Worsened	1 (25%)	6 (24%)	22 (18%)

Client Assessment. Using the same comparisons as with the practitioners, it becomes apparent that the vast majority of clients (91%) considered themselves allied and engaged with the intervention process, and that the vast majority (95%) of these engaged individuals experienced positive learning changes (Table 40).

Table 40: Alliance/Engagement and Learning – Client

Learning Change	Low Alliance/ Engagement (# of Clients)	Moderate Alliance/ Engagement (# of Clients)	High Alliance/ Engagement (# of Clients)
Improved	4 (100%)	20 (95%)	243 (95%)
Unchanged	0 (0%)	1 (5%)	4 (2%)
Worsened	0 (0%)	0 (0%)	8 (3%)

INFERENTIAL ANALYSES

Practitioner Assessment. A Pearson correlation showed no significant relationship between working alliance/engagement and need for learning (changes in employability dimension scores) (r = -.02, p=.79 (two-tailed)).

Client Assessment. A Pearson correlation showed a moderate and significant negative relationship between working alliance/engagement and need for learning (changes in employability dimension scores) (r = -.26, p<.001 (two-tailed)). In other words, there is a positive relationship between working alliance/engagement and learning.

ANSWER SUMMARY

As with other questions that address working alliance/engagement, convincing answers are difficult given how few practitioners and clients perceived alliance/engagement to be low or moderate. There is, however, a clear indication from the client perspective that greater alliance/engagement and learning go hand-in-hand.

LABOUR MARKET OUTCOMES AND PROCESSES

QUESTION 5: WHAT LABOUR MARKET OUTCOMES ARE ACHIEVED WITH 6 WEEKS OF INTERVENTION?

DESCRIPTIVE FINDINGS

Overall, 31% of the 313 clients for whom outcome data exist were employed, 17% were in a training/education program and 7% were waitlisted for a program by the end of the intervention period. Where 65% of clients were not employed, in a program or on a waitlist before the intervention, 45% were after the intervention period, a decrease of almost one-third.

	Before (%)		After (%)			
	NB	SK	Total	NB	SK	Total
Employed	12	11	12%	27	34	31%
In program	28	10	20%	28	10	17%
Waitlisted	14	3	7%	14	3	7%
Not employed or in program	46	75	65%	31	53	45%

Table 23: Labour Market Outcomes Before and After (N = 313)

Of those who gained employment, 55% worked full-time, 36% part-time and 10% on contract. Almost all (97%) worked within 50 km of their residence. Almost three-quarters (73%) reportedly found work quite consistent or highly consistent with their skill/qualification levels (See Table 24). More than half (57%) of the work was rated as quite or highly consistent with the client's vision of preferred employment (See Table XX). Although 70% of salaries were rated as quite or highly consistent with skill/qualification levels, only 51% of salaries were rated as quite or highly adequate for cost of living needs.

Table 24: Employment in Relation to Skill/Qualifications, Vision, Salary and Cost of Living

	Consistency of Work with Skill/ Qualification Levels (%)	Consistency with Vision of Preferred Employment (%)	Consistency of Salary with Skill/ Qualification Levels (%)	Adequacy of Salary to Cost of Living Needs (%)
Not at all	5	10	8	14
Not much	8	11	10	6
A little	14	22	13	29
Quite a lot	43	29	43	27
A lot	30	29	27	24

Of the 43 clients with educational outcomes, 72% were enrolled and 28% waitlisted at the end of the study. Of those enrolled in training/education, 72% were full-time and 28% part-time. More than half (58%) were in programs lasting 6 months or longer; 42% were in shorter programs. For almost all (95%), the program was within 50 km of their residence.

The degree of consistency between clients' employment visions and training/education was rated "quite a lot" or "a lot" for almost all (95%) of clients. The vast majority of training (88%) was rated as well linked to local and regional employment opportunities.

QUESTION 6: WHAT LABOUR MARKET OUTCOMES ARE ENHANCED BY A STRONG WORKING ALLIANCE AS ASSESSED BY THE PRACTITIONER? BY THE CLIENT?

DESCRIPTIVE FINDINGS

Practitioner Assessment. A look at the numbers (Table 25) shows that the percentage of clients "neither employed nor in training" declines as working alliance/engagement goes up (67%, 59% and 45%, respectively). However, the reader is cautioned to note the very low numbers in the "Low" and "Moderate" columns compared to the "High" column, making comparisons of any kind quite difficult.

	Working Alliance/Engagement			
	Low Moderate High			
Labour Market Outcome				
Employed at Intake – Still Employed	1 (33%)	3 (10%)	27 (12%)	
Unemployed at Intake – Employed	0 (0%)	5 (17%)	42 (19%)	
In Training/ Education Program	0 (0%)	3 (10%)	35 (16%)	
Waitlisted for Program	0 (0%)	1 (3%)	17 (8%)	
Neither Employed Nor in Training	2 (67%)	17 (59%)	100 (45%)	

Table 25. Working Alliance/Engagement and Labour Market Outcomes – Practitioner (N = 253)

Client Assessment. Client data reveal almost exactly the same pattern as the practitioner data. A very small proportion of clients (10%) viewed the working alliance/engagement as "Low" or "Moderate," making comparisons difficult (Table 26).

Table 26. Working Alliance/Engagement and Labour Market Outcomes – Client (N = 242)

	Working Alliance/Engagement			
	Low Moderate High			
Labour Market Outcome				

Employed at Intake – Still Employed	0 (0%)	1 (5%)	25 (11%)
Unemployed at Intake – Employed	1 (33%)	4 (20%)	40 (18%)
In Training/ Education Program	0 (0%)	0 (0%)	46 (21%)
Waitlisted for Program	1 (33%)	2 (10%)	15 (7%)
Neither Employed Nor in Training	1 (33%)	13 (65%)	93 (43%)

Practitioner Assessment. No significant differences were found by a Pearson chi-square test ($\chi^2(8) = 4.84$, p=.77). As mentioned above, the small number of cases in the Low and Moderate groups results in a comparison with limited value. As reported below, the analysis of the correlations with finding employment at the end of the study found some significant relationships with the working alliance/engagement index.

Client Assessment. No significant differences were found by a Pearson chi-square test ($\chi^2(8) = 11.41$, p=.18). Again, the small number of cases in the Low and Moderate groups results in a comparison with limited value.

ANSWER SUMMARY

The very narrow range of working alliance/engagement scores of both practitioners and clients prohibit answering this question. A study would be required that involved less competent practitioners or more resistant clients to create the needed range for this comparison. Although it is not helpful to this research, practitioners should be congratulated on their consistent ability to create a strong working alliance with a diverse array of clients across a variety of settings. The vast majority of clients in this study were engaged in the intervention process, and this speaks very positively about the service being provided.

QUESTION 7: TO WHAT EXTENT DOES LENGTH OF SERVICE IMPACT LABOUR MARKET OUTCOMES?

DESCRIPTIVE FINDINGS

Comparing the duration of the intervention received by clients to the outcomes experienced by clients reveals some unexpected findings (See Table 27). It would be expected that those who were "Unemployed at Intake – Employed" would grow in proportion as the intervention hours increase – the more hours, the better the employment results. However, a cursory look at the results shows virtually no shift in employment results with more intervention (e.g., 23% with 1 hour or less; 27% with more than 8 hours). One might expect that this is due to the proportion of clients in training rather than employment but, again, the numbers remain remarkably consistent across intervention hours (e.g., 18% with 1 hour or less; 15% with more than 8 hours).

The only visual outlier in Table XX is the high proportion of clients who receive between 4 and 8 hours of intervention and remain unemployed and not in training/education (58%).

	Intervention Hours					
Labour Market Outcome	1 Hour or Less	1.01 to 2 Hours	2.01 to 4 Hours	4.01 to 8 Hours	More than 8 Hours	
Employed at Intake – Still Employed	9 (15%)	5 (8%)	12 (13%)	7 (10%)	3 (9%)	
Unemployed at Intake – Employed	14 (23%)	10 (17%)	17 (19%)	11 (16%)	9 (27%)	
In Training/ Education Program	11 (18%)	12 (20%)	17 (19%)	7 (10%)	5 (15%)	
Waitlisted for Program	5 (8%)	5 (8%)	9 (10%)	3 (4%)	1 (3%)	
Neither Employed Nor in Training	22 (36%)	28 (47%)	36 (40%)	39 (58%)	15 (46%)	

Table 27. Intervention Hours and Labour Market Outcomes (N = 312)

INFERENTIAL ANALYSIS

The statistical analysis confirms the visual analysis described above: No statistically significant differences were revealed between intervention hours and labour market outcomes ($\chi^2(16) = 12.67$, p=.70).

ANSWER SUMMARY

This analysis has produced what at first appears as a surprising answer. There appears to be no relationship between length of service and labour market outcomes in this study. However, the lack of a relationship may be due to a very simple cause: self-regulation among practitioners. It may well be that practitioners monitor their time with clients, putting in a sufficient amount of time to help clients reach a certain level of readiness for further progression. With more job-ready clients, getting to this level may take less than an hour whereas with other less job-ready clients, more than 8 hours may be needed. It would be interesting to have practitioners spend set amounts of hours with clients and then compare different sets of hours with labour market outcomes. It would be even more informative to track levels of job readiness along with set amounts of service hours and then compare labour market outcomes. Ideally, further research could look at hours of service with a larger sample over a greater time period, and compare this to the opportunity structure, client employment potential, level of need and outcomes. Further qualitative analysis may reveal distinct differences in the clients who receive more intervention hours than others.

RELATIONSHIP AMONG OUTCOMES

QUESTION 8: HOW ARE IMPROVEMENTS IN LEARNING OUTCOMES RELATED TO IMPROVEMENTS IN PERSONAL ATTRIBUTE OUTCOMES?

DESCRIPTIVE FINDINGS

Practitioner Assessment. To answer this question from the practitioner's perspective, comparisons are made in Table 41 showing three categories of learning (i.e., changes in overall Employability Dimension scores) (Improved, Unchanged, Worsened) and three categories of change in personal attributes (Improved, Unchanged, Worsened). There were 144 practitioners for whom data were available.

The most heavily loaded cell in Table 41 is Improved Learning x Improved Attributes. Almost all clients (90%) whose learning improved also improved their personal attributes, in practitioners' eyes. At the diagonal end of the table, the majority (65%) of clients whose attributes worsened also experienced decreases in learning.

	Improved Attributes	Unchanged Attributes	Worsened Attributes
Improved Learning	54 (90%)	29 (45%)	4 (20%)
Unchanged Learning	1 (2%)	26 (41%)	3 (15%)
Worsened Learning	5 (8%)	9 (14%)	13 (65%)

Table 41: Learning and Attribute Changes -- Practitioner

Client Assessment. Using the same system as above for practitioners, Table 42 illustrates the client assessment of learning and attribute changes. Effectively all clients (99%) experiencing improved attributes also experienced improved learning.

Table 42: Learning and Attribute Changes -- Client

	Improved Attributes	Unchanged Attributes	Worsened Attributes
Improved Learning	236 (99%)	29 (81%)	1 (25%)
Unchanged Learning	0 (0%)	5 (14%)	0 (0%)
Worsened Learning	3 (1%)	2 (6%)	3 (75%)

INFERENTIAL ANALYSES

Practitioner Perspective. A Pearson correlation tested the relationship between changes in learning (Employability Dimension composite score change) and changes in personal attributes. A

moderate, positive and significant correlation was found (r = .39, p<.001 (two-tailed)). As learning improves, so do personal attributes.

This is a particularly interesting finding because of the conservative nature of practitioners' ratings on both learning and attribute changes. In both cases, the perceived changes were quite small. However, they correlate to a reasonable degree.

Client Perspective. A Pearson correlation also tested the relationship between changes in learning (Employability Dimension composite score change) and changes in personal attributes from the client's perspective. A strong, positive and significant correlation was found (r = .67, p<.001 (two-tailed)). As with the practitioners, when learning improves, so do personal attributes from a client perspective.

ANSWER SUMMARY

A clear answer is provided with these data: Whether viewed from a practitioner's eyes or a client's eyes, learning improvements are positively related to personal attribute improvements. We cannot, of course, answer the question "Which factor causes the other factor?" with this analysis. The likely answer is that a third factor, such as the working alliance or the intervention itself, causes both changes.

QUESTION 9: HOW ARE IMPROVEMENTS IN LEARNING OUTCOMES RELATED TO IMPROVEMENTS IN LABOUR MARKET OUTCOMES?

DESCRIPTIVE FINDINGS

Practitioner Assessment. The three categories of change in overall Employability Dimension composite scores, Improved, Unchanged and Worsened, (as assessed by practitioners) are compared to employment and training outcomes in Table 43. Worthy of note are that clients who remain neither employed nor in training form almost half (46%) of the group of clients whose learning improved, and under half (40%) of the group of clients whose learning did not change.

Table 43. Learning Outcomes and Labour Market Outcomes – Practitioner

	Clients with Improved Learning	Clients with Unchanged Learning	Clients with Worsened Learning
Employed at Intake – Still Employed	12 (11%)	5 (14%)	4 (14%)
Unemployed at Intake – Employed Now	22 (20%)	9 (24%)	1 (4%)
Training/Education Program	17 (15%)	7 (19%)	3 (11%)
Waitlisted for	9 (8%)	1 (3%)	2 (7%)

Program			
Neither Employed or in Training	52 (46%)	15 (40%)	18 (64%)

Client Assessment. Viewing the same comparison but from a client perspective (Table 44 below), percentage results found in the "Clients with Improved Learning" column are almost identical to those found with practitioners. The numbers of clients in the other columns (Unchanged and Worsened) are too small to allow for patterns to form.

Table 44. Learning Outcomes and Labour Market Outcomes - Client

	Clients with Improved Learning	Clients with Unchanged Learning	Clients with Worsened Learning
Employed at Intake – Still Employed	25 (11%)	0 (0%)	2 (29%)
Unemployed at Intake – Employed Now	44 (19%)	0 (0%)	0 (0%)
Training/Education Program	46 (20%)	1 (20%)	1 (14%)
Waitlisted for Program	17 (7%)	0 (0%)	1 (14%)
Neither Employed or in Training	100 (43%)	4 (80%)	3 (44%)

INFERENTIAL ANALYSES

Practitioner Assessment. A Pearson chi-square test found no significant differences ($\chi^2(8) = 8.47$, p=.39) that would suggest a relationship between learning outcomes and labour market outcomes.

Client Assessment. As with the practitioner assessment, a Pearson chi-square test found no significant differences ($\chi^2(8) = .51$, p=.31) that would suggest a relationship between learning outcomes and employment outcomes.

ANSWER SUMMARY

There is no evidence in this analysis that makes a link between clients acquiring skills, knowledge and attitudes vis-à-vis the employability dimensions and labour market outcomes. However, the earlier correlations between the employability dimensions and employment outcomes showed linkages. More refined testing will be needed to clarify these relationships.

QUESTION 10: HOW ARE IMPROVEMENTS IN PERSONAL ATTRIBUTE OUTCOMES RELATED TO IMPROVEMENTS IN LABOUR MARKET OUTCOMES?

DESCRIPTIVE FINDINGS

Practitioner Assessment. Table 45 compares improvements in personal attribute scores as assessed by practitioners with labour market outcomes. The table is strikingly similar to Table XX, which shows learning improvements in relationship with labour market outcomes. Approximately half (48%) of clients with improved attributes were neither employed nor in training at the end of the intervention period; 48% of those whose attributes had not changed were also not employed and not in training.

	Clients with Improved Attributes	Clients with Unchanged Attributes	Clients with Worsened Attributes
Employed at Intake – Still Employed	12 (14%)	5 (11%)	4 (0%)
Unemployed at Intake – Employed Now	22 (16%)	9 (20%)	1 (6%)
Training/Education Program	17 (13%)	7 (14%)	3 (12%)
Waitlisted for Program	9 (8%)	1 (8%)	2 (6%)
Neither Employed or in Training	52 (48%)	15 (48%)	18 (75%)

Table 45. Personal Attribute Improvements and Labour Market Outcomes – Practitioner

Client Assessment. A cursory view of clients' perspectives on personal attribute change compared to labour market outcomes provides a similar impression as the practitioners' perspectives (Table 46).

Table 46. Personal Attribute Improvements and Labour Market Outcomes - Client

	Clients with Improved Attributes	Clients with Unchanged Attributes	Clients with Worsened Attributes
Employed at Intake – Still Employed	20 (10%)	4 (12%)	2 (67%)
Unemployed at Intake – Employed Now	38 (19%)	6 (18%)	0 (0%)
Training/Education Program	43 (21%)	4 (12%)	0 (0%)

Waitlisted for Program	15 (7%)	3 (9%)	0 (0%)
Neither Employed or in Training	88 (43%)	17 (50%)	1 (33%)

Practitioner Assessment. No significant differences that would indicate a relationship between changes in personal attributes and labour market outcomes were found by a chi-square test ($\chi^2(8)$ = 6.00, p=.65). There were 143 cases for which data were available.

Client Assessment. No significant differences that would indicate a relationship between changes in personal attributes and labour market outcomes were found by a chi-square test ($\chi^2(8) = 12.06$, p=.15). There were 241 cases for which data were available.

LABOUR MARKET OUTCOMES AND INPUTS

QUESTION 11: WHAT LABOUR MARKET OUTCOMES ARE ACHIEVED IN 6 WEEKS OF SERVICE WITH CLIENTS OF DIVERGENT EDUCATION?

DESCRIPTIVE FINDINGS

Client education levels (No High School; High School Diploma/GED; Some Post-Secondary/College Diploma/Trade Certificate; University Degree) are compared against labour market outcomes in Table 28. Note that the percentage of clients who were unemployed at intake but became employed by the end of the intervention period is roughly the same within the High School, Some Post-Secondary and University Degree groups (22%, 19% and 19%, respectively). However, it is a smaller percentage of the No High School group who become employed (12%), and a much larger percentage of the No High School group in Training/Education Program (34%) than in the other three educational groups (12%, 10% and 0%, respectively).

	Client Education									
Labour Market Outcome			Some Post- Secondary/ College Diploma/ Trade Certificate	University Degree						
Employed at Intake – Still Employed	8 (9%)	16 (13%)	10 (14%)	2 (35%)						
Unemployed at Intake –	11 (12%)	27 (22%)	14 (19%)	5 (19%)						

Table 28. Client Education and Labour Market Outcomes (N = 306)

Employed				
In Training/ Education Program	30 (34%)	15 (12%)	7 (10%)	0 (0%)
Waitlisted for Program	3 (3%)	18 (14%)	1 (1%)	0 (0%)
Neither Employed Nor in Training	37 (42%)	48 (39%)	41 (56%)	13 (65%)

The visible differences in Table 28 were supported statistically, with a Pearson chi-square showing a significant variation among cells ($\chi^2(12) = 47.13$, p<.001). This finding is likely explained by the smaller percentage of the No High School group obtaining employment than with the other three groups and the higher percentage of the No High School group entering training/education than the other groups, as described in the "Descriptive Findings" above.

ANSWER SUMMARY

This analysis reveals that, in a 6-week period, a greater proportion of clients who have not completed high school will enter training/education programs than clients who have completed high school and other levels of education. Also, in a 6-week period, a smaller proportion of clients who have not completed high school will gain employment than client groups who have completed high school or other forms of education.

There were too few clients in the sample who had completed university for any meaningful comparisons to be made with university graduates and others. However, even if there had been sufficient numbers, and their employment successes could have convincingly been displayed, this analysis alone would not reveal the quality of employment. Perhaps university graduates would have the highest unemployment proportions of any group, not because they were not employable but because they were waiting for work that would suit their qualifications. High school graduates may do very well from an employment perspective, but only because entry-level jobs are plentiful in a region.

QUESTION 12: WHAT LABOUR MARKET OUTCOMES ARE ACHIEVED BY CLIENTS WHO IDENTIFY PERSONAL ATTRIBUTE NEEDS?

DESCRIPTIVE FINDINGS

The categories of need (very low, low, moderate and high) described above are shown in relationship to the labour market outcome categories in Table 29. Perhaps the most noticeable feature of this table is how few of the cells jump out as noteworthy.

Table 29. Personal Attribute Needs and Labour Market Outcomes (N = 266)

	Very Low Need	Low Need	Moderate Need	High Need
Employed at Intake – Still Employed	5 (9%)	11 (13%)	8 (10%)	6 (12%)
Unemployed at Intake – Employed Now	16 (29%)	12 (15%)	14 (17%)	5 (10%)
Training/Education Program	7 (13%)	11 (13%)	17 (22%)	6 (12%)
Waitlisted for Program	5 (9%)	6 (7%)	7 (9%)	3 (6%)
Neither Employed nor in Training	22 (40%)	42 (51%)	35 (43%)	28 (58%)

A Pearson chi-square test revealed no significant differences ($\chi^2(9) = 6.54$, p=.68), indicating that there is no unexpected pattern in the results shown in Table 29 above.

ANSWER SUMMARY

There is no statistically or clinically significant pattern that connects personal attribute needs at the beginning of an intervention and labour market outcomes. However, as shown previously, when the correlations between the Personal Attribute Needs Index and employment at end of the study were examined, there was a significant correlation between these two variables. One can also observe that the highest proportion of those obtaining employment was within the group with very low need (29%) and the highest percentage of clients neither in employment or in training was in the group with very high need (58%). It is also to be noted that close to 70% of clients were still receiving services at the end of the 6 week intervention period (8 weeks including intake and exit interviews) and this undoubtedly is reflected in the large percentages still in neither employment or training.

QUESTION 13: WHAT LABOUR MARKET OUTCOMES ARE ACHIEVED BY CLIENTS WHO IDENTIFY ONE OR MORE ADDITIONAL LIFE CIRCUMSTANCE NEEDS?

DESCRIPTIVE FINDINGS

Practitioner assessments of clients' additional life circumstances needs were categorized as per the system described above: Very Low Need, Low Need, Moderate Need and High Need. These categories are compared to labour market outcomes in Table 30.

It is noteworthy that very few clients (9 or 3% of the 309 for which data are available) fall into the High Need category. A further 13% are assessed with Moderate Need. This leaves 84% of clients with low or very low needs. The percentage of clients in the Very Low Need category who became

employed during the intervention (23%) is more than one-quarter higher than the percentage in the Low Need category who became employed. Conversely, the percentage of clients in the Very Low Need category who were neither employed nor in training/education at the end of the intervention was just over one-third less than the percentage of clients in the Low Need category who were neither employed nor in training/education at exit (38% and 60%, respectively).

	Very Low Need	Low Need	Moderate Need	High Need
Employed at Intake – Still Employed	24 (12%)	7 (10%)	5 (9%)	0 (19%)
Unemployed at Intake – Employed Now	39 (23%)	14 (16%)	4 (11%)	1 (10%)
Training/Education Program	29 (17%)	12 (11%)	10 (22%)	1 (24%)
Waitlisted for Program	17 (10%)	4 (3%)	2 (9%)	0 (0%)
Neither Employed nor in Training	68 (38%)	47 (60%)	18 (50%)	7 (48%)

Table 30. Additional Life Circumstances and Labour Market Outcomes (N = 309)

INFERENTIAL ANALYSES

A Pearson chi-square test revealed no significant differences that would link additional life circumstances to labour market outcomes ($\chi^2(12) = 17.93$, p=.12).

ANSWER SUMMARY

The tentative answer offered by this study to the question of the relationship between life circumstances and labour market outcomes is that no relationship exists. However, there were very few clients in this study who faced additional circumstances, and there simply may not have been enough range in clientele to see a statistically significant effect.

PERSPECTIVES IN MEASUREMENT

QUESTION 14: TO WHAT EXTENT DO COUNSELLORS AND CLIENTS ASSESS WORKING ALLIANCE SIMILARLY?

A two-tailed Pearson correlation shows a weak positive relationship between practitioners' and clients' assessments of working alliance/engagement (r = .22, p<.05). There were 128 cases available for analysis.

QUESTION 15: TO WHAT EXTENT DO COUNSELLORS AND CLIENTS ASSESS LEARNING CHANGE SIMILARLY (REGARDLESS OF EMPLOYABILITY DIMENSION)?

We have seen above that practitioners are far more conservative than clients in terms of assessing change in the Employability Dimensions items or in personal attributes. What is not known, however, is whether the practitioners' views and clients' view are directionally aligned. Even though the magnitude of change they see is different, it may be in the same or different directions. To answer this question, overall intake, exit and change in employability dimension scores of practitioners were correlated with those of clients. See Table 47 for the full set of correlations. The table first shows no relationship between any practitioner rating – intake score, exit score or change in scores – and client assessments of the employability dimensions at intake. However, a moderate correlation between practitioner assessments of clients' needs at intake and client assessments of their needs at exit was found (r = .32, p < .01 (two-tailed)), and a weak correlation of practitioner assessments of clients' needs at exit and client assessments of their needs at exit was found (r = .32, p < .01 (two-tailed)).

Also, practitioner assessment at intake correlated weakly with client change scores (r = .22, p<.01 (two-tailed)), as did practitioner assessment at exit correlate weakly with client change scores (r = .28, p<.01 (two-tailed)).

	Client						
Practitioner	Intake	Exit	Change				
Intake (N = 282)	.06	.32*	.22*				
Exit (N = 151)	08	.23*	.28*				
Change (N = 151)	.00	07	07				

Table 47. Correlations of Client and Practitioner Ratings of Employability Dimension Scores

*Significant at the 0.01 level (2-tailed).

QUESTION 16: TO WHAT EXTENT DO COUNSELLORS AND CLIENTS ASSESS PERSONAL ATTRIBUTE CHANGE SIMILARLY (REGARDLESS OF EMPLOYABILITY DIMENSION)?

To answer this question, overall intake, exit and change in employability dimension scores of practitioners were correlated with those of clients. See Table 48 for the full set of correlations. The statistically significant findings are described below.

Practitioner assessments at intake correlated positively and moderately (r = .31, p<.01 (two-tailed)) with client assessments at intake, and positively and weakly (r = .20, p<.01 (two-tailed)) with client assessments at exit. Practitioners' intake assessments correlated negligibly and negatively with client change scores (r = .16, p<.05 (two-tailed)). Technically, the higher practitioners assessed client attributes at intake, the less that change in personal attributes would

occur. However, -.16 is a very small correlation value and, even though statistically significant, may have little meaning.

Practitioner exit scores correlated positively and weakly with client exit scores (r = .24, p<.01 (two-tailed)) and also with their intake scores (r = .28, p<.01 (two-tailed)).

	Client					
Practitioner	Intake	Exit	Change			
Intake (282)	.31**	.20**	16*			
Exit (151)	.28**	.24**	.08			
Change (151)	04	04	.11			

Table 48. Correlations of Client and Practitioner Ratings of Personal Attribute Scores

*Significant at the 0.05 level (2-tailed). **Significant at the 0.01 level (2-tailed).

DISCUSSION

Government-delivered or sponsored employment services have been offered in the Western world since shortly after Winston Churchill's Labour Exchanges Bill became law in England in 1909 (Peck, 2004). Introduced to help potential workers (predominantly youth at the time) connect with increasingly urban-centred employment opportunities, these services helped clients understand their characteristics, explore opportunities aligned with these characteristics, and make effective choices about employment. At almost the same time, Frank Parsons (1909) was offering the same services in America under the auspices of a non-profit organization.

Fast forward just over 100 years, and, recognizing that trillions of dollars have been spent on these services by governments across the globe, marvel at:

- how little has changed about these services (i.e., in 2013, client meets practitioner, who helps client understand personal characteristics and how they related to the labour market, and helps client make connections to the labour market);
- what little we know about them (e.g., we do not know how many intervention hours are needed on average to help clients into employment within a set amount of time);
- how crude our metrics are for assessing effectiveness (e.g., "employed" vs.. "unemployed", "in training" vs.. "not in training"); and
- how non-uniform our tools are for measuring inputs, processes and outcomes (imagine every electrical outlet in your residence requiring a different style of plug, and that all of these were different than your neighbours' outlets!)

There are a number of reasons for these gaps in knowledge and inconsistencies in metrics (e.g., costs, complexity, political will) that need not be explored here. Important for the purposes of this study is that we have great difficulty improving services because we do not know what works, and

we do not know what works partially because we do not have a set of common, differentiated metrics by which to measure inputs, processes or outcomes.

This study starts with the possibility of uniform metrics or common indicators and then seeks to understand what using these metrics tells us about inputs, processes and outcomes. The reader is reminded that two over-arching questions formed the basis of this study:

- 1. What common indicators are applicable across different client contexts, different client groups, different agencies, and different interventions?
- 2. What statements about service effectiveness can be made by tracking common indicators of inputs, processes and outcomes? To put this another way, "What kinds of interventions in what contexts produce what kinds of outcomes?"

Sixteen specific related questions were answered to help address these broad questions, but particularly question #2.

Prior to answering these questions, the most obvious and predictable finding of this study should be noted: Determining common indicators is a very complex task. A survey given to a practitioner may be incomprehensible to a client, for example, yet comparisons between practitioner views and client perspectives depend on gathering highly similar data. Even before creating workable instruments and measures, the seemingly simple task of deciding what is worth measuring (where "worth" has different meanings to practitioners, clients, policy makers and funders) is fraught with definitional complexity. How are the terms "initiative," "self-starting," and "self-efficacy" similar and different, for example? When one term is used instead of another, what is lost? What is the theoretical basis for believing this cluster of concepts has an important bearing on employment, training/education, career path or well-being outcomes?

QUESTION #1: APPLICABLE COMMON INDICATORS

Notwithstanding the complexities, we can answer Question #1, "What common indicators are applicable across different client contexts, different client groups, different agencies, and different interventions?" with the list in Table 49 categorized according to the input-process-outcome model of the CRWG, illustrated earlier in Figure 1. Notice that the list below contains indicators that are applicable across a host of contexts but does not address the degree to which they are applicable. The answer to Question #2 begins to address the question of usefulness. Also, the italicized items were shown in this study to have statistically significant connections to employment outcomes.

Table 49. Applicable Common Indicators

	Input Indicators		Process Indicators		Outcome Indicators				
	Employability	1	Working alliance/	1	Personal attributes5				
	Dimension need/		client engagement	1	Employability Dimension competence				
	competence		Length of service		(composite & 5 dimension scores)				
	(composite & 5			Employment status					
	dimension			Unemployed					
	scores)				✤ Employed				
1	Responsibility				 Full-time 				
1	Personal				 Part-time 				
	attributes				 Fit with skills and qualifications 				
1	Education level				 Fit with vision of preferred 				
1	Support Systems				employment				
1					 Location with respect to residence 				
				 Salary 					
				 Consistency with skills/ 					
					qualifications				
					 Consistency with local/regional 				
				cost of living					
				Education status					
					In training/education program				
					 Full-time 				
					 Part-time 				
					 Fit with vision of preferred 				
					employment				
					 Aligned with local/regional 				
					opportunity				
					 Location with respect to residence 				
					 Length of program 				

⁵ All outcome indicators can also be inputs, and the client's set of "personal attributes" is perhaps the most obvious example of this.

There are elements of the CRWG model that are missing from Table 49 above because they were not included in the original scope of this study (e.g., funding, practitioner training). A "Structure of Opportunity Index," however, was part of the original intention of this study but was not developed in a satisfactory manner.

Synopses of the indicators and their merits are provided below.

EMPLOYABILITY DIMENSION NEED/COMPETENCE

Although this study does not have the final answer on how to measure clients' needs or abilities on the five Employability Dimensions, it has demonstrated that:

- the surveys of need for the five Employability Dimensions correlate well with each other (whether measured by a client or a practitioner), indicating that it would be quite reasonable to use a composite Employability Dimensions score if needed;
- the items within each of the Employability Dimensions surveys correlate highly with each other, indicating that some of these surveys could be shortened without losing predictive value;
- a composite Employability Dimensions score is a predictor of employment, regardless of whether measured by a practitioner (if measured at intake) or a client (in which case the exit score is a significant predictor);
- of the five practitioner Employability Dimensions indices at intake, the two significant predictors of employment are the Career Decision Making index and the Skill Enhancement index (in both cases, the lower the need, the greater the likelihood of employment);
- of the five *client* Employability Dimensions indices at exit, the Pre-Employability/Job Readiness, Career Decision Making and Work Search indices each are predictors of employment (in each case, the lower the need, the greater the likelihood of employment); and
- clients and practitioners view changes differently, with practitioners being much more conservative than clients in terms of recording change.

Further clarity regarding the measurement of the five Employability Dimensions separately and as a composite would be gained by:

- using the item analysis to tighten up each sub-index (i.e., remove items that load less well than the others on the dimension being measured),
- completing a true "pre-post" test with clients as well as the "post pre-post" test used in this study so that a more rounded sense of clients' perceptions could be gained, and
- lengthening the duration of the intervention so that more clients would likely become employed, thereby providing a large data set to work with.

RESPONSIBILITY

An analysis of the items in the "Life Circumstances" index revealed two factors being addressed: "support systems" and "responsible behaviour." The latter factor as measured by practitioners is a significant predictor of employment when measured at intake and when measured at exit. However, it is a weak predictor; a longer study in which more clients experienced employment success would clarify its real predictive value.

PERSONAL ATTRIBUTES

The Personal Attributes index used in this study was a significant predictor of employment when measured at intake either by practitioners or clients. It was also a significant predictor of employment when measured by practitioners at exit. As with "responsibility," the predictive values here are weak; a longer study involving more clients obtaining employment would clarify the strength of the relationships.

EDUCATION LEVEL

Education level proved to be of little value in this study, partially because the educational range was narrow (i.e., there were very few university graduates in the sample), and partially because "employment" is not a differentiated enough variable on its own. University graduates, for example, expect different types of employment than high school graduates. Education level needs to be compared to not only employment but to a composite of employment factors (e.g., employed, fit with skills, fit with vision); this should be the focus of subsequent studies.

SUPPORT SYSTEMS

As measured in this study, "support systems" held no predictive value. Rather than abandoning the construct, however, we recommend refining the measure. "Support systems" was part of the "Life Circumstances" index used in this study for which a factor analysis showed two distinct constructs: "responsible behaviour" and "support systems." A new index is worth pursuing if only because intuitively and experientially it seems completely reasonable that this construct plays a role in employment success.

WORKING ALLIANCE/CLIENT ENGAGEMENT

The composite measure of working alliance and client engagement was a significant predictor of employment when measured by practitioners at intake and exit. It was not a useful predictor of employment when measured by clients (although it was a weak predictor of learning), but this may well be due to the very limited range of scores: The vast majority of clients saw alliance/engagement levels to be quite high, making statistical comparisons difficult.

LENGTH OF SERVICE

One of the most surprising findings (or "non-findings") of the study was the apparent lack of relationship between service length and employment outcomes. This clearly requires further investigation. It may be that practitioners self-regulate the time they spend with clients, putting in only enough to help them reach the next milestone they need to reach, but other factors may be at play. The interplay of client job readiness and the local opportunity structure needs to be

examined more closely in future research. Resolving the reasons for this non-finding would require, at minimum, knowing more about the nature and quality of service (perhaps less skilled practitioners take longer to achieve the same outcomes as more skilled practitioners; perhaps clients with significant issues take much longer to reach the same outcomes as clients with less significant issues).

In this study, many clients had not yet completed service within the research period; lengthening the study would clarify the relationship between service length and employment outcomes.

EMPLOYMENT

Measuring employment is not new; measuring "fit with skills and qualifications," "fit with vision of preferred employment," "proximity to residence," "consistency of salary with skills and qualifications" and "consistency of salary with local/regional cost of living" is, however, not typical and is likely important for both research and practical purposes. On the practical side, it would probably be most useful if an employment centre could boast that 95% of clients find work locally, that a large majority will find work consistent with their skill sets, or that most will find work that fits with their vision of preferred employment.

From a research perspective, the qualifying variables to employment listed above are important because they should be predictive of employment longevity. This study was not sufficiently long to see these types of relationships form, but good "fit" should lead to more enduring employment, as would salary consistency and proximity.

ENTRY INTO TRAINING/EDUCATION

As with employment, measuring entry into training/education programs is common, but it is less common to assess the opportunity fit, fit with career path and proximity. These are important additions for precisely the same rationale as provided above for the employment measures.

QUESTION #2: CONNECTING INPUTS, PROCESSES AND OUTCOMES

This study enables few conclusive statements to be made that would connect inputs, processes and outcomes. However, we can say:

Working alliance/client engagement is a predictor of both employment outcomes and learning (as measured by reductions in need for help with employability dimensions) and is a likely predictor of improvements in personal attributes (e.g., self-esteem, self-efficacy). These findings regarding working alliance/client engagement are important. The reader will remember that the overwhelming majority of both practitioners and clients rated working alliance/client engagement as very high, making correlations between alliance and other factors difficult to find. Even with this restraint, alliance predicted change. It is therefore highly reassuring to know that practitioners, at least in this study, reliably create a strong working alliance.

- Clients who obtain employment do so almost exclusively within 50 km of their residence, and about three-quarters find work consistent with their skills/qualifications, more than half see the work consistent with their vision of preferred employment, and almost three-quarters see their salary as consistent with their skill/qualification levels. Only about half, however, see this salary as adequate for their locale's cost of living needs. This set of findings speaks to practitioners' abilities to not only help clients find work, but to find work that fits with a number of needs. Examining these patterns for a period longer than 6 weeks would be highly beneficial.
- As an input, need for Skill Enhancement as assessed by practitioners is negatively related to client employment at the end of the intervention. To put this another way, the more the client needs help with skill enhancement concerns, the less likely the client will be employed in 6 weeks.
- As an input, need for help with personal attributes as assessed by clients is a negative predictor of employment at the end of the intervention. Put positively, the stronger clients perceive their personal attributes to be, the more likely they will be employed in 6 weeks. This finding fits well with both common understanding in the career development field, but also with research in the positive psychology realm (cf. Frederickson (2001), Seligman, 2011).
- Personal attributes improve with a 6-week intervention. Although clients see this improvement as more dramatic than do practitioners, both see the clients' personal attributes (e.g., self-esteem, self-efficacy) improve in 6 weeks. These changes show client progress throughout the intervention.
- Learning occurs in a 6-week intervention. Both practitioners and clients see learning occur across the Employability Dimensions in the intervention period, with clients seeing more dramatic changes than practitioners.
- Client learning is highly related to client change in personal attributes. Although we do not know which causes which, or if there is another factor causing both, there is a positive relationship between client learning and client improvements in personal attributes. Given the findings regarding working alliance/client engagement, we suspect the practitioner intervention is the cause of both these changes. It makes sense that these improvements go hand-in-hand, particularly if employment counselling is seen as an exercise in learning (cf. Hiebert, et al., 2011).

To summarize, this study has produced indicators, and measures for these indicators, that are applicable to a wide range of settings with diverse clientele. It has also begun to find connections between "input" indicators, such as skill enhancement needs and personal attribute needs and outcomes such as employment; "process" indicators such as working alliance and their relationship to outcomes such as employment; and differentiated "outcome" indicators, and their relationship to each other (e.g., as learning rises, personal attributes improve).

Of particular importance to the researchers is that the study has shown a pathway to measuring client *progress* in a meaningful way. Much more research is needed to connect the many dots at play, but the study provides a line of sight to the ability to connect interventions with changes in skills, knowledge and personal attributes, and to connect these changes with successful outcomes.

CONCLUSION

The tools and processes developed and tested in this research respond directly to the demands from the career practitioner field for many years for robust data-gathering tools that capture more fully and accurately the results they achieve with their clients as well as to the demands of policy makers and funders to provide trustworthy evidence of benefits to individuals, communities and economies. Employment, reduced time on benefits, and successful retraining are currently measured by many data-gathering systems already in use but, with very few exceptions, other variables that are known to influence goal achievement in general and employability specifically are not. These include skill and learning acquisition; improvements in personal attributes such as self-esteem, self-management and optimism; and qualitative measures related to job retention and well-being including how well employment and/or training fits with individual goals, skills and qualifications; and the degree to which acquired work allows for a decent standard of living.

A key question in this exploratory research was to determine if there is enough similarity in career and employment services that the measurement of common indicators across service settings could contribute significantly over time to helping answer the questions of what works, what works best and for whom?

A significant finding of this study is that measurement of a set of common indicators is readily achievable in a pragmatic manner, and that these common indicators are transferable across different service settings and applicable to a diversity of clients and client needs. The field tests for this study were two very different service setting and models serving quite different client populations, and the system was successfully implemented and positively received over the research period. For a very long time, there has been a weak database for evidence of the effectiveness (or non-effectiveness) of career and employment services. If multiple sites were to use the same common indicators, over time patterns of effectiveness and efficiency would become much more clear and the evidence base could become extremely robust.

In response to the second key question of what works best and for whom, there remains a long research distance to travel. The study began to tease out indicators that demonstrate impact on positive labour market outcomes and was successful in identifying trends and tendencies and in some cases, some relatively strong indicators that call out for further testing to confirm their hardiness. This has been a very good start and we have enough data to conclude that the U-Name-It Common Indicators data-gathering tool (to be properly named soon) has demonstrated capability to gather and analyze the data such that it will can begin to specifically address the question of what works best and for whom. Much more data, further development and enhancements are needed to further develop and secure these findings.

Partnering with Goss-Gilroy Inc., and specifically Ken Organ of this firm, greatly benefited this project. Goss-Gilroy Inc. provided the ARMS advanced technology that already does data-gathering for multiple career and employment services in several provinces using a more traditional data-gathering model. We were privileged to be able to integrate our U-Name-It model into the ARMS platform, which is already user-friendly, highly sophisticated and quite intuitive in

its use and its application and to do so in both official languages. It also afforded a 1-800 help line, password protection and security for all client information.

As noted elsewhere in this report, the project was also greatly advantaged by having the support of the offices of PETL in New Brunswick and Abilities Council offices in Saskatchewan which allowed us to test out the system in divergent delivery settings and systems and with a highly diverse range of client employability needs.

We have learned that the model is robust and that we may be able to reduce its complexity and still achieve similar results. We have learned that clients and practitioners perceive change and progress quite differently and this presents some measurement challenges to be addressed in the future. It is clear that the services that practitioners are delivering and that clients are receiving are perceived by both as making positive differences and that clients attribute positive changes directly to the services provided and how they are delivered.

We did not answer the ultimate question of what actually works and for whom in this study but that was a known clear limitation from the outset. What we were able to do was to track the kinds of services and the hours of services but we were not able to track the specificity or the quality of these services. A next step would be to specify a menu of services in detail and to track their impact within the U-Name-It model of Input, Process and Outcome. The programs developed under the recent HRSDC funded research projects provide fine examples for what such a menu might contain. The booklets developed for the Impact of LMI on Career Decision Making, the coaching guides developed for the Employability Dimensions research, the methodology of Motivational Interviewing, the Career Motion Career Exploration tool and many promising practices that are already in place in the provinces/territories as presented at the recent National Symposium on "From Research to Practice" are examples of what could be constructed and what could be tested to uncover what actually works for what kinds of clients in what kinds of labour markets.

A major limitation in this study was the timeframe. The research was designed to track and measure change in client learning and personal attributes and in labour market outcomes. The timeframe allowed for only a total of six weeks of services plus one week for intake and one week for exiting the project. Actual service was only six weeks.

Most individuals who are seeking training or are unemployed and/or underemployed need to anticipate more than six weeks for goal achievement. Learning of career management, job search, decision making skills is a process and not a single event; learning and change take time. Personal attributes such as self-esteem and self-efficacy can also be expected to be gradual improvements rather than eureka moments.

A large percentage of the client sample were still receiving services and had no labour market outcomes per se in a six week period—they were in process or in progress as the data suggest. Therefore our substantive outcome data is much more limited than we had hoped. A minimum period of three months of services would have allowed for more substantive results and many more clients with actual labour market outcomes rather than progress outcomes. A second limitation was our sample size. We had aimed for a minimum sample of 300 clients from each of Saskatchewan and New Brunswick for a total of 600. We had 32 practitioner research volunteers from New Brunswick and 16 from Saskatchewan and our final sample was 172 clients in New Brunswick and 229 in Saskatchewan for a total of 401. Operational issues over which practitioners in New Brunswick had no control whatever significantly reduced the time available to them and their capacity to recruit clients into the study. Several training initiatives were occurring simultaneously and it is no criticism, simply an observation, that research in real settings is vulnerable to real setting realities. Fewer clients in our sample meant, of course, less robust comparisons and results. Operational issues appeared to present no barriers in Saskatchewan.

An unexpected methodology issue for this project was the final client survey which was a post-pre survey which had worked very effectively in previous CRWG and many other research projects. We developed the survey on-line and it was anticipated that most if not all clients would complete the on-line survey. It was designed in such a way that the list of employability needs that the client would respond to were tailored to those needs identified by the practitioner in the U-Name-It system. For example, if a client's needs were identified in the assessment and in subsequent meetings as being in the dimension of pre-employability and in career decision making, the final survey that the client would be asked to complete would be only these two employability dimension as well as the personal attribute and working alliance indicators which were common in all surveys.

In reality, close to 50% of clients did not want to use the on-line questionnaire and opted for the paper version. In the paper version, all indicators from all dimensions were listed and there was no way this could be circumvented. This was a shock to researchers and a surprise to most practitioners.

As a result we had close to 50% of clients who were given all employability dimensions to evaluate. For the analysis, we used only those dimensions that were identified as needs but nonetheless, we have no way of knowing how much client responses were influenced by seeing more indicators than their needs suggested.

Our learning from this is that, as a safety precaution for future research, we would ensure a pre as well as a post-pre test.

With respect to where to from here, the research questions are abundant and promising. Among the highest priorities are:

- Repeat the study giving a minimum of a three month service period with a six month follow-up so that tracking of change over time can more accurately inform the capacity of the data-gathering tool to gather change data;
- Develop the indices that were not able to be developed for this project, add them to the model and test them. These include most importantly:
 - The employment opportunity index that can give a needed perspective on what is realistic to expect with respect to outcomes in divergent labour markets.

- The client employability index including the labour market attachment variable that may provide a framework for establishing service parameters to be expected and planned.
- Detailed data on the processes—the actual services provided—not only the what but the goals, content, duration and expected outcomes—so that the critical Process component of the model can be substantiated.
- Build the processes on what the field of practice already has determined is working and working well.

Addressing these issues as a next step would provide a very solid evidence base for career and employment service and could result in identifying the components needed to strengthen what is now working and change or eliminate what is not working.

REFERENCES

- Arthur, N., & Collins, S. (Eds.) (2005). Culture-infused counselling: Celebrating the Canadian mosaic. Calgary, AB: Counselling Concepts.
- Baudouin, R., Bezanson, L., Borgen, W., Goyer, L., Hiebert, B., Lalande , V., Magnusson, K., Michaud, G., Renald, C., & Turcotte, M. (2007). Demonstrating value: A draft framework for evaluating the effectiveness of career development interventions. *Canadian Journal of Counselling*, 41, 146-157.
- Bezanson, L., & Plant, P. (2010). *Quality standards in career development services: A Canadian "snapshot" and an international perspective*. Ottawa. Canadian Career Development Foundation.
- Borgen, W.A. (1995). *Starting points (British Columbia ed.)*. Victoria, B.C.: Ministry of Education Skills and Training.
- Canadian Research Working Group on Evidence Based Practice in Career Development. (2010). Meeting Workplace Skills: The Career Development Contribution, Report 1: Synthesis Report. Retrieved from CRWG website: <u>http://www.crwg-gdrc.ca</u>.
- Flores, Lisa Y., & Heppner, M.J. (2002). Multicultural career counselling: Ten essentials for training. *Journal of Career Development*, 28(3), 181-202.
- Hiebert, B. (1994). A framework for quality control, accountability, and evaluation: Being clear about the legitimate outcomes of career counselling. *Canadian Journal of Counselling*, 28 (4), 334-345.
- Hiebert, B., & CRWG. (In Press). Assessing the Impact of Labour Market Information on Career Decision Making Research Report.
- Hiebert, B., Bezanson, L., O'Reilly, E., Hopkins, S., Magnusson, K. & McCaffrey, A. (2011). Assessing the impact of labour market information: Final report on results of phase two (field tests). Ottawa, ON: Canadian Career Development Foundation (downloaded from http://www.crwg-gdrc.ca/crwg/index.php/research-projects/lmi on March 20, 2013).
- Hiebert, B., & Charles, G. (2008). Accountability and Outcomes in Health and Human Services: Changing Perspectives for Changing Times. Calgary, AB: Canadian Outcomes Research Institute. Available from: <u>http://homepages.ucalgary.ca/~hiebert/research/files/CORI_Issue1_web.pdf</u>.
- Hiebert, B., Domene, J. F., & Buchanan, M. (In Press). The Power of Multiple Methods and Evidence Sources: Raising the Profile of Canadian Counselling Psychology Research. *Canadian Psychology*, 52.
- Jarvis, P.S. (2009). Connecting talent and opportunity: Canada's foremost economic and social challenge. Memramcook, NB: National Life/Work Centre (downloaded from https://campus.digication.com/careerwell/6_24_10 Phil Jarvis on May 30, 2013).

- Killeen, J., White, M., & Watts, A. G. (1993). *The economic value of careers guidance*. London, England: Policy Studies Institute.
- Lalande, V., & Magnusson, K. (2007). Measuring the impact of career development services in Canada: Current and preferred practices. *Canadian Journal of Counselling*, 41, 146-157.
- Magnusson, K., & Lalande, V. (2005). *The state of practice in Canada in measuring career service impact.* Ottawa, ON: Canadian Career Development Foundation. Retrieved from CRWG website: <u>http://www.crwg-gdrc.ca</u>.
- Maguire, M. & Killeen, J. (2003). *Outcomes from career information and guidance services*. Paris: Organization for Economic Cooperation and Development.
- McMahon, M., & Patton, W. (2000). Career counsellors, support, and lifelong learning: A case for clinical supervision. *International Journal for the Advancement of Counselling*, 22(2), 157-169.
- Patsula, P. (1992). *The assessment component of employment counselling*. Ottawa: Human Resources Development Canada.
- Peck, D. (2004). *Careers services: History, policy and practice in the United Kingdom.* London: RoutedgeFalmer.
- Redekopp, D.E. (2009). *Why should Canadians care about career development?* Presentation to the Forum of Labour Market Ministers, Winnipeg, Manitoba, October, 2009.
- Schick Tryon, G. (2005). Behavioral working alliance. In Hersen, M, Rosqvist, J., Gross, A.M., Drabman, R.S., Sugai, R. & Horner, R. *Encyclopedia of behavior modification and cognitive behavior therapy*. Retrieved from http://knowledge.sagepub.com/view/cbt/n41.xml on May 21, 2013.
- Wills, J. & Mack, D. (2009). *Comprehensive career planning and its role in the competitive global economy*. Washington, D.C.: Institute for Educational Leadership and HeiTech Services, Inc.

APPENDIX A: FINAL CLIENT SURVEY

Client Name:					
Date:		Client ID/No.:			
Location where	e you received service:				
Please provide your complete address so your gift card can be mailed to you (please print clearly):					

App # / Street no. / Street Name / City / Province / Postal Code

You agreed to participate in a Research Study about six weeks ago. We would like to know what has happened over these weeks. We would like to ask you about your experience. We would also like to know if you think you benefitted (or not) from the work you did together, specifically if you think you learned anything new and helpful, if you learned a new skill and also if any other things important to you changed.

Below are several statements. For each statement, we are asking you to think about where you are now with respect to the issues you have been working on with your career practitioner and then to think back to where you were with respect to these same issues when you agreed to enter the research study.

The survey asks you to do two things:

- 1. Think of BEFORE and in the BEFORE column, indicate how OK you were with respect to the statement at that time;
- 2. Next, think of NOW and in the AFTER column, indicate how OK you are now with respect to the statement.

To help you provide a more accurate answer, please use the two-step process described below when responding.

(A) decide on whether the characteristic in question was/is adequate (OK) or not adequate (Not OK), then

(B) assign the appropriate rating:

(0) not adequate,
(1) not really adequate, but almost OK,
(2) adequate, but just barely (still OK otherwise it would be 0 or 1),
(4) exceptional,
(3) somewhere between minimally OK and exceptional.

Graphically, the scale looks like this:

Not OK			ОК	
0	1	2	3	4

Part A.1: Getting Ready by removing some things that are in the way and need to be resolved before work or		B	Befor	е		After				
training. Knowing what you know now, rate yourself before the research project and rate yourself now:						Not OK OK 0 1 2 3 4				
I needed/need help to:		1	2	3	4	0	1	2	3	4
 Set a future direction for myself (e.g., set a goal around training, education, employment or change in life circumstances) 										
 Identify my strengths/resources that support my future direction (e.g., training, education, employment or change in life circumstances goal) 										
3. Deal with money issues that may impact my future direction (e.g., mortgage, public transit, day care)										
 Find and use community resources that would help me with personal challenges (e.g., mental health services; addictions counselling; public housing) 										
 Develop supports I need to move toward my goal (e.g., family, childcare, transportation) 										
6. Get life/employment skills										
7. Develop attitudes that support my future direction										
 Develop and follow a plan of action to move forward 										
9. Other: Please specify:										

Part A.2: Ready to work or train but need to learn		B	Befor	е		After					
more about me, and what is out there so I can find a direction.	1	Not OK		ОК		Ν	lot OK		OK		
Knowing what you know now, rate yourself before the research project and rate yourself now:		0	1 2	2 3	4		0	1 2	2 3	4	
I needed/need help to:	0	1	2	3	4	0	1	2	3	4	
1. Identify my own strengths, skills and interests											
 Connect my strengths, skills and interests to my career choices 											
 Research work opportunities using several sources (e.g., job boards, labour market information, internet, networks, employer and employee contacts) 											
 Research details specific to my work goal (e.g., time needed in education/ training; future employment prospects; types of work; places of work; local opportunities) 											
 Choose a career goal (e.g., employment/ training/ education/change in life circumstance) 											
 Find the resources I need to support achievement of my goal (e.g., support system, finances, motivation) 											
 Identify challenges that may interfere with achievement of my career goal (e.g., mobility, local opportunities, finances, health) 											
8. Follow a plan of action to get around problems and move forward											
9. Other: Please specify:											

Part A.3: Ready to look for work but need to learn		E	Befor	е		After				
how to look and how to be successful.		Not OK	. I I I I	ОК		٦	Not OK	1	ОК	
Knowing what you know now, rate yourself before the research project and rate yourself now:		0	1 1	2 3	4		0		2 3	4
I needed/need help to:	0	1	2	3	4	0	1	2	3	4
1. Confirm my employment goal										
 Confirm that my qualifications and experience are in line with my employment goal 										
 Be able to recognize my personal strengths that support successful work search 										
 Find potential employers and employment opportunities 										
 Adjust/adapt my employment goal according to employment opportunities as needed 										
6. Identify my transferable skills										
7. Write a resume and cover letter										
8. Use networks to identify leads to work										
 Use resources to support my work search, including internet 										
10. Adjust my resume and cover letter according to work possibilities										
11. Learn and practice appropriate job interview skills										
12. Develop and follow a work search action plan										
13. Demonstrate positive work attitudes and behaviours										
14. Be active and persistent in work search										
15. Other: Please specify:										

Part A.4: Ready to take training or education but			Before				After				
need to decide what and where and learn the skills needed to succeed.		Not OK	Ļ	ОК	_	Ν	lot OK		ОК		
Knowing what you know now, rate yourself before the research project and rate yourself now:		0	1 2	2 3	4		0	1 2	3	4	
I needed/need help to:	0	1	2	3	4	0	1	2	3	4	
1. Confirm my training/education goal											
 Research future employment prospects before pursuing education/training 											
 Research available training/education options related to my training/education goal 											
 Choose training/education options, taking into consideration my personal circumstances (e.g., supports, strengths and limitations) 											
 Identify issues that might interfere with achieving my training/education goal 											
 Develop strategies ahead of time to address issues I might face 											
 Learn study and personal skills needed to be successful in education/training 											
 Identify resources and supports in training and education sites and/or community agencies to help me to finish the program 											
9. Keep motivated to complete training/education program											
10. Other: Please specify:											

Part A.5: Have work but need to learn how to be a		B	Befor	е		After					
successful and/or happier worker Knowing what you know now, rate yourself before the research project and rate yourself now:		Not OK I OK 0 1 2 3 4			Not OK I OK 0 1 2 3 4				– 4		
I needed/need help to:	0	1	2	3	4	0	1	2	3	4	
 Identify skills and attitudes that improve my chances of keeping employment 											
Identify my strengths and limitations with respect to these skills and attitudes											
 Develop a plan to learn skills and attitudes I need before on the job problems arise 											
4. Find community and/or workplace resources that provide help and guidance related to keeping work											
 Know about job roles, responsibilities and expectations that support being successful on the job (e.g., who to report to; who makes decisions; approval processes, getting answers to job related questions) 											
6. Actively seek help when needed											
Make and follow a plan to remain up to date with on the job changes in duties and skills											
8. Other: Please specify:	-	-	-	-	-	-	-	-			

Part B:

There are some general skills and attitudes that have an effect on employability.

Below are six statements about these general skills and attitudes. For each statement, we are asking you to think about where you are now with respect to each of these and then to think back to where you were with respect to these same skills and attitudes when you agreed to enter the research study.

- 1. Think of BEFORE and in the BEFORE column, indicate how OK you were with respect to the statement at that time;
- 2. Next, think of NOW and in the AFTER column, indicate how OK you are now with respect to the statement.

Part B: Skills and Attitudes that can have an effect on employability		E	Befor	е		After					
		Not OK OK			Not OK I OK				_		
				0	1 2	3	4				
I needed/need help to:	0	1	2	3	4	0	1	2	3	4	
 manage my own actions so that I keep moving forward 											
2. feel good about myself as a person											
 look after my health and relationships in positive ways 											
4. feel like I have the abilities I need and I know when and how to use these abilities											
5. Understand my strengths, limitations and motivations clearly											
6. Other. Please specify:											

Part C:

Finally, we would like to know about your own experience working with your career practitioner(s) and the impact of the services you have received. There are 6 questions and these ask you about your answers NOW (that is today and not when you entered the research).

To wha	t extent would you say that you	Not at all	Not much	A little	Quite a lot	A lot
1.	had trust in and were comfortable working with your career practitioner					
2.	were helped to set your own goals					
3.	agreed with your career practitioner on the steps you need to take					
4.	participated actively in the interviews					
5.	participated actively in other programs and services					
6.	were focused on making progress toward your goals					

7. To what extent would you say that any changes in your ratings are the result of the programs, services, interviews and work you have done in the last 6 weeks and to what extent were they a function of other factors in your life?

mostly other factors	somewhat other factors	uncertain	somewhat the programs, services, interviews and work	mostly the programs, services, interviews and work

APPENDIX B: EXAMPLES OF EMPLOYMENT OPPORTUNITY PROFILES AND SERVICES AVAILABLE PROFILES

EXAMPLE 1:

PART 1: EMPLOYMENT OPPORTUNITIES LOCALLY

Name of Office: xxxxxxxxxxxxxxxx

Population of Town/City: xxxxxxxxxxxxxxxx

- A. Current Unemployment Rate Overall: 10%
- B. If you know it, current unemployment rate for youth (16-29): _____

If you know it, current unemployment rate for members of target groups:

- Visible minority:
- Aboriginal:
- Recent immigrants:
- C. Numbers of upskilling institutions (approximately) which are accessible to clients in your region:
 - Number of universities accessible =
 Number of community colleges accessible =
 Number of upgrading institutions accessible =
 Number of vocational colleges accessible =
 Number of distance or on-line programs accessible =
 Number of short-term skill/license specific training courses accessible =
 - Other: Digital Literacy

How adequate in your judgement is the supply of each of the following programs relative to the demand for these programs?	Not at all adequate	Barely adequate	Just adequate	More than adequate	Very adequate
Number of universities				×	
Number of community colleges				×	
Number of upgrading institutions			×		
Number of vocational colleges					
Number of distance or on-line programs accessible		×			
Number of short-term skill/license specific training courses	×				
Other (please specify)				×	

D. Community Resources Available Locally:

How adequate in your judgement is the supply of community resources which clients need to access in order to be employed relative to the demand for these resources?	Not at all adequate	Barely adequate	Just adequate	More than adequate	Very adequate
Public Transit	×				
Affordable child care			×		
Accessible elder care			×		
Other (please specify)					

E. Employment Opportunities Available Locally:

What is your perception of the availability of employment in your catchment area for	Not at all adequate	Barely adequate	Just adequate	More than adequate	Very adequate
Clients without secondary school diplomas	×				
Clients with skilled trades diplomas/certificates/ certifications		×			
Clients with secondary school diplomas		×			
Clients with college diplomas/university degrees			×		
What is your perception of employment opportunities in your catchment area in terms of:	Not at all adequate	Barely adequate	Just adequate	More than adequate	Very adequate
Range of employment opportunities across several sectors		×			
Quality of employment opportunities (full-time vs. part-time; some benefits vs. no benefits)		×			
Other comments:					

105

PART 2: SERVICES INVENTORY: COMMON INDICATORS RESEARCH PROJECT

Please check off (x) the services regularly provided to clients by your office. Please add any which are not listed. Please also provide brief details where requested (i.e., number of workshops; duration of workshops; learning objectives or workshop content outline covered in workshops).

		CHECKLIST							
	Self-serve Resource Centre with career, education, training and labour market information								
х	Staffed Resource Centre with career, education, training and labour market information								
	Self-serve Resource Centre with acce	ess for clients to computers, fax r	nachines, telephones						
х	Staffed Resource Centre with access	for clients to computers, fax ma	chines, telephones						
Х	Group Information Sessions giving clients knowledge of available	Average duration of information sessions	30-40 minutes						
	services	Average number of clients in attendance	15-20						
х	Individual employability needs	Average duration of interview	30-60 minutes						
	assessment interviews	Average number of interviews per client	1-2						
	Group employability needs	Average duration of interview							
	assessment interviews	Average number of clients in attendance							
	Referrals to PLAR (prior learning assessment and recognition) services	Average duration of process							
	Referrals to Settlement Services	Average duration of process							
	Referrals for Language Assessment	Average duration of process							
Х	Administration and interpretation of career assessment tools	Names of specific assessment tools used	CAAT, Screening for Success, Choices, Career Cruising						
Х	Financial/Program Eligibility Assessments	Average duration of process	60-120 minutes						
Х	Individual employment counselling	Average duration of interview	30-60 minutes						
		Average number of interviews per client	4-6						

		CHECKLIST	
х	Financial Management/Debt	Average duration of interview	0-30 minutes
	Management Advice	Average number of interviews per client	1-2
	Group employment counselling	Average duration of interview	
		Average number of interviews per client	
	Pre-Employability and Life Skills	Number of workshops in series	
	Workshops (Examples could include: helping to develop personal supports needed	Duration of workshops in series	
	for work (i.e. childcare); referrals to community resources to address challenges/vulnerabilities; life skills workshops etc.)	Themes of Pre-Employability and Life Skills Workshops or attach learning objectives or workshop content outline	
	Career Decision Making Workshops	Number of workshops in series	
	(Examples could include: identifying strengths and transferable skills; researching work opportunities;	Duration of workshops in series	
	identifying a career goal; identifying challenges which may interfere with career goal and developing strategies etc.)	Themes of Career Decision Making Workshops or attach learning objectives or workshop content outline	
	Work Search Workshops	Number of workshops in series	
	(Examples could include: confirming that qualifications match employment goal; identifying	Duration of workshops in series	
	potential employers and opportunities; using networks to identify employment leads; completing a resume and cover letter etc.)	Themes of Work Search Workshops or attach learning objectives or workshop content outline	
	Skill Enhancement	Number of workshops in series	
	(Examples might include training and education course selection; researching and evaluating training	Duration of workshops in series	
	options; researching employment prospects in specific fields; developing study skills etc.)	Themes of Skill Enhancement Workshops or attach learning objectives or workshop content outline	

	CHECKLIST				
	Employment Maintenance	Num	ber of workshops in series		
	(Examples might include identifying important attitudes which improve chances of keeping employment;	Dura serie	tion of workshops in s		
	identifying sources of support which provide advice about work retention; learning how to ask for assistance when needed; coaching on the job etc.)	Main attac	nes of Employment ntenance Workshops or ch learning objectives or schop content outline		
	Job Finding Clubs				
х	Placement services - Workability				
	Employer liaison				
Х	Referrals to third party providers for specific employability needs		Please specify: Job Search, E	mployment Maintenance	
	Referrals to specialized community resources		Provide names of most common referral resources:		
	Workplace assessment/adaptation/r	nodifi	cation		
	Workplace mentoring				
х	Income support/financial eligibility set	ervice	es - LMA or Reachback clients	5	
Х	Referrals for personal counselling		Average duration of intervie	?w	
	Referrals for addiction counselling		Average duration of intervie	w	
х	Career fairs, job fairs and/or career symposia				
Х	Other: (Please specify): Liaise with Al info sessions, counselling, services or	•	-	ajor Business Closures with	

EXAMPLE 2:

PART 1: EMPLOYMENT OPPORTUNITIES LOCALLY

Name of Office: xxxxxxxxxxxxxxx

Population of Town/City: xxxxxxxxxxxxxxxx

F. Current Unemployment Rate Overall: 6%

If you know it, current unemployment rate for youth (16-29): 12%

I fyou know it, current unemployment rate for members of target groups:

- Visible minority: <u>12%</u>
- Aboriginal: 25%
- Recent immigrants: 15%

G. Numbers of upskilling institutions (approximately) which are accessible to clients in your region:

- Number of universities accessible =
- Number of community colleges accessible =
- Number of upgrading institutions accessible =
- Number of vocational colleges accessible =
- Number of distance or on-line programs accessible =
- Number of short-term skill/license specific training courses accessible =
- Other: Digital Literacy

How adequate in your judgement is the supply of each of the following programs relative to the demand for these programs?	Not at all adequate	Barely adequate	Just adequate	More than adequate	Very adequate
Number of universities				×	
Number of community colleges			×		
Number of upgrading institutions			×		
Number of vocational colleges			×		

How adequate in your judgement is the supply of each of the following programs relative to the demand for these programs?	Not at all adequate	Barely adequate	Just adequate	More than adequate	Very adequate
Number of distance or on-line programs accessible	×				
Number of short-term skill/license specific training courses		×			
Other (please specify)	×				

H. Community Resources Available Locally:

How adequate in your judgement is the supply of community resources which clients need to access in order to be employed relative to the demand for these resources?	Not at all adequate	Barely adequate	Just adequate	More than adequate	Very adequate
Public Transit		×			
Affordable child care	×				
Accessible elder care		×			
Other (please specify)	×				

I. Employment Opportunities Available Locally:

What is your perception of the availability of employment in your catchment area for	Not at all adequate	Barely adequate	Just adequate	More than adequate	Very adequate
Clients without secondary school diplomas		×			
Clients with skilled trades diplomas/certificates/ certifications					×
Clients with secondary school diplomas			×		
Clients with college diplomas/university degrees			×		

What is your perception of employment opportunities in your catchment area in terms of:	Not at all adequate	Barely adequate	Just adequate	More than adequate	Very adequate
Range of employment opportunities across several sectors			×		
Quality of employment opportunities (full-time vs. part-time; some benefits vs. no benefits)	×				
Other comments:	×				

PART 2: SERVICES INVENTORY: COMMON INDICATORS RESEARCH PROJECT

Please check off (x) the services regularly provided to clients by your office. Please add any which are not listed. Please also provide brief details where requested (i.e., number of workshops; duration of workshops; learning objectives or workshop content outline covered in workshops).

CHECKLIST

Self-serve Resource Centre with career, education, training and labour market information

Staffed Resource Centre with career, education, training and labour market information

- X Self-serve Resource Centre with access for clients to computers, fax machines, telephones
 - Staffed Resource Centre with access for clients to computers, fax machines, telephones

		1 ,	, 1
	Group Information Sessions giving clients knowledge of available	Average duration of information sessions	
	services	Average number of clients in attendance	
Х	Individual employability needs	Average duration of interview	1.5 hours
	assessment interviews	Average number of interviews per client	1 initial, 1 possible vocational evaluation (min. 1 week)
	Group employability needs	Average duration of interview	
	assessment interviews	Average number of clients in attendance	
	Referrals to PLAR (prior learning assessment and recognition) services	Average duration of process	
х	Referrals to Settlement Services	Average duration of process	
	Referrals for Language Assessment	Average duration of process	
x	Administration and interpretation of career assessment tools (Vocational Evaluation services)	Names of specific assessment tools used	 Valpar work samples (size discrimination, simulated assembly, multi-level sorting, independent problem solving) Kaufman Brief Intelligence Test, 2nd edition Self Directed Search

		CHECKLIST	
			 Ashland Interest Inventory Test of Interpersonal Competence for Employment Pro-3000 Computerized Assessment (for employment aptitude testing) Career Orientation and Placement Evaluation Survey (COPES) Wide Range Achievement Test 4th edition (WRAT 4)
	Financial/Program Eligibility Assessments	Average duration of process	
Х	Individual employment counselling	Average duration of interview	45 min
		Average number of interviews per client	16 meetings
	Financial Management/Debt	Average duration of interview	
	Management Advice	Average number of interviews per client	
Х	Group employment counselling	Average duration of interview	6 hours / day
	(New Opportunities for Work program)	Average number of interviews per client	35 days (avg.)
	Pre-Employability and Life Skills	Number of workshops in series	
	Workshops (Examples could include: helping to	Duration of workshops in series	
	develop personal supports needed for work (i.e. childcare); referrals to community resources to address challenges/vulnerabilities; life skills workshops etc.)	Themes of Pre-Employability and Life Skills Workshops or attach learning objectives or workshop content outline	
х	Career Decision Making Workshops (Examples could include: identifying strengths and transferable skills;	Number of workshops in series	Not provided in a workshop format, individualized
	researching work opportunities;	Duration of workshops in series	

	CHECKLIST				
	identifying a career goal; identifying challenges which may interfere with career goal and developing strategies etc.)	Work	nes of Career Decision Making schops or attach learning ctives or workshop content ne		
	Work Search Workshops (Examples could include: confirming that qualifications match	Num	ber of workshops in series	Provided on an individual basis, numbers and themes may vary	
	employment goal; identifying potential employers and	Dura	tion of workshops in series		
	opportunities; using networks to identify employment leads; completing a resume and cover letter etc.)	or at	nes of Work Search Workshops tach learning objectives or shop content outline		
Х	(Examples might include training and education course selection; researching and evaluating training options; researching employment prospects in specific fields; developing study skills etc.)	Num	ber of workshops in series	Not provided in a workshop format, individualized	
		Dura	tion of workshops in series		
		Work	nes of Skill Enhancement kshops or attach learning ctives or workshop content ne		
Х	Employment Maintenance (Examples might include identifying important attitudes which improve	Num	ber of workshops in series	Ongoing, schedule is individualized, not a workshop format	
	chances of keeping employment;	Dura	tion of workshops in series		
	identifying sources of support which provide advice about work retention; learning how to ask for assistance when needed; coaching		nes of Employment tenance Workshops or attach ing objectives or workshop ent outline		
	Job Finding Clubs				
Х	Placement services				
Х	Employer liaison				
Х	Referrals to third party providers for specific employability needs		Please specify: XXXXXXXXXXXX;	various others	

	CHECKLIST				
Х	Referrals to specialized community resources	Provide names of most common referral resources:	Learning Disabilities Association		
			Autism Resource Center		
			Work Prep Center		
			Can. Mental Health Association, Mental Health Clinic		
Х	Workplace assessment/adaptation/modif	ication			
Х	Workplace mentoring				
	Income support/financial eligibility service	25			
	Referrals for personal counselling	Average duration of interview			
	Referrals for addiction counselling	Average duration of interview			
Х	Career fairs, job fairs and/or career symposia				
х	Other: (Please specify): Job Coaching, Job	Bundling (individually designed	job carves)		

APPENDIX C:

EMPLOYMENT GOAL AND ACTION PLAN:

Arriving at an agreed upon goal and a concrete action plan are fundamental. They are the roadmap to guide and to gauge progress towards the client achieving his/her employability goal. The Action Plan must be updated with each client contact. You are encouraged to complete the action plan on screen with the client, and to print an updated copy for the client each time you work together (click Print bullet).

Goal

	Action steps	Do this by	Finished (check)
1.			
2.			
3.			
4.			
5.			

Other Supports for Client (people, programs, services, resources)	Contact Information for Other Supports