

CAREER COUNSELLING FOR OFFENDERS:
RELATIONSHIP BETWEEN WORK PERSONALITY,
LEARNING STYLE AND CLIENT
INTERVENTION PREFERENCES

CENTRE FOR NEWFOUNDLAND STUDIES

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**Career Counselling for Offenders:
Relationship Between Work Personality, Learning Style
and Client Intervention Preferences**

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**A Thesis submitted as partial fulfillment
of the requirements for
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ABSTRACT

Work dramatically affects the lives of many people, including offenders, as has been substantiated by correctional research indicating a correlation between offender recidivism and employment. Interventions designed to address the career development needs of offenders have traditionally been positivist in design, relying mainly on actuarial approaches, and offered uniformly without consideration to individual preferences. The application of emerging career theory approaches such as constructivism to this target group offers certain benefits not found in conventional career development interventions. A process is proposed that seeks to provide offenders with a choice between two approaches to group career counselling, one that is action-oriented and a second that is grounded in self-reflection. This study focused on the development of an assessment tool that included work personality and learning style in the process of determining the individual's preference for career counselling. This instrument, the Career Counselling Preferences Questionnaire (CCPQ), along with Holland's Self-Directed Search (SDS-E) and Kolb's Learning Style Inventory (LSI) was administered to 60 inmates, parolees, and probationers to investigate these inter-correlations and to determine the validity of the CCPQ in assessing preferences for counselling structure. Four Holland types, Artistic, Investigative, Social and Enterprising, were found to be positively correlated with a "thinking" approach to career intervention. The Social type was found to be additionally correlated with a "doing" approach. The Realistic Holland type, accounting for the largest portion of the sample, was found to be not significantly correlated with either approach, as was the Conventional type. In addition, all six Holland types produced by the CCPQ were strongly correlated with results of the SDS-E. The

CCPQ “thinker” construct was supported with a positive correlation to the LSI Abstract Conceptualization score. These results are discussed as per the potential benefits of a dual approach that creates a space for emerging career counselling approaches such as constructivism in the correctional system. The possible influence of an unmeasured construct, readiness for change, is also discussed. Implications for correctional programming and recommendations for future research are outlined.

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CHAPTER I

INTRODUCTION

Statement of Purpose

The purpose of this study was to examine a component of the rehabilitative process of offenders in the Newfoundland correctional system: specifically, the provision of career counselling and employability skills. In particular, the study explored the relationship between offenders' work personality and learning style in relation to their preferences for selected types of career counselling within a sample of offenders and ex-offenders in the eastern Avalon region. As rehabilitative services are often provided in group settings to optimize operational efficiency, the study developed an assessment instrument to aid in matching offenders with career counselling group interventions that best suit their work personality and learning style. Finally, several static factors, such as age, education and criminal history were studied to ascertain the relationship of these factors to work personality, learning style and preference for career counselling approach.

Rationale and Significance

Rationale

Within Canada's correctional system, a great deal of resources are invested in rehabilitative services designed to provide the offender with skills, abilities and attitudes that will assist in reducing the likelihood of re-offense. Given the high social and financial cost of crime and incarceration, all factors that contribute to improving the outcomes of rehabilitation are worthy of consideration. A total of 31,594 criminal code offenses were committed in the province of Newfoundland in 1998 (Statistics Canada, 1999a). Although this represents the lowest provincial crime rate in Canada (5,803 incidents per 100,000) Newfoundland was the only province in

Canada to report an increase in property crime from 1997 to 1998 (2.8%) and one of only three provinces to report an increase in overall crime in the same period. Although violent crime was found to decrease in Newfoundland in 1998 (-7.8%), the property crimes committed comprise almost half (46%) of all crimes committed in the province and therefore, affect the total provincial crime rate dramatically. This divergence from the national trend becomes even more pronounced when the focus is narrowed to metropolitan St. John's. In 1998, property crimes in St. John's increased by 6.1% over the previous year, making St. John's the Canadian city showing the highest property crime increase for this period and one of only four Canadian cities that did not show a decrease in property crime in 1998, the other three are Halifax with a 4.6% increase, Kitchener with 3.1% and Sherbrooke with 0.3% (Statistics Canada, 1999a).

Recent studies in the field of corrections have indicated that a lack of employability skills is positively correlated with an increased re-offense rate (Gendreau et al., 1998; Gillis, 1998; Motiuk, 1996; Auditor General of Canada, 1996; Bonta, 1997; Andrews and Bonta, 1994). Disproportionate rates of unemployment exist among the offender population. The national unemployment rate in Canada during November, 1999 was 7.2% and for Newfoundland was 16.1%, continuing to be the highest provincial unemployment rate in the country (Statistics Canada, 1999). A 'snapshot' survey of the unemployment rate of all offenders on parole in Newfoundland and in the other maritime provinces was conducted on February 15, 2000 (Correctional Service of Canada, unpublished). The findings indicated that 76% of all Newfoundland parolees (n = 113) were unemployed at that time. The same survey of the remaining maritime provinces (Nova Scotia, Prince Edward Island and New Brunswick) revealed that 48% of all parolees in those provinces (n = 695) were unemployed at that time. Given these

high unemployment rates among the offender population in the province of Newfoundland, along with lower educational achievement also common to this group, the steady decrease in the provincial unemployment rate over the past four years (Statistics Canada, 2000) has probably not ameliorated employment disadvantages for Newfoundland offenders in any appreciable manner.

According to the 1996 Canadian Census findings, the average male residing in St. John's is more highly educated than the average Canadian male with 71% of St. John's males aged 25 or older having a high school certificate compared to 67.9% of Canadian males and 53% of St. John's males having a trade compared to a national male average of 47% (Statistics Canada, 2000).

Assuming that most employers prefer to hire from the pool of the highest trained and educated workers available to them, this would appear to support the argument that offenders living in the St. John's area face employment obstacles disproportionate to many other areas in Canada. Thus, improving offender employability locally could have an even greater impact on reducing recidivism rates in this province than has been found in other provinces and countries as indicated by various recidivism studies (eg. Gendreau, Goggin & Gray, 1998).

Many services exist in Canada, within both prison and community settings, that provide career counselling and employment-related training. However, it appears as if very little consideration has been given to a systematic means of discerning offender preferences to career counselling and the effect that this consideration may have on intervention outcomes. In fact, it would seem that even within the general population, little attention has been paid to role of client preferences in career counselling (Niles, 1993; Galassi, Crace, Martin, James & Wallace, 1992).

The determination of client preference and subsequent application of this information to the choice of career counselling strategy could be expected to proffer certain benefits. Increasing

offender responsivity to treatment is considered to be a key component of effective intervention in terms of reducing recidivism (Andrews, Zinger, Hoge, Bonta, Gendreau & Cullen, 1990; Bonta, 1997). This may be witnessed through the reduction of client resistance as is often characterized in correctional programming by absenteeism, failure to complete homework assignments, disengagement in discussions, argumentativeness and apathy. Accommodating preference for approach may result in an offender who is more engaged in a process that has greater meaning for him and, as a result, who is more positively affected by it. In fact, the importance of client expectations in psychotherapy has been a major research focus for over 40 years but has received little attention in the area of career counselling (Galassi et. al., 1992)

The use of a work personality typology such as Holland's (1966, 1973, 1985) to explore relationships between client personalities and career counselling interventions has recently received support (Riverin-Simard, 1999; Boyd and Cramer, 1995; Niles, 1993; Rosenberg and Smith, 1985). Holland developed six basic personality types: Realistic, Investigative, Artistic, Social, Enterprising and Conventional (RIASEC) and argued that people tend to affiliate with and be most like one, two or three of the types. Rosenberg and Smith (1985) developed six strategies for career counselling based on these Holland types. They claimed that realistic types would prefer a hands-on approach, investigative types a problem-solving approach, artistic types a low structured approach, social types a highly verbal approach, enterprising types a challenging approach and conventional types a highly structured approach. Niles (1993) explored this concept further in a sample of undergraduate students and found support for parts of this theory. More specifically, realistic and enterprising males preferred congruent career counselling environments, but results were less conclusive for the other typologies.

Boyd and Cramer (1995) in examining this theory, explored four aspects of client preferences as they related to Holland type: the framework of the counselling intervention, career aspirations, the process of decision-making, and counselor characteristics. Overall, support was found for the desirability of considering client personality type when devising a career counselling intervention. In particular, in looking at the framework of counselling variable, a significant difference was found between the social and realistic types, with the enterprising types responding similarly to social types and conventional types most similarly to the realistic types. Boyd and Cramer conclude that “more so than the realistic and conventional types, the social and enterprising types prefer ... little structure within the sessions with the freedom to explore related issues ... and a focus more on self-awareness and introspection rather than making concrete career decisions through primarily external means” (p. 219).

Riverin-Simard (1999) has also suggested that distinctly different career counselling approaches should be provided to clients based on their Holland typology. She proposes that individuals tend towards one of two opposite poles, that of being and doing. More specifically, the pole of “being” describes clients who must first clarify who they are (or have become) in order to deal with the career dilemma they face and that three of Holland’s occupational typologies (artistic, social, enterprising) share this pole. Their preferred counselling approach would seek to help them redefine themselves through examination of their personal assets, qualities of their being that make them act and motivate them in vocational activities. On the opposite side, Riverin-Simard suggests that the pole of “doing” describes clients who emphasize what they produce rather than who they are and is represented mainly by Holland’s other three typologies (Realistic, Investigative, Conventional). Accordingly, their preferred approach would assist self-definition

through acting and doing. Therefore, the first intervention priority should be to get them to act; to accomplish and do things.

A review of the literature on learning styles (Dunn, 1996; Hewitt, 1995; Simms and Sims, 1995; Dunn and Griggs, 1995; Reiff, 1992; Keefe, 1987; Gregorc, 1979; Messick & Assoc., 1976; Witkin, 1976; Kagan, 1965; Myers, 1962; Jung, 1921) provides support to the concept that adapting intervention strategies to the preferences of the 'learner' (client), will increase the likelihood there will be a positive learning or teaching experience and that client responsivity will be enhanced. Kolb's (1984) experiential learning model is useful in identifying adult learning styles and this information can then be used to modify the approach taken in a career counselling intervention. Kolb maintains there is a four stage cycle of learning that is structured around two dimensions of learning style: concrete experience versus abstract conceptualization (taking in experience) and reflective observation versus active experimentation (dealing with experience). Kolb proposes that the most effective learners have competencies in and use all four stages when learning. However, some learners are more comfortable with a particular stage and prefer this approach, often skipping other stages.

Using Kolb's (1999) Learning Style Inventory (LSI) that contains 12 sentence stems, each having four completers that are rank ordered by the test-taker to determine the client's preferred way of taking in experience (concrete experience versus abstract conceptualization). will provide an additional assessment of preferred approach to career counselling. This additional measure will provide a means of evaluating the relationship between an individual's preferred counselling strategy and their Holland code as postulated by Riverin-Simard above.

In addition to addressing client counselling preference, another area where contemporary

career counselling for offenders is lacking is the application of emerging career theories that have shown promising results among other client populations. In providing career counselling in a correctional setting, the practitioner is often challenged with clients who have selected one career option to which they rigidly cling. In other instances, correctional clients may have no clear sense of career/life direction and may behave apathetically regarding the exploration of possible career paths. Interventions that encourage creative means of self reflection and new ways of finding meaning through work that fosters self-direction and empowerment would assist immensely. Constructivist approaches offer many of these qualities (Neimeyer, 1993) and therefore appear well-suited to assist in career counselling of offenders, in particular, the exploration of possible career (life) futures. A constructivist model of career counselling emphasizes the subjective experience of career development; that is, the viewpoint that the client's context, personal narratives, and interpretations of meaningfulness should play the most prominent role in career counselling (Peavy, 1992, 1996; Neimeyer, 1993; Savickas, 1995; Young, Valach & Collin, 1996).

Another strength of the constructivist approach is the value that is placed on the clients' perspective of what is meaningful for them in the development of their career plan. This can be very empowering for the individual and fosters a sense of control over their own career goal development. The client-centered nature of this approach also gives considerable weight to the client's circumstances, cultural (and sub-cultural in the case of offenders) influences, and socio-economic background. This can assist the career counselor in the building of an effective therapeutic alliance with clients who are often resistant to counselling and such an alliance is often critical to the effectiveness of an intervention (Shay, 1996). Also, this approach is very holistic in the sense that the client is encouraged to reflect on the larger picture of their 'life story' and not

on certain traits or characteristics.

Before applying a constructivist career counselling approach to all offenders universally, offender responsivity to the intervention must be considered. Responsivity refers to characteristics of offenders that influence how responsive they are to types of treatment (Bonta, 1997) and the choice of the most appropriate mode of service to the client (Andrews, 1995). In providing career counselling to offenders, one must consider the possibility that a proportion of them will not respond favourably to this approach. It is possible that some clients may find this approach too abstract, nebulous or ungratifying and will, as a result, be uncomfortable with the intervention as well as question the credibility of the counselor. For the intervention to be more meaningful for the client and therefore act as a more effective change agent in his/her life, the use of constructivist approaches in offender career counselling must be employed selectively with the career counselling preferences of the client considered foremost. Additionally, other dynamic factors correlated to recidivism such as antisocial attitudes (Gendreau et al., 1998) will be expected to be addressed through prior or concurrent correctional programming designed specifically to address these needs.

This study then, was designed to explore the career counselling preferences of a representational sample of Newfoundland offenders. A career counselling preferences questionnaire was designed to provide an assessment tool for career counselors working with this population. Through a comparison of responses on this questionnaire to responses on two standardized and validated instruments that identify work personality by Holland code (Holland, 1985) and learning style (Kolb, 1984), the ability of this questionnaire to accurately identify these indicators for counselling preferences can be established. In effect, clients demonstrating a

propensity towards an abstract conceptualization learning style were predicted to be more responsive to a constructivist approach to career counselling than those who preferred to learn through concrete experience. Additionally, this preference for a constructivist-oriented approach was also expected to exist more frequently in artistic, social and enterprising Holland types in comparison to realistic, investigative and conventional Holland types. The degree of correlation of responses to items on the career counselling preferences questionnaire developed for this study with Holland code and Kolb's learning style could result in a new way of approaching career counselling with offenders that increases client responsiveness to intervention thus increasing effectiveness of the counselling strategy.

Significance

The impact of crime continues to dominate the collective consciousness of our culture through national and local news media, best-selling books, popular talk shows, blockbuster movies and conversations around the water cooler. Billions are spent annually on law enforcement, legal proceedings, institutionalizing of offenders, correctional services and rehabilitation. Although the national crime rate in Canada has been steadily decreasing since 1991, in 1998 it was still almost double that of 30 years ago (Statistics Canada, 1999a). This huge social concern continues to warrant extensive research into factors related to the causes and reduction of criminal behaviour.

Although it has been the belief of many correctional rehabilitation staff that longer prison sentences do not reduce re-offending behaviour, recent research now supports this. A recent study (meta-analytic) involving over 300,000 offenders showed that longer prison sentences were associated with a 3% *increase* in recidivism (Solicitor General Canada, 1999). Given that the cost

to imprison an offender in 1996 on average was \$49,483 per year (Department of Justice, in press) in Newfoundland, longer prison terms alone are costly in both social and financial respects. On cogitation of these high costs of crime, the significance of even a modest reduction in the re-offense rate of offenders is substantive. By improving the effectiveness of career counselling for offenders, this study seeks to identify strategies to improve employment outcomes for this population. Current research findings on recidivism suggest that this in turn would significantly reduce the rate at which ex-offenders re-offend (Gendreau et al., 1998; Gillis, 1998; Motiuk, 1996; Auditor General of Canada, 1996; Bonta, 1997; Andrews and Bonta, 1994).

This study also examines the relationship between the work personality, learning style and intervention preference of the offender. A better understanding of these relationships may not only assist correctional program facilitators and administrators in their efforts to improve the effectiveness of employment services, but also influence in a more fundamental way the manner in which these services are currently perceived by correctional staff. More attention then, may be paid to designing career counselling programs that have built-in flexibility to respond to substantially differing mechanisms for different clients to acquire self-insight and knowledge necessary for successful career development.

Another factor impelling this study was the lack of an appropriate vehicle for constructivist approaches to be applied in a conservative, controlled manner to career counselling in a correctional environment. Interventions that are viewed as client-centered are considered less effective than more directive, cognitive-behavioural approaches in correctional settings. This is a result of research that has shown interventions that are psycho-dynamic, insight-oriented and non-directive have tended to have less impact on reducing the antisocial beliefs, attitudes and

behaviours of offenders (Lösel, 1996; Gendreau, 1996; Andrews and Bonta, 1994; Andrews et al., 1990). However, by supplementing current correctional programming that targets the antisocial factors of offending behaviour with a process of career development that offers strategies of self-exploration responsive to the styles of the client, this study hopes to provide the vehicle whereby constructivist approaches may be applied to correctional clients selectively and appropriately.

The development of the career counselling preferences questionnaire for this study may provide correctional staff and counselors with an effective instrument for assessing the career intervention needs of their clients. The paperwork involved in assessing and providing interventions to offenders has swelled over the years. This extensive documentation takes an inordinate amount of time. The questionnaire developed for this study was designed to be self-administered, relatively brief and to identify several factors that currently require a least three separate instruments to assess (work personality, learning style, need for career counselling, preference for group versus individual counselling and the importance of work). The benefits of a more responsive career counselling intervention are therefore increased by the use of an assessment tool that is low-cost in both time and money while providing information on a number of significant variables.

Research Questions

This study was designed to answer the following research questions:

1. What is the relationship between scores on the Holland Self-Directed Search (SDS-E) and scores on the Kolb Learning Style Inventory in the offender population?
2. What is the relationship between scores on the career counselling preferences

- questionnaire and scores on the Holland Self-Directed Search (SDS-E) for offenders?
3. What is the relationship between scores on the career counselling preferences questionnaire and scores on the Kolb Learning Style Inventory (concrete-experience versus abstract conceptualization) for offenders?
 4. What is the relationship between offender preferences for career counselling (doing versus thinking) as measured by the career counselling preferences questionnaire and Holland code?
 5. What is the relationship between offender preferences for career counselling (doing versus thinking) as measured by the career counselling preferences questionnaire and the Kolb Learning Style Inventory?
 6. What is the prevalence of 'thinkers':
 - a) as indicated by the career counselling preferences questionnaire,
 - b) as indicated by SDS-E results (Artistic, Social and Enterprising differentiated types), and
 - c) as indicated by LSI results (Abstraction and Reflective learning styles)in the offender population?
 7. What is the prevalence of offenders who perceive a need for career counselling?
 8. What is the prevalence of offenders who prefer group counselling over individual?
 9. What is the relationship of specific demographic variables such as age, size of home town, past career counselling, years of education, number of convictions and months spent incarcerated to offenders' preferences for career counselling?

Definition of Terms

To clarify the meanings of terms frequently used in this study, the following definitions are presented:

Constructivism	A philosophic framework of career counselling that views self-reflection and personal construction of meaningfulness as central to successful development of self and career.
Learning Style	An individual's preferred approach to perceiving, processing and incorporating new information.
Need Principle	Treatment of offenders attempts to address two types of needs: criminogenic (if addressed, can reduce risk to re-offend) such as unemployment, and non-criminogenic such as low self-esteem.
Offender	An individual who has been convicted of an offense under the Criminal Code of Canada.
Recidivism	Returning to criminal activity as determined by subsequent re-conviction.
Responsivity	The degree to which an individual responds favourably to an intervention or treatment which is thought to be influenced by certain personality and cognitive-behavioural characteristics of that person.
Risk Principle	Intensity of treatment or intervention should be matched to the offender's risk to re-offend: high intensity treatments reserved for high risk clients

Work Personality Based on John Holland's theory that people generally express their personality through choice of vocation, there are six distinct types of workers in the world (Realistic, Investigative, Artistic, Social, Enterprising and Conventional).

Limitations of the Study

1. Results of the study can be generalized only to adult male offenders residing in eastern Newfoundland, from which the sample was chosen. No generalizations from the study's findings can be made to female offenders or to young offenders.
2. Data was collected in a relatively short time frame and is therefore more susceptible to historical influences than would data collected from a longitudinal study.
3. As this study is not of an experimental design, no statements regarding causes for any observed relationships between dependent measures can be made.
4. Offenders' responses on the questionnaire and standardized instruments could have been influenced by their attempts to guess the purpose behind the item and manipulate the outcome.
5. As the study participants were not provided with the career intervention they appear to prefer, satisfaction with their preferred approach cannot be verified by this study.
6. Although many constructivist career counselors maintain that their approach can be well suited to action-oriented clients, this study's discussion focused on the self-reflective and thinking-oriented elements of the constructivist epistemology in discussions.

CHAPTER II

REVIEW OF RELATED LITERATURE

Introduction

Work plays an enormous role in the lives of many people (Brown, 1996), providing much more than an economic means of subsistence. Work also serves to fulfill many of our social needs through the network of relationships and roles it establishes, as well as many of our psychological needs such as affiliation, competency, identification, structure, purpose and community (Herr and Cramer, 1996). It would even appear that having employment that is satisfying to the individual contributes to longer life, more so than abstinence from smoking or even genetic inheritance (Palamore, 1969).

There is growing evidence that being unemployed (or underemployed) is reflected in behaviours that suggest various problems in living or even mental illness (Herr and Cramer, 1996; Herr, 1989a). Prolonged unemployment has been found to be characterized by periods of apathy and helplessness, alternating with anger, sadness, sporadic optimism, feelings of victimization and low self-esteem (Schlossberg and Leibowitz, 1980; Herr, 1989a; Herr and Cramer, 1996). In this chapter, selected research on offender employment and rehabilitation issues, career counselling and learning styles are examined.

Employment and offenders

Unemployment has also been found to be related to criminal behaviour. Many offenders entering the correctional system have poor employment histories and are lacking skills necessary to improve their employability in the community (Guynes & Grieser, 1986). Offenders, themselves, have expressed the need for enhanced employment skills and experience. In a survey

conducted by Erez (1987), two thirds of offenders identified lack of education and employability skills as contributing to their criminogenic needs, and viewed employment training as integral for successful community reintegration.

This supposition is also supported by recidivism studies, for example, the study by Gendreau, Goggin and Gray (1998). Utilizing a meta-analysis approach, they examined employment related characteristics of offenders and recidivism. A database of 114,032 offenders was generated in this study and the employment domain was found to be a useful predictor of recidivism. In particular, when education and employment factors were combined, a moderately high correlation ($r = .26$) with recidivism was found.

Focus on cognition

The correctional system currently functioning in Canada is very concerned with the rehabilitation of offenders and a wide range of programs designed to provide offenders with skills and lifestyle options are widely delivered in both prison and community settings. Historically, many interventions designed to assist ex-offenders develop employability skills initially focused on simply providing employment. When personal issues continued to interfere with successful job placements, intervention was expanded to address such problems as substance addiction, poor impulse control, poor problem solving skills and irrational belief systems. The Correctional Service of Canada developed intensive, community-based programs (eg. Choices, Cognitive Skills Training and Counter Point), proven to be very helpful in addressing many of the criminogenic needs of this client group. These programs are well grounded in theories developed in the academic realm and operationalized by government research branches. For example, several have grown out of research based on the development of Social Learning Theory (Bandura, 1977) and

Rational-Emotive Therapy (Ellis, 1962). These cognitive-behaviour approaches are embodied in a wide range of direct services delivered predominantly in small group counselling settings. These interventions in the past decade have focused on changing the cognitive processes of offenders, believed by many to be critical in effecting lasting behavior and lifestyle change. "Effective programs included as a target of their intervention not only the offender's environment, or his feelings, or his behavior or his vocational skills, but his cognition - his reasoning, his attributions, his self-evaluations, his expectations, his understanding and his appraisal of his world." (Ross and Fabiano, 1985, p. 7)

Many offenders have been found to lack several cognitive skills that are essential for social adaption. Ross and Fabiano (1985) further stated that offenders may fail to distinguish their own emotional states, thoughts and views from those of others. They may misread social expectations and misrepresent the actions and intentions of others. Also, they may fail to conceptualize the relationship between means and ends. They may externalize blame and fail to critically analyse their own thinking. Failure in social cognition (a lack of awareness or sensitivity to other people's thoughts or feelings) severely impairs an offender's ability to form acceptable social relationships, particularly with family members as well as employers.

Follow-up research has shown that these interventions often have an immediate positive impact and the effects can be enhanced as well as maintained over longer periods in certain circumstances (Ross and Fabiano, 1985). Some characteristics of these effective programs include: cognitive-behavioural based, community-based, small group design, program intensity set to match risk level of participants, multi-faceted, high competency group facilitator and a process which is energetic and engaging while controlled (Ross, Fabiano & Ross, 1991, Ross and

Ross, 1995; Bonta, 1997; Gendreau & Goggin, 1996; Antonowicz, Izzo & Ross, 1995).

New direction for offender career counselling

This application of cognitive-behavioural approaches to lifestyle issues, that many offenders struggle with after release, has contributed considerably to the effectiveness of interventions. This concept of targeting skills more fundamentally related to human cognition and attitude has also influenced offender employment programs, both positively and negatively. On the positive side, prison industry and other institutional-based employment programs have begun to shift focus to the development of general employability skills for inmates as opposed to concrete work skills (Gillis, Robinson & Porporino, 1996; Mulgrew, 1996). On the negative side, this intense focus on cognitive restructuring interventions has resulted in less attention to the development of career counselling programs for offenders by correctional researchers this past decade. In particular, many of the implications for practice of the emerging career development theories of the 1990's (such as contextualism and constructivism) have not yet found their way into correctional counselling and services. Most career counselling interventions (especially those based in corrections) to date have utilized traditional "positivist" approaches to career counselling (Herr and Cramer, 1996; Brown, et al., 1990) and have, for the large part, failed to incorporate any of these "emerging" career theories that are more holistic and less actuarial in approach.

Intervention Needs of Offenders

Psychology as a discipline was first utilized in corrections in the United States in the 1920s, mainly to assist in the classification of inmates based on individual differences, particularly differences in intelligence (Watkins, 1992). The discipline grew slowly until the 1970s to define a role for itself that included assessment, treatment, training and research. Correctional

psychologists came under attack in the mid-1970s when allegations that “nothing works” were made (Martinson, 1974). This general disenchantment with rehabilitative programs led to a critical examination of the role of correctional psychology and the recognition of the need for more meaningful programs that address offender needs. Since then, correctional researchers have identified a number of factors correlated with recidivism, and have maintained that recidivism is predictable and can be influenced.

Offender risk, need and responsivity

Recent meta-analyses have examined hundreds of studies in the quest to identify effective correctional programming. Practically all meta-analyses on offender treatment suggest that offenders who receive some kind of psycho-social treatment tend to do better than those who do not (Lösel, 1996). However, substantial differences in effectiveness are found between different types of programming. There are thought to be three primary characteristics of interventions that are key to effective programming: the risk principle, the need principle, and the responsivity principle (Andrews et al., 1990, Bonta, 1997). The risk principle argues that intensive treatment has a greater impact on higher risk offenders while such treatment has no (or reverse) effect on lower risk offenders. The need principle maintains that there are two types of offender needs: criminogenic (associated with changes in recidivism) such as substance abuse and non-criminogenic such as poor self esteem. The responsivity principle holds that certain personality and cognitive-behavioural characteristics of the offender influence how well they respond to various types of treatment. These concepts could be summarized by viewing the risk principle as determining *who* could benefit most from programming, the need principle targeting *what* should be addressed and the responsivity principle suggesting *how* the service should be provided.

One of the most extensive meta-analysis conducted to date on factors related to recidivism is that of Gendreau, Little and Goggin (1996). This study generated a very large database of offenders and examined predictors of recidivism that were classified into eight categories: age/gender/race, criminal history, criminogenic needs, family factors, intellectual functioning, personal distress, socio-economic status, and social achievement. All of these domains significantly predicted recidivism. However, one category in particular, criminogenic need factors (consisting of antisocial personality, companions, attitude and behaviour regarding education and employment), was the most predictive of recidivism. Adult criminal history and criminogenic needs (consisting of antisocial attitudes and education/employment behaviour) produced the greatest frequency of significant differences ($r = .17$) across the predictor domains (Gendreau et al., 1996; Gillis, 1998). Social achievement (marital status and education level), age/gender/race and family factors showed more moderate correlations with recidivism (range, $r = .12$ to $.15$). Intellectual functioning, socioeconomic status and personal distress variables were least predictive (range, $r = .06$ to $.07$).

Andrews (1995) maintained that the major risk factors for recidivism include the “big four”: antisocial cognition, anti-social associates, anti-social personality complex and a history of antisocial behaviour. These first three are susceptible to change (dynamic) and provide useful information regarding needs that should be targeted for treatment in order to decrease the likelihood that an offender will become involved in future criminal behaviour (the need principle). Although not one of the “big four”, employment has been found to consistently be a moderate to major predictor of recidivism (Gendreau et al., 1998; Gillis, 1998; Motiuk, 1996; Auditor General of Canada, 1996; Bonta, 1997; Andrews and Bonta, 1994). Considering these findings then, any

intervention with offenders that targets the employment domain, should also seek to target antisocial attitudes and cognitive processes in order to optimize outcomes.

Offender beliefs, attitudes, intentions and actions

In seeking to understand how a career counselling intervention could be developed to address both employment and antisocial attitude needs of offenders, an examination of the theory of planned behaviour (Ajzen, 1985, 1988) may be helpful. Following the contention that most human behaviour is goal-directed, Ajzen (1985) maintained that human social behaviour follows the lines of more or less well-formulated plans. Actions are controlled by intentions, but not all intentions are carried out. The longer the time between intention and action, the greater the likelihood that unforeseen events will cause changes in intentions.

Ajzen maintained that a person's intention is a function of two basic determinants: the persons' evaluation of performing the behaviour (or attitude towards the behaviour) and the person's perception of social pressures to perform (or not perform) the behaviour. Basically, people intend to perform a behaviour when they evaluate it positively and when they believe that others who are important to them think they should perform it.

Ajzen (1985) identified four factors which may influence intentions over time and result in changes: 1) Salience of beliefs: beliefs regarding a behaviour's negative features may become increasingly salient over its positive features as the time of the behaviour gets closer. If the point is reached that the negative is perceived to outweigh the positive, the intention may be reversed. 2) New information: unforeseen events may change the person's attitude toward the behaviour. 3) Confidence and commitment: when an intention is held with great confidence, changes produced by new information will not be sufficient to reverse the planned course of action. 4) Individual

differences: some people change their intentions more easily than others. People differ in the extent to which their behaviour is susceptible to situational as opposed to internal states.

Related to this last factor, people who attribute control of their behavioural goals to internal factors should incur more attempts to perform the behaviour. Their success will depend upon how realistic their attribution of control is. Upon attempting to perform the behaviour, they may discover that they lack information, skills or abilities that are needed. They may be affected by the degree of control they have over their actions in the form of will power. Kuhl (1982) maintained there are two basic influences on the execution of intended behaviour. Individuals may be viewed as predominantly action-oriented or state-oriented. Action-oriented individuals focus their attention on action alternatives and make use of knowledge and abilities to control their performance. State-oriented individuals are more likely to focus on their thoughts and feelings rather than taking action consistent with their intentions. Situational factors (eg. a failure experience) are thought to influence these orientations and thus affect the performance of intended behaviours.

External or situational factors which effect a person's control over behavioural goals fall mainly under two categories: time and opportunity, and dependence on others. As new information comes to light over time, this may affect the person's beliefs about the behaviour and lead to changes in attitudes and intentions; thus reducing the interest in carrying out the original intention. In contrast, loss/lack of opportunity or time disrupts the performance of the behaviour without changing the basic determinants of the intention. Whenever the performance of a behaviour depends upon the actions of others, the possibility of loss of control over behavioural goals exists. Again, the underlying determinants of the intention may not be changed and the

intention may only be affected temporarily until the circumstances improve (such as a different individual is recruited for assistance).

Ajzen (1988) later added a third determinant of intention to his theory of planned behaviour. In addition to the first two (attitude toward the behaviour and subjective norm), the third antecedent of intention is the degree of perceived behavioural control. This refers to “the perceived ease or difficulty of performing the behaviour and it is presumed to reflect past experience as well as anticipated impediments and obstacles” (p. 132).

Perceived behavioural control has motivational implications for intentions. People who believe that they do not possess the resources or opportunities to perform a behaviour are not likely to develop intentions to perform it, even if the other two determinants (positive attitude about the behaviour and belief that important others would approve) are present.

Also, Ajzen’s theory postulated a direct link between perceived behavioural control and behaviour. The more that perceived behavioural control corresponds to actual control, the more useful this information will be to the individual in planning behaviour. If it reflects actual control with some degree of accuracy, perceived behavioural control can help predict successful performance of the behaviour independent of behavioural intention. This is because perceived behavioural control may be considered to be a partial substitute for a measure of actual control. In some situations (eg. with offenders), perceived behavioural control may not be realistic due to the existence of cognitive deficits or dysfunctional belief systems.

An important set of beliefs that determine perceived behavioural control are those that deal with required resources and opportunities. These beliefs are based on past experiences with the behaviour, but are also influenced by observations of the experiences of others and by other

factors (such as cognitive restructuring interventions) that increase or decrease the perceptions of difficulty involved. “The more resources and opportunities individuals think they possess, and the fewer obstacles or impediments they anticipate, the greater should be their perceived control over the behaviour” (Ajzen, 1988, p.135). This concept of perceived behavioural control is similar to Bandura’s concept of self-efficacy (Eagly and Chaiken, 1993).

Self-efficacy and attitude change

Bandura (1997) provided substantial consideration to the role of self-efficacy as it relates to education and career development. “A fundamental goal of education is to equip students with self-regulatory capabilities that enable them to educate themselves. Self-directedness not only contributes to success in formal instruction but also promotes lifelong learning. Self-regulation encompasses skills for planning, organizing, and managing instructional activities; enlisting resources; regulating one’s own motivation; and applying metacognitive skills to evaluate the adequacy of one’s knowledge and strategies” (p. 174).

In preparatory stages, self-efficacy beliefs are a factor in how well students develop fundamental sociocognitive skills necessary for successful and fulfilling careers. Also, those with a sense of self-efficacy will perceive greater employment opportunities and will be more successful in finding employment. “People are unlikely to invest much effort in exploring career options and their implications unless they have faith in their abilities to reach good decisions. Hence, the stronger the perceived decisional efficacy, the higher the level of exploratory activity designed to aid selection and planning of a career” (p.427). Bandura also maintained that those young adults with low self-efficacy are more likely to forgo careers that they may consider desirable because they do not believe they can match the demands and requirements of those careers. Finally, a

higher sense of self-efficacy can contribute to higher job satisfaction and career advancement (Bandura, 1997).

On interventions, Bandura suggested several approaches to help people increase their occupational self-efficacy on an individual basis. One was to provide mastery-oriented instruction geared to eliminate self-limiting barriers that have become ingrained over time. Courses on skills such as critical thinking can help persuade people that they have the learning capabilities and potential to succeed. A second way was to expose people to models from similar backgrounds performing the occupational roles successfully. Finally, cognitive restructuring of belief systems involving appraisal of personal efficacy can reduce self-belittling habits. (Bandura, 1997, p.438-439).

Kahle (1984) examined Piaget's interactive theory of attitude change. Kahle maintained that a primary function of attitudes (and other social cognition) is adaption. Attitudes continually change through assimilation of information into schemata, through accommodation of existing schemata to information and through organization of these schemata as new information is obtained and old information is modified. This organization of schemata attempts to seek a state of equilibrium. When one state of equilibrium fails, the adaptive individual will change to a different, usually more complex, state of equilibrium. "[This] process is constructivist rather than passive, and it is thoroughly dialectical" (p. 42). Equilibrium can be restored by changing either or both, the person (attitude) or the environment (situation). Ultimate equilibrium is never achieved; there are always factors which require accommodation and equilibration. Successful adaptation is best viewed as optimal levels of equilibration under the circumstances.

Research in addiction treatment regarding stages of change have produced constructs in

respect to treatment readiness quite relevant to this discussion. Prochaska and DiClemente (1982) proposed a transtheoretical model of how people change addictive behaviours, either with or without formal intervention. This model involves a series of stages through which people pass in the process of changing a problem. Within this approach, motivation is best described as a person's present state or stage of readiness for change (Miller and Rollnick, 1991). The Prochaska and DiClemente (1986) model is composed of six separate stages. In the first stage Precontemplation, people are not considering change in their problem behaviour and may not, in fact, acknowledge existence of a 'problem'. The Contemplation stage involves individuals' beginning to consider that they have a problem and the costs of changing it. In this stage, people often swing back and forth between being motivated to change and to continue unchanged, demonstrating considerable ambivalence regarding change. The third stage, Determination, is where the decision is made to take action and change the problem behaviour. Individuals in this stage are prone to be seeking information that may help them and may be looking to participate in interventions that support their desired change. In the Action stage, people are actively modifying their behaviour. Making a change, however, does not ensure that the change will be maintained. During the fifth stage, Maintenance, individuals are faced with sustaining the change accomplished by the action they have taken. This maintenance may require a different set of skills than those required in the preceding stage. Finally, if the maintenance efforts fail, then the stage of Relapse occurs and the individual begins around another cycle.

This research suggests an important consideration: that clients entering into treatment or an intervention towards change may be actually doing so in very different stages of change, as opposed to all clients being at one stage, for example, ready for action (McConaughy et. al.,

1983). This concept may be an important factor in understanding individual differences between clients in their preferences of intervention structure and delivery.

Career counselling needs of offenders

In considering the above discussion of offender needs, one would propose that for an intervention which seeks to increase the employability of offenders to be effective, it must address not only career related issues but also the attitudes and beliefs of offenders. As was pointed out earlier, increased employability skills alone do not impact as strongly on reducing recidivism as do other need factors such as antisocial attitudes. It must be remembered that the reduction of recidivism is a key part of any career counselling intervention with this population. Enhanced employment opportunities are of little benefit to the offender who becomes re-incarcerated.

On the flip side of this coin, it could be argued that changes in offender attitudes and beliefs can be extended through the development of employability skills. As Ajzen (1985, 1988) maintained, beliefs contribute to attitudes which lead to intentions. However, offenders who believe that they do not possess the resources or opportunities to perform a behaviour are not likely to develop intentions to perform it, even if they possess a positive attitude about the behaviour and a belief that significant others would approve. This is the crux of the matter in terms of intervention effectiveness. Increased employability skills could provide the offender with those resources and opportunities necessary for developing intentions to engage in pro-social actions. As an offender becomes more receptive to change, availability of such resources become more important to him. Resources such as a well constructed career plan, structured job search, enhanced interview and self-presentation skills, wage subsidy packages and a support network all serve to augment perceptions of self-efficacy in this area. As more opportunities are perceived to

exist, intentions to act in accordance with newly restructured attitudes become more plausible for the offender.

Thus, it is reasonable to conclude that both aspects of offender needs (cognitive/attitudinal and employability skills/resources) are necessary for effective interventions. That is, effective career counselling requires supplementary interventions that assist the offender in changing antisocial beliefs and attitudes in order to reduce risk of recidivism. Likewise, cognitive restructuring interventions need the additional impact of effective career counselling interventions to maintain the impact on recidivism over time. This also fits with Kahle's (1984) concept of equilibrium discussed above. Providing interventions that assist changes in *both* the person (attitudes, beliefs, self-efficacies) and their environment (employment opportunities through enhanced employability skills and employment resources) contribute to the restoration of their optimal equilibrium but in a more adaptive, pro-social manner. Both these aspects of the intervention can be delivered together in an integrated program or as complementary components that are delivered separately but with cross-references and links that increase the transference of skills and concepts to application opportunities.

Excluding the criminogenic attitudinal needs, the career counselling needs of offenders are similar to those of any group facing high unemployment and are commonly thought to include three main areas: self exploration and career planning, transferable employability skills, and job finding skills (Brown and Brooks, 1991; Mulgrew, 1996; Gillis et al., 1996). Essentially, these needs are not unlike the needs of any other group that faces disproportionately high levels of unemployment (Saylor and Gaes, 1996; Motiuk, 1996) and formidable employment barriers. The importance of self-exploration in regards to career counselling was suggested by Hall (1996) who

maintained that “viewing the career as a personal quest implies finding influences on development that are uniquely equipped to promote personal development.” (p. 7). This was also supported by Betz (1994) who held that one’s career development is optimal when the most relevant and important self concepts can be expressed in the workplace. This self-exploration will both draw upon and reinforce the cognitive restructuring intervention necessary to address the criminogenic needs outlined above. As Brown and Brooks (1991) stated “people who have a high degree of cognitive clarity can take data about themselves, assimilate them into their overall view of themselves, and apply this self-knowledge to their environment as they make choices.” (p. 5).

The development of transferable (generic) employability skills is being increasingly recognized as necessary for effective offender career interventions (Gillis et al., 1996; Fabiano, LaPlante & Loza, 1996; Mulgrew, 1996). Employability skills refer to the general skills and attitudes that employers find most desirable in potential workers. A list of such skills has been compiled by the Conference Board of Canada (1993) based on the extensive survey of Canadian employers. They found three categories of skills considered important for workers to find and succeed in jobs: academic skills, personal management skills and teamwork skills. Herr (1993) has developed the term “personal flexibility” (see also Herr and Cramer, 1996) to encapsulate many of the essential skills that need to be the focus of career counselling interventions.

Finally, addressing the job finding skill needs of offenders involves the provision of activities which assist individuals to develop techniques and resources to connect with potential employers and present themselves in the most favorable light possible. The rationale for the inclusion of this category as an aspect of career intervention with offenders is fairly obvious: employable clients may not become employed without appropriate self-marketing skills.

Developments in Career Counselling

Conventional approaches to career counselling

At the turn of this century, vocational guidance was considered to be born through the contributions of Frank Parsons who established techniques to help youth identify their abilities and then, through acquisition of knowledge about different occupations, match these abilities to occupations and choose jobs with reasonable expectations of success (Herr and Cramer, 1996). This approach has become known as the trait-and-factor approach to career counselling and continues to be very popular today. This early work has also stimulated much research and gave rise to many of the conventional theories of career counselling such as Developmental, Decision-making, Sociological and Psychological. A review of these theories is beyond the scope of this paper but one “psychological” theory in particular, that of John Holland, will be briefly outlined for reasons that will be discussed below.

Holland maintained that a person expresses personality through the choice of a vocation and that interest inventories are really personality inventories (Isaacson & Brown, 1996). Holland (1966, 1973) developed six basic personality types: Realistic, Investigative, Artistic, Social, Enterprising and Conventional (RIASEC) and while acknowledging that no one individual is all one type, he argued that people tend to affiliate with and be most like one, two or three of the types (McDaniels & Gysbers, 1992). The six personality types are matched by six types of environments on the assumption that work environments can be classified according to their demands and that people seek out environments where there are others like themselves who share their interests and skills (Diamond, 1998).

Herr and Cramer (1996) asserted that four assumptions constitute the heart of this theory:

1) most people can be categorized as one of six types (RIASEC), 2) there are also six types of environments, 3) people search for environments that will let them exercise their skills and abilities, express their attitudes and values and take on agreeable problems and roles, 4) a person's behaviour is determined by an interaction between his personality and the characteristics of his environment.

Holland's theory has strength of a structured approach and possesses the capability to provide helpful information to clients regarding themselves and their relationships to various work environments. The theory is popular and is widely used in high school and college settings, as the Self-Directed Search (Holland, 1991) can be self-administered and self-interpreted. Indeed, this theory has had major influence on our fundamental concepts of personality types, work settings and job titles. As Drummond and Ryan (1994) stated "Our values, aptitudes, achievements, skills, and competencies set parameters on what we may be able to accomplish. Our interests and aptitudes guide us in choosing certain environments that we prefer, certain educational options, and career decisions. People have to become more introspective and aware of their assets and limitations, their likes and dislikes, and the realities of their environment." (p. 44).

Emerging approaches to career counselling

Spanning the past five decades, the work of Donald Super has contributed immensely to the field of career counselling. In particular, he was instrumental in changing the view of vocational guidance from one where clients are assisted in choosing, entering and progressing in an occupation, to a view that was self-concept oriented and focused on self-understanding and self-acceptance (Herr and Cramer, 1996). This effectively expanded the approach to include the psychological nature of career counselling and also shaped the viewpoint that career counselling

can also be viewed longitudinally and developmentally. Super's resulting developmental model of career counselling led to closer examination of working with adults through various life stages and transitions. Many career theorists have come to view career as providing a 'moving perspective' on the interaction between a person and society. This perspective offers a link between the person's initial identity and final integrity over the course of their life (Arthur, Hall & Lawrence, 1989).

With recent economical changes our society is experiencing, workers today can expect to experience several transitions during their adult working lives. Although not new, Schlossberg's model (Schlossberg, 1981) has received considerable attention in recent times because of current trends in the workplace. It also offers substantial contributions to assisting adult offenders as they experience many transitions. This model is based on five propositions about adult development which Schlossberg found to be key to the work of other adult theorists. These propositions are: 1) behaviour in adulthood is determined by social rather than biological clocks; 2) behaviour is at times a function of life stage, at other times of age; 3) sex differences are greater than either age or stage differences; 4) adults continually experience transitions requiring adaptations and reassessment of the self; and, 5) the recurrent themes of adulthood are identity, intimacy and generativity (Herr & Cramer, 1996).

Schlossberg points out that it is important to understand the distinction that a transition is not so much a matter of actual change as it is a matter of the client's perception of change (McDaniels & Gysbers, 1992). Her model has three parts: 1) the transition (type, context and impact); 2) the transition process (continuing and changing reactions over time, linked to the client's continuous and changing appraisal of themselves in their situation; and, 3) coping

resources (available to the client).

As mentioned above, a strong point of this model is that transitions are becoming more and more common in increasingly older clients. With offenders, a criminal conviction often marks the beginning of a dramatic transition. Another strength is that Schlossberg's model is client centered in that counselors are encouraged to be open to clients' desire for change and their perspectives around this. The model also focuses on helping clients develop new perspectives and on improving problem-solving, coping skills and a support network.

During the 1970's, cognitive psychologists such as Beck and Meichenbaum were instrumental in the application of cognitive psychology to counselling psychology which later gave rise to cognitive-developmental approaches to career development theory (Cahill, 1997). Meichenbaum (1977) outlined seven common components of treatment programs designed to provide clients with coping skills for a variety of problem areas (eg. anger, alcoholism, social incompetence). These include: 1) teaching the client the role of cognitions in contributing to the presenting problem; 2) training in the self-monitoring of maladaptive behaviours; 3) training in the fundamentals of problem-solving; 4) modeling of the self-talk and images associated with cognitive skills; 5) modeling, rehearsal and encouragement of positive self-evaluation and of coping skills; 6) the use of various behaviour therapy procedures (eg. relaxation training); 7) real life behavioural assignments that become increasingly demanding.

Beck (1970) identified five types of distortions in the thought patterns of his clients. These are: 1) arbitrary inference, the drawing of a conclusion that is not supported by the evidence; 2) magnification, the exaggeration of the meaning of an event; 3) cognitive deficiency, disregard for an important aspect of a life situation; 4) dichotomous reasoning, the rigid and overly simplified

perception of events as either black or white; 5) over-generalization, the taking of a single event and generating a fallacious rule.

Contributions from cognitive psychology such as these two examples led to the focus on how individuals process information related to career development. Similar to the developmentalist's focus on self-concept, the cognitive-developmental approach concerns itself with the individuals perception of their reality and how "cognitive schemas" are developed by people to process career issues, problems and decisions (McDaniels and Gysbers, 1992). This emphasis on the role of self-concept and the individual's perspective has led to some career theorists and counselors to move even farther from the "positivist" realm to a more subjective experience of career development; that is, the viewpoint that the client's context, personal narratives, and interpretations of meaningfulness should play the most prominent role in career counselling (Peavy, 1992, 1996; Neimeyer, 1993; Savickas, 1995; Young et al., 1996). This approach, referred to as *constructivism*, has been defined as a philosophic framework "that emphasizes the self-organizing and proactive features of human knowing and their implications for human change" (Neimeyer, 1993, p.221).

The growth of the constructivist approach has been attributed to the struggles that empirically-based traditional cognitive therapies have faced in the postmodern world (Neimeyer, 1993). With change being considered the one constant in recent times (Gelatt, 1989), the conventional cognitivist's perspective that rationality, objective process and match of beliefs to the "real world" are central to a client's progress toward well-adjustment has been challenged by constructivists. Proponents of this new perspective reject the theory that any beliefs that do not correspond to objective reality are dysfunctional and believe instead that the usefulness of any

“construction” is measured by its consequences for the individual that adopts it (Neimeyer, 1993).

One of the emerging theories grounded in constructivism, Young’s contextualist approach (Young et al., 1996) maintained that the best way of understanding clients is in the context of their environment as they experience it and how they make sense of the experience. These interpretations of experiences are constructed both in terms of the immediate context and the goals of the client. The gender and culture of the individual are also influencing variables. Counselors using this approach encourage clients to construct narratives based on their interpretations of significant events and then assist them in projecting these narratives into future contexts (Isaacson & Brown, 1996). Savickas (1995) used this approach to help clients develop ‘themes’, interpret current career problems in terms of these themes and then edit the theme as necessary before projecting it into the future. Skills are then developed to help the client implement the future narrative theme.

Peavy (1996), in applying a constructivist approach to career counselling, maintained that the development of self is a function of construction in the context of social participation, relationships and dialogue rather than a logical unfolding of stages or the product of environmental influences. In regard to the debate over objective versus subjective views of reality, Peavy stated “...reality is neither objective nor subjective, but participatory. What is real, what kind of life we lead, what we make of our career potentials is the result of participation in social life, of engaging in dialogue and relationships and of activity. In other words, we produce, create and construct our realities, both personal and social” (1996, p.9). This perspective has implications for career interventions. The counselling relationship is viewed as a cooperative process instead of an expert one, while the career development process is viewed as non-linear,

ever-changing and prone to be affected by accident and chance as much as by logical planning. Therefore, the constructivist counselor assumes the intervention will be active, dynamic and re-constructive and that the focus of the intervention will be the client's own perception's and personal meanings of what was, is and will be significant for them, typically elicited by the counselor through stories, metaphors, narratives and dialogues (Peavy, 1992; 1996). Reflection and meaningful activity are considered to be essential processes and the broader perspective of the client's whole life is considered as opposed to simply making a career choice or focusing on the vocational aspect of the client's life.

Enhancements to Offender Career Counselling

Usefulness of constructivism

As discussed earlier, numerous studies on the effectiveness of correctional programs as measured by recidivism have indicated that the most effective interventions account for and address offender risk, need and responsivity principles. Interventions which are psycho-dynamic, insight-oriented and non-directive have tended to have less impact (Lösel, 1996; Gendreau, 1996; Andrews and Bonta, 1994; Andrews et al., 1990). For this reason, it would be anticipated that a constructivist approach used in isolation as an intervention with offenders would encounter this legitimate criticism. Therefore, it is important to ascribe the following qualifier to the incorporation of the constructivist approach to offender rehabilitative programming: constructivist approaches should be viewed as a complement to current correctional program approaches and not as a replacement. Addressing offender needs most closely correlated to recidivism (such as the "big four" described above) could be viewed as the establishment of cognitive clarity, a term used by Brown and Brooks (1991) briefly referred to earlier. Brown and Brooks went on to state that

where clients face cognitive deficits or distortions, "appropriate action may require postponement of consideration of career related matters until cognitive clarity is attained" (1991, p.6).

Constructivist approaches have much to offer clients in terms of self-exploration (Neimeyer, 1993). In providing career counselling in a correctional setting, the practitioner is often challenged with clients who have selected one career option to which they rigidly cling. In other instances, correctional clients may have no clear sense of career/life direction and may behave apathetically regarding the exploration of possible career paths. Interventions that encourage creative means of self reflection, news ways of finding meaning through work and which foster self-direction and empowerment would assist immensely. Constructivist approaches offer many of these qualities and therefore appear well-suited to assist in career counselling and guidance of offenders, in particular, the exploration of possible career (life) futures.

Another strength of the constructivist approach is the value placed on the clients' perspective of what is meaningful for them in the development of their career plan. This can be very empowering for the individual and fosters a sense of control over their own career goal development. The client-centered nature of this approach also gives considerable weight to the client's circumstances, cultural (and sub-cultural in the case of offenders) influences, and socio-economic background. Also, this approach is very holistic in the sense that the client is encouraged to reflect on the larger picture of their 'life story' and not on certain traits or characteristics.

Offenders can be encouraged to explore many of their 'possible selves' (Oyserman and Markus, 1990), such as those they fear, expect and hope for. This approach can help develop the concept of alternate paths in life-career and germinate the motivation for career planning. Peavy

(1996) suggested a number of constructivist assessment techniques to aid career planning that facilitate the generation of personal meaning and promote reflection on old and new self-knowledge. These include conceptual mapping (client draws a map of their life space in relation to future career) and word sculpturing (a type of doodling that evokes the expression of ideas, feelings and hunches into a meaningful graphic). Autobiographical work such as keeping a journal, writing letters and self characterization (a procedure whereby the client is asked to write a character sketch of him/herself in the third person as if they were the main person in a play) was another method. Finally, Peavy (1996, p.13) described the process he calls “dependable strengths articulation” (helping clients identify good experiences and the personal strengths behind them) as useful and also suggested the use of individual portfolios in assessment.

The responsivity principle revisited

To reiterate, the principle of responsivity refers to characteristics of the offender that influence how responsive he/she is to types of treatment (Bonta, 1997) and the choice of the most appropriate mode of service to the client (Andrews, 1996). In applying this principle to the use of constructivist career counselling techniques with offenders, it becomes necessary to consider the likelihood that a proportion of the client group will not respond with favour to this approach. It is possible that some clients may find this approach too abstract, nebulous or ungratifying and will, as a result, be uncomfortable with the intervention. They may resist the idea of exploring and interpreting life stories. For example, clients who are very action-oriented (e.g. Holland’s *Realistic* personalities) could find this approach too abstract and therefore question the credibility of the counselor. For the intervention to be more meaningful for the client and therefore act as a more effective change agent in his/her life, the use of constructivist approaches in offender career

counselling must be employed selectively with the career planning personality and learning style of the client considered foremost.

A 'dual track' approach

Recent studies have found support for the theory that an individual's preferences for career counselling are related to his/her highest Holland code (Rosenberg and Smith, 1985; Niles, 1993; Boyd and Cramer, 1995). In examining this theory, Boyd and Cramer (1995) explored four aspects of client preferences as they related to Holland type: the framework of the counselling intervention, career aspirations, the process of decision-making, and counselor characteristics. Overall, support was found for the desirability of considering client personality type when devising a career counselling intervention. In particular, in looking at the framework of counselling variable, a significant difference was found between the social and realistic types, with the enterprising types responding similarly to social types and conventional types most similarly to the realistic types.

Danielle Riverin-Simard (1999) has recently suggested that individuals who face major career decisions fall into one of two main types of preferred approach. She proposed that in times of occupational stress, individuals tend towards one of two opposite poles, depending upon their characteristics. These poles are comprised of two opposing career principles; that of being and doing. More specifically, the first pole "I am, therefore I do" represents the idea that people who adhere to this pole believe they must first clarify who they are (or have become) in order to deal with the transition or career dilemma they face. They would consider their self-definition (I am) as their primary force in their occupational choices and acts (I do). She also claims that three of Holland's vocational typologies (artistic, social, enterprising) share this pole. These people could

be labeled 'thinkers' in the sense that introspection and self-reflection are key elements in their preferred approach to resolving career dilemmas.

On the opposite side, Riverin-Simard suggested that a distinctly different category of people "I do, therefore I am", tend to emphasize what they produce rather than who they are. This pole is represented mainly by Holland's other three typologies (Realistic, Investigative, Conventional) and is the dominant vocational principle of today's society. According to this principle, the work product is the foundation for the continual redefinition of the self. These people could be labeled 'do-ers' (or doers) in the sense that taking action and accomplishment are key to their preferred approach.

Accordingly, interventions used by counselors would be distinctly different depending upon which pole the client adhered to. The "I do" individuals must define themselves first by acting and doing. Interventions which encourage the client to speak of their emotions or experience or to redefine themselves should not be used first with this person. Instead, the first priority should be to get them to act; to accomplish and do things. Within a group career counselling setting, these clients would accordingly be most responsive to a 'doers' group whose intervention would be more structured, action-oriented and prescribed.

Riverin-Simard suggests that the "I am, therefore I do" individuals' first priority would be to redefine themselves through examination of their personal assets, qualities of their being that make them act and motivate them in vocational activities. Only after they rediscover "who they are" can they resume action. These clients would be expected to respond most favourably to a 'thinkers' group whose intervention would provide more emphasis on self-exploration and constructing meaning for their career paths, an intervention well suited to incorporate a

constructivist approach.

Utilizing learning styles

Learning style has been described as a set of factors, behaviours and attitudes that facilitate learning and influences how the individual learns (Reiff, 1992). As Hewitt (1995) stated “It is clear that not everyone learns in the same way or at the same pace. Thus, knowledge of the different types and ways of learning provides added understanding of the needs of the learner and greatly influences the practical usefulness and overall effectiveness of the teaching or training being offered” (p.172). Using awareness of these individual styles to modify the intervention towards improved compatibility with the style of learning, will increase the likelihood that there will be a positive learning or teaching experience (Sims and Sims, 1995). As the consideration of an individual’s vocational personality may contribute to designing a more responsive intervention, similarly, consideration of a client’s preferred learning style may be equally beneficial to the success of the intervention. This suggestion has, in fact, been noted recently by correctional researchers who have maintained that in addition to targeting criminogenic needs, program deliverers must account for offenders learning styles in their intervention delivery (Kennedy and Serin, 1997).

The concept of a bipolar nature of learning styles arose from the right and left brain functions research of Roger Sperry in the 1950s (Sims and Sims, 1995). Subsequent studies have indicated that left brain dominant individuals are thought to be more logical and organized, prefer an analytical approach to solving problems and prefer simple answers while right brain dominant people prefer to think more holistically, employ a more creative approach to problem solving, rely less on logic and are good at interpersonal relations (Sims and Sims, 1995, p.10).

Theories of learning style have become increasingly complex. Bloom (1976) proposed that effective learning occurs when the learner's cognitive behaviours and affective characteristics are met with an appropriate quality of instruction. Learning style is thought to be comprised of three components: cognitive, affective and physiological styles (Reiff, 1992; Keefe, 1987). Messick defined cognitive style as the way a person perceives, remembers, thinks and solves problems and has identified over 20 dimensions of cognitive style based on experimental research (Messick et al., 1976). Affective components of learning styles include a person's personality and emotional characteristics and are related to approaches that motivate the individual such as attention, valuing, expectancy, and incentives (Drummond and Ryan, 1994; Reiff, 1992; Keefe, 1987).

Drummond and Ryan, in their discussion of cognitive styles, advised that "in selecting an information source, it is important to take into consideration how a person prefers to perceive, think, and remember the information." (1994 p.257). Thus, it would appear that consideration of learning style during the intervention design would benefit the client. The question remains however, of what aspect of learning style theory can be incorporated into a design given practical limitations of resources for group interventions. In addition to left-brain (analytical) versus right-brain (holistic) as outlined above, other dimensions of learning style which may be considered include impulsive versus reflective (Kagan, 1965), field dependence versus field independence (Witkin, 1976), concrete versus abstract and sequential versus random (Gregorc, 1979), low versus high conceptual level (Hunt, Butler, Noy & Rosser, 1977), sensing versus intuitive and thinking versus feeling (Jung, 1921; Myers, 1962) to name a few.

At the risk of oversimplification, the best answer to this question may be to consider a bipolar approach to learning styles, as many theories appear to contain some commonalities, such

as concrete/experiencing versus abstract/ reflective. In addition to acknowledging practical limitations to group work, this approach would also serve to complement the process of identifying work personalities ('doers' versus 'thinkers') as outlined above, to determine the career counselling approach that clients would best respond. Although learning style preferences are thought to change over time (Dunn and Griggs, 1995), Dunn (1996) maintained that "during a period in which an individual has strong style preferences, that person will achieve most easily when taught with strategies and resources that complement those preferences" (p.2). Although an individual's learning preference may be subject to change over the duration of an intervention, knowing their preferences at the onset could determine how the client responds and therefore the overall outcome of the service.

As is commonly understood in working with adult learners, an approach that is experiential is often preferred (Hewitt, 1995; Simms and Sims, 1995). Kolb's (1984) experiential learning model may be useful in determining how adult learning styles can be identified and how this determination can be used to modify the approach taken in a career counselling intervention. Kolb maintained that there is a four stage cycle of learning that is structured around two dimensions of learning style: concrete experience (CE) versus abstract conceptualization (AC) (taking in experience) and reflective observation (RO) versus active experimentation (AE) (dealing with experience). The cycle begins with concrete learning experiences, moves to reflective experiences where the focus is building meaning and structured understanding, progresses to abstract experiences where theory building and logical analysis of ideas are central and ends with active experimentation experiences where application of what has been learned to real life occurs. Kolb proposed that the most effective learners have competencies in and use all

four stages when learning. However, some learners are more comfortable with a particular stage and prefer this approach, often skipping other stages.

It is the determination of this preference that is of particular interest here. An assessment tool called the Learning Style Inventory (LSI) has been developed by Kolb (1999), comprised of 12 sentence stems, each having four completers which are rank ordered by the test-taker. The responses are organized into the two bipolar concepts as described above. Katz (1986) administered a Hebrew version of the LSI to 739 undergraduate students from nine major study areas to test construct validity. Interestingly, the factor analysis indicated that differentiation between various career groups occurred mainly on the Abstract/Concrete dimension. Marshall (1985) in her investigation of relationships between LSI scores and preference for counselor approach, found a significant relationship only when a client chose a counselor for vocational concerns. She found that abstract learners (higher AC-CE scores) preferred either rational or behavioural approaches to counselling while concrete learners (lower AC-CE scores) preferred either the client-centered or experiential approaches.

Highhouse and Doverspike (1987) investigated the relationship between cognitive style, occupational preference and learning modes. They administered the Group Embedded Figures Test (GEFT), Kolb's LSI and Holland's Vocational Preference Inventory (VPI) to 111 introductory psychology students. Although no significant correlations were found between the GEFT and LSI, correlations between the VPI and LSI revealed that both the Realistic and Conventional typologies were positively correlated with the AE learning style, as were the Social and Enterprising types. Additionally, they found a positive correlation between the Artistic typology and the CE learning style.

Use of an individual's LSI score on their preferred way of taking in experience (concrete experience versus abstract conceptualization) may help in providing a correlation to an assessment of preferred intervention approach based on their Holland code as postulated by Riverin-Simard reviewed above. In effect, clients demonstrating a propensity towards an abstract conceptual learning style would be treated as more 'thinker' than 'doer' and would therefore be predicted to be responsive to a constructivist approach to career counselling and guidance.

Summary

Clearly, any career counselling intervention with a multi-needs group such as offenders must be multi-faceted in order to be effective. Career issues cannot be addressed in isolation; needs related to the likelihood of re-offending must be met as well. Attending to offender attitudes, both those of an antisocial nature indicated to be correlated with recidivism and those that are related to career issues, is essential for an effective intervention. For these attitudes to be modified, it is critical that clients experience meaningful and real learning situations where they are able to explore their attitudes and issues related to it (Simonson and Maushak, 1996). The creation of such learning situations requires the intervention to provide for individual differences in learning style and transition coping skills while still addressing skill deficits in a comprehensive manner. Unless offenders come to believe they have developed the resources and opportunities to live differently, then they will be less likely to even develop the intention to do so, even if attitude change has occurred.

Regardless of the career counselling approach taken, constructivist or conventional, offenders at high risk for recidivism will also need correctional interventions that are cognitive-behavioural in approach and target criminogenic needs. Such approaches may involve the

challenging of criminal belief systems and cognitive restructuring. Ideally, these interventions should be carried out in a coordinated fashion through a comprehensive case plan, in a setting that motivates the client and assists in the learning of pro-social behaviours.

The approach that has been outlined proposes to provide a more comprehensive and personalized group intervention for offenders requiring career counselling and guidance. The essential purpose of this strategy is to provide correctional clients with career counselling services that recognizes that differences exist among clients for preferred approaches, while at the same time operating within a limited budget. This “dual track” approach allows for the most basic diversity of client learning preferences to be addressed (eg. ‘doers’ versus ‘thinkers’) within the constraints of a cost-effective community intervention delivered to groups of ex-offenders. This will provide a proportion of clients who have shown a propensity towards a ‘constructivist’ approach to career counselling the opportunity to engage in alternative processes, activities and strategies. It is expected that this alternative approach would be more meaningful with greater responsivity from this group, but would not be as effective with those who do not show this proclivity.

The first step of implementing this proposed approach for offender career counselling is to accurately assess the intervention preferences of potential clients. This assessment should be sensitive to work personalities and dominant learning styles of clients, their perceived need for career counselling and their preferences for group versus individual learning environments. The career counselling preferences questionnaire was designed for this study to serve this function. In testing the usefulness of such an assessment tool, the initial phase of developing a new, more responsive approach to meeting the employment needs of offenders can be inaugurated.

CHAPTER III

METHODOLOGY

Introduction

Included in this chapter are descriptions of the population, sample and sampling procedure as well as procedures utilized to gather data for the study. Descriptions of the instruments used are provided and finally, the statistical procedures employed to analyse the data are described.

Sample

The population from which the sample was drawn was comprised of all adult, male offenders currently under the supervision of either the St. John's Area Office of the Correctional Service of Canada or the Avalon Region Corrections and Community Services of the Newfoundland Department of Justice at the time of sampling. In effect, this included all Federal and Provincial Parolees residing on the Avalon peninsula of Newfoundland (N = 75), all inmates of Her Majesty's Penitentiary and Salmonier Correctional Institute (N = 180), and all clients (excluding females and low-risk males) under supervision of the Corrections and Community Services office in St. John's (N = 430). This last group included individuals on electronic monitoring, a conditional sentence or under a probation order.

In order to provide a representational sample, a stratified random sampling procedure was used. The total sample size of 75 participants was determined to provide sufficient representation (11%) from which generalizations to the population under study could be made (Gay, 1996). The first stratification of the sample was made between Correctional Service of Canada (CSC) clients and Newfoundland Department of Justice (Justice) clients with the CSC stratum of 15 participants being only slightly over-representational of the actual population. This was justified by the need to

compensate for the relatively small proportion this group made of the target population. The second stratification of the sample was made within the group of Justice clients: those who were incarcerated (n = 18) and those under supervision in the community (n = 42). Both of these substratum represented approximately 10% of their corresponding populations.

Participants in each stratum were chosen randomly in the following manner. CSC produced a numbered list in alphabetical order by last name of all clients under the supervision of the St. John's Area office. Using a random number generator (range 01 - 75), 15 of these clients were chosen for the sample. In case any of those chosen refused to participate, an additional five names were similarly added as spares to the list. A similar procedure was used for incarcerated Justice clients, with the random selection of 18 participants (from a range of 001 - 180) utilized. For Justice clients under supervision in the community, a database search was first required to screen out female and low risk male clients. The resulting list (N = 430) was then subjected to the same random sampling procedure to obtain 42 participants along with an alternate list of random spares in case of participation refusal.

Instruments

Three separate instruments were administered to each study participant: Holland's Self-Directed Search, Form E (SDS-E), Fourth Edition; Kolb's Learning Style Inventory (LSI), Version 3; and the Career Counselling Preferences Questionnaire (CCPQ) developed for this study.

Self-Directed Search, Form E (SDS-E)

This instrument is based on and developed from John Holland's well established theory (Holland, 1966, 1973, 1985) that links personality with occupational choice. Holland developed

six basic personality types: Realistic, Investigative, Artistic, Social, Enterprising and Conventional (RIASEC) and in acknowledging that no individual is simply one type, he argued that people tend to affiliate with and be most like one, two or three of the types (McDaniels & Gysbers, 1992).

The six personality types are matched by six types of work-place environments on the assumption that these environments can be classified according to their demands and that people seek out work settings where there are others like themselves who share their interests and skills (Diamond, 1998). The SDS instrument seeks to estimate the test-taker's similarity to these six types by exploring experiences and competencies.

This instrument was first developed in 1970 and has since undergone several revisions. John Holland is the author and the current edition is published by Psychological Assessment Resources, Inc. It can be administered in 20 to 40 minutes. The Form E (easy) was selected because of its applicability to a special client group, that is, adults with low education. Form E was specifically designed for adults (and adolescents) with as low as a grade four reading level.

The SDS-E assessment booklet contains 192 items and is divided into the following six sections: 1) Possible Jobs 2) Likes 3) Competencies 4) Jobs 5) Rating Your Abilities and 6) Counting Your Answers. The first section asks the client to list up to five jobs they have thought about doing someday. The Likes section requires the test-taker to decide if each activity listed is liked or disliked and the Competencies section requires the same choice in terms of skills they have/want or do not have/want. In the Jobs section, a list of occupations is presented grouped under each of the six types and the client is required to choose each as either liked or disliked. The Rating of Abilities section presents six abilities and asks the test-taker to rate themselves on a six point scale from poorest to best. The last section is for tabulating the scores and produces a two

letter summary code (as opposed to a three letter code in the regular form) which is used to “locate jobs that you might like to do”. As this is a Level A instrument, examinees self-administer the assessment and then total all their scores, recording their top two scores in the spaces provided. These two scores comprise their “two-letter Holland Summary Code”. Although this instrument has been criticized in the past for errors related to self-administration, this edition of the instrument has made scoring very straightforward and uncomplicated as a result of adopting a two-letter code as opposed to the three-letter codes of Form R.

Very few theories of career development have been studied and reported on more than Holland’s. In fact, the professional manual (Holland, 1991) contains highlights of over 400 relevant reports. This form of scrutiny has led to many of the refinements, additions and modifications of the SDS over the past three decades and has served to provide face validity to the instrument based solely on the mere volume of study it has survived.

The manual reports that internal reliability of the SDS scales is moderate: KR 20’s for the six scales ranging from .67 to .94 (Holland, 1991). Comparisons of the internal consistency between the 1985 and 1990 revision was examined by Ciechalski (1998) and found to be high (Cronbach’s alpha above .95). The retest reliability of the SDS summary scales are reported in the manual to also be favourable (.81 to .92). Construct validity is not reported on in the manual because “the studies of construct validity are too extensive to summarize here, for they comprise the 400 or more investigations that have tested the hypotheses from the typology” (Holland, 1991). With predictive validity, the manual reports on a study conducted by the author which determined that “a person’s highest summary scale score predicts with moderate efficiency the category of occupational choice three years later”.

The SDS is not normed, nor does it rely on normed scores for interpretation. Holland has continued to argue that norms are unnecessary and that the use of raw scores with homogeneous scales is practical and valid. This would appear to make sense in light of how this instrument is designed as it attempts to match the examinee with other groups of test-takers categorized by occupation based on raw scores. In summary, Holland reports on the validity of the SDS as comparable to or exceeding other interest inventories that have “hit rates” of 40 to 55 per cent (Holland, 1991).

Learning Style Inventory (LSI)

This instrument was developed from David Kolb’s (1984) experiential learning model that holds there is a four stage cycle of learning structured around two dimensions of learning style: concrete experience versus abstract conceptualization (taking in experience) and reflective observation versus active experimentation (dealing with experience). The cycle is thought to follow a sequence that begins with concrete learning experiences, moves to reflective experiences where the focus is building meaning and structured understanding, progresses to abstract experiences where theory building and logical analysis of ideas are central and ends with active experimentation experiences where application of what has been learned to real life occurs. Kolb proposes that the most effective learners have competencies in and use all four stages when learning. However, some learners are more comfortable with a particular stage and prefer this approach, often skipping or not moving into other stages.

The Learning Style Inventory (LSI) has been developed by Kolb (1999) to help individuals assess their modes of learning and learning styles (Murphy, Impara & Plake, 1999). The LSI contains 12 sentence stems, each having four completers which are rank ordered from four to one

by the test-taker. Four is assigned to the completer with the stem that best characterizes the participant's learning style and one is assigned to the least. The responses are organized into the two bipolar concepts as described above. Reliability testing carried out since introduction of the first version in 1981 found the instrument to be rated as "strong in regard to reliability and fair in terms of validity" (Hickcox, 1995, p.34). Gregg (1989) in his review of this instrument, stated that the reliability of the LSI showed good internal reliability using Cronbach's Alpha but that further research is required to answer questions of validity.

Kolb (1984) claims that strong empirical support for the bipolar nature of the experiential learning model was found in a 1980 study by Gypen who found a strong negative correlation between concrete experience and abstract conceptualization as well as a somewhat weaker negative correlation between active experimentation and reflective observation. Kolb concedes that this does not prove validity of his model but does suggest that the LSI is an effective analytic tool for exploring the four learning styles put forth by his model.

Katz (1986) administered a Hebrew version of the LSI to 739 undergraduate students from nine major study areas to test construct validity. Using factor analysis and Guttman's Smallest Space Analysis, Katz found the results to "provide empirical substantiation and support construct validity of the inventory". More recently, Loo (1996) in his investigation of the construct validity of the LSI, administered the instrument to 149 management undergraduate students and, using factor analysis, found moderate support for construct validity of the two bipolar dimensions of the LSI.

Career Counselling Preferences Questionnaire (CCPQ)

The CCPQ was designed for this study to assess offender's preferences for career

counselling interventions. The questionnaire (Appendix A) contains 50 statements that require the respondent to indicate their level of agreement or disagreement with each statement on a six point Likert Scale. A six point scale was used in order to eliminate a middle answer. The response choices range from “strongly disagree” to “strongly agree”. A total of 50 items were developed in five categories that were considered significant to the determination of career counselling preference. The first two categories, the importance of work and the perceived need for counselling, contain five items each and were designed to assess the client’s motivation to engage in the workforce and to engage in a career counselling intervention. The third category, group versus individual counselling preference, contains four items which allow the client to indicate which of these two basic approaches are preferable. The fourth category contains 24 items and were constructed to assess client preferences for active (doing) versus reflective (thinking) approaches to career counselling. The final category of 12 items was developed to provide referencing to the six Holland types in order to investigate the questionnaire’s ability to detect differentiated Holland personalities through correlations with responses on the SDS-E.

Development of the 50 items was grounded in this writer’s 10 years of field work providing group and individual career counselling to offenders and ex-offenders. This process took place over several months and involved numerous revisions. As items were added to the questionnaire they were evaluated for literacy-level (an attempt was made not to exceed a Grade Eight reading level) and face validity by two experienced career counselors who work with offenders. Once the total group of 50 items was obtained, the items were intermixed throughout the questionnaire and adjustments were made to allow reverse scoring on approximately half of the items. This original draft of the questionnaire was reviewed for wording, item construction,

face validity and instrument structure by several individuals well-versed in career counselling and research design. Subsequent drafts were then produced as these revisions were incorporated into the design of the instrument.

In order to determine that the items addressed the theories they were designed to address, a “back translation” procedure similar to that used by Boyd and Cramer (1995), was employed. This process is thought to increase validity and involved five judges assigning the items back to the five categories from which they originated (see Appendix B). Three of the judges were correctional workers familiar with career counselling and Holland’s theory and the other two judges were graduate students trained in career counselling and familiar with the population.

Finally, the CCPQ was pilot tested with offenders to obtain their overall impressions of the instrument as well as an item by item critique. This review attempted to determine readability of each item, their comprehension of the items, their explanation of choices on each item and their sense of face validity. Final revisions were made to alleviate any ambiguities or difficulties encountered.

Interview Process

All participants who had been selected for inclusion in the study sample were contacted by phone or in person. A general description of the study was provided which included a brief summary of the three instruments involved. Potential participants were informed that participation was completely voluntary and anonymous and that refusal to participate would not be reported to their supervisory agency (parole or probation officer). If the individual agreed to participate, an appointment was made for the instruments to be administered at a time convenient for the participant.

Each participant met individually with the researcher in a either private interview room in the prison (for those incarcerated) or in a counselling room of the John Howard Society's C-STEP program in St. John's. This setting was chosen in the community to provide consistency for instrument administration, it's central location and also the positive client perception of this agency as an offender advocacy organization. The initial part of the meeting was used to describe the purpose of the study, the procedure involved and to answer any questions the participant had. The consent form was then reviewed and signed. The three instruments were administered in the order of the CCPQ first, followed by the LSI and finally the SDS-E. The participant was encouraged to take their time and ask questions if unsure of anything. The researcher moved out of the participant's vision but remained within earshot in case assistance was requested. Responses on each instrument were checked for errors or missed items before the interview ended. This meeting lasted approximately 40 - 60 minutes per participant.

Analysis

Microsoft Excel spreadsheets were utilized to initially organize the participant's responses from the three instruments. This data was then exported to the Statistical Package for the Social Sciences (SPSS) for Windows. The primary method of statistical analysis was the use of the Pearson correlation coefficient (r) to determine the direction and strength of the relationship between the variables examined in the study. All research questions posed in Chapter 1 were tested for statistical significance in this manner, where appropriate. Also, Cronbach's alpha was used to measure reliability of the three instruments used in the study.

CHAPTER IV

RESULTS AND STATISTICAL ANALYSIS

This chapter has been divided into three sections. The first section will present general findings regarding the study sample. The second will present the results of measures of reliability on each of the test instruments in turn. Correlations that were examined between constructs within each instrument will also be reported here. The third is subdivided into nine subsections in the order as posed as research questions in Chapter II. Accordingly, these nine subsections will each be explored in turn.

General Findings and Description of Sample

In total , sixty individuals participated in the study. The originally planned sample size of 75 was reduced to 60 due to difficulties in the responding rate of the probation strata. As only about one in ten probationers contacted kept their appointment for completion of the study questionnaires, the size of this strata was reduced from 42 to 27 participants after a three month period of data collection from this group. This sample represented about 6.4% of the target probation population. The two remaining strata of the sample, incarcerated and paroled participants, took part as planned, comprising 18 and 15 participants accordingly.

The average age of participants was 32.7 years, ranging from 19 to 59 years. The group aged 20 to 29 years accounted for 48.3% of all participants. The majority of participants were single (60%), followed by those reporting living common-law (15%) and married (11.7%). The remainder were separated, divorced or widowed. Most reported their home town being larger than 5,000 (76.3%) and the majority were currently living in the community in a non-halfway house setting (60%). Most (71.7%) were unemployed at the time of interview (see Table 1).

Table 1: Age, Employment Status, Home Town Size and Marital Status					
Age	19 years	20-29 years	30-39 years	40-49 years	50-59 years
n = 60	1.7% (1)	48.3% (29)	28.3% (17)	11.7% (7)	10% (6)
Employment Status	employed	unemployed	retired		
n = 60	26.7% (16)	71.7% (43)	1.7% (1)		
Home Town Size	greater than 5,000	less than 5,000			
n = 59	76.3% (45)	23.7% (14)			
Marital Status	Single	Married	Comm. law	Sep/Divorce	Widowed
n = 60	60% (36)	11.7% (7)	15% (9)	10% (6)	3.3% (2)

The level of education of the participants ranged from grade 5 to university graduate (Table 2). The average education was grade 10.4, with a mode of grade 10 (accounting for 20% of the sample). Two participants were university graduates, four others had completed some post-secondary education, nine more reported completing grade 12 and an additional six had received a high school certificate through the GED program. In response to the question regarding other training, 25 participants (41.7%) indicated they had completed some type of training. For this group, the most common training reported (12.1%) was ABE (Adult Basic Education) or GED (Graduate Equivalency Diploma), followed by computer training or courses (8.8%).

Table 2: Educational Background					
Highest Education	Gd. 5 - 9	Gd. 10 - 12	GED	some post-sec	university graduate
n = 60	26.7% (16)	53.3% (32)	10% (6)	6.7% (4)	3.3% (2)
Other Training	ABE	GED	Computer	Other	No Training
n = 60	8.8% (5)	3.3% (2)	8.8% (5)	21.7% (13)	58.3% (35)

The majority of participants (66.7%) in the study have not received any kind of career counselling in the past. Of the 18 respondents who reported receiving some kind of counselling in the past, 16 reported on the dates in which this occurred. Nine of the 16 (56.3%) reported this to have occurred in the past two years. In regards to the type of career counselling received, the majority (76.5%) of the 17 respondents who reported on this, indicated this to have occurred in a group setting. The single most common source of career counselling identified was the C-STEP Program (John Howard Society) career group, accounting for 28.3%.

Career Counselling	Yes	No	not stated		
n = 60	30% (18)	66.7% (40)	3.3% (2)		
Source	C-STEP	High Sch.	College	other group	Individual
n = 17	28.3% (6)	17.5% (3)	5.9% (1)	6.7% (4)	3.3% (2)
When Counselling	1980-89	1990-98	1999	2000	
n = 16	18.7% (3)	18.7% (3)	25% (4)	37.5% (6)	

Most participants were repeat offenders with only 20% reporting no previous convictions (Table 4). The mean number of previous convictions of participants was 9.1, with a range of 1 to 57 convictions. Just over 29% of participants reported 10 or more previous convictions. The length of current sentence (Table 5) ranged from no jail time (probation only) to 180 months (life sentence), with an average of 32.9 months for the 55 participants answering this question. In terms of time spent in jail (Table 4), 28.1% reported never having been institutionalized. The average cumulative time spent in jail for participants was 26.4 months, ranging from 0 to 120 months. Over 38 % of participants reported having spent two or more years incarcerated at this

point in their lives.

Number Previous Convictions	0	1-9	10-19	20-29	30 and more
n = 55	20% (11)	50.9% (28)	12.7% (7)	5.5% (3)	10.9% (6)
Total Time Incarcerated	0	1-12 months	13-23 months	2-5 years	over 5 years
n = 57	28.1% (16)	19.3% (11)	14% (8)	28.1% (16)	10.5% (6)

In terms of type of current offence (Table 5), all but six participants reported this information. The single most common offence for the study group was break and entry (16.7%), closely followed by assault (14.8%) and drug offenses (13%). Other types of offences reported were driving while impaired (9.3%), murder (7.4%), sexual assault (7.4%), robbery (5.6%), theft (5.6%), fraud (5.6%), driving while suspended (5.6%), trespassing/property damage (3.7%), breach of condition (3.7%) and drunk/disorderly (1.9%).

Current Offense	Breach Condition	Alcohol/ Drugs	Property	Robbery/ Break-in	Sex Offence	Assault/ Murder
n = 54	3.7% (2)	29.6% (16)	14.8% (8)	22.2% (12)	7.4% (4)	22.2% (12)
Current Sentence	No Jail Time	1-12 months	13-23 months	2-5 years	over 5 years	
n = 55	21.8% (12)	32.7% (18)	10.9% (6)	20% (11)	14.6% (8)	

In terms of most common work personality found in this sample, the Realistic typology

was dominant, with 56.8% of participants indicating this to be their dominant type according to SDS-E results. This was followed by the Social work personality with 20.5% of participants scoring highest in this typology on the SDS-E (Table 6). This trend was supported by results of the CCPQ, with the Realistic type being most common (42.1%) and the Social type second (36.8%). This was determined based on a differentiation of one or more points between typology total scores, that is, those participants with high scores tied in two or more typologies are discounted ($n = 38$). This trend becomes more distinctive when the differentiation criteria is increased to two points, with Realistic types accounting for 61.9% followed by Social with 23.8% of the sample ($n = 21$).

	Realistic	Investigative	Artistic	Social	Enterprising	Conventional
SDS-E $n = 44$	56.8% (25)	2.3% (1)	9.1% (4)	20.5% (9)	6.8% (3)	4.6% (2)
CCPQ $n = 38$	42.1% (16)	2.6% (1)	10.5% (4)	36.8% (14)	7.9% (3)	0% (0)

When asked to list most recent job, 51 of the 60 participants (85%) did so (Table 7). The most common job listed was labourer (19.6%), followed by construction worker (7.8%) and driver/courier (7.8%). Participants were also asked to list previous jobs, with 39 doing so. Taking the first occupation they listed in this category, the most common occupation identified was mechanic (10.3%), followed by labourer, construction worker, factory/plant worker and carpenter/carpenter helper, each accounting for 7.8%. A total of 42 different occupations were identified by participants.

Table 7: Employment Background						
	Labourer	Construction	Driver	Factory	Mechanic	Carpenter
Most Recent Job n = 51	19.6% (10)	7.8% (4)	7.8% (4)	2% (1)	3.9% (2)	3.9% (2)
Prior Jobs n = 39	7.8% (3)	7.8% (3)	2.6% (1)	7.8% (3)	10.3% (4)	7.8% (3)

Reliability of Instruments and Within Instrument Construct Correlations

Reliability of all instruments was measured using Cronbach's alpha.

Career Counselling Preferences Questionnaire (CCPO)

CCPO reliability.

Reliability of this instrument was examined for each of the 12 areas that the questionnaire was designed to investigate (Table 8). These areas include: whether clients are 'Doers' or 'Thinkers' (two areas), the importance of work in their lives, their perceived need for career counselling, their Holland 'type' (six areas: RIASEC), and whether they prefer group or individual career intervention. In order to increase reliability, several items that provided unreliable results were dropped from the questionnaire and are not included in subsequent correlation analyses..

Of the twelve items initially designed to investigate whether clients are 'Doers', five were dropped (questions 3, 4, 9, 13, 19). This provided a reliability of $\alpha = .67$ on the remaining seven items in this category. Of the twelve items initially designed to investigate whether clients are 'Thinkers', four were dropped (questions 7, 14, 36, 40). This provided a reliability of $\alpha = .61$ on the remaining eight items in this category.

Of the five items addressing the importance of work in their lives. three were dropped

(questions 8, 11, 35) due to unreliability. The resulting reliability was $\alpha = .76$. Of the initial five items which investigated respondents perceived need for career counselling, two were dropped (questions 23 and 48). This produced a reliability of $\alpha = .58$ for this construct.

A total of 12 questions were designed to determine client's dominate Holland type (two questions in each of six 'typologies'). No items were dropped. Inter-item reliability in each of the six types are as follows: Realistic, $\alpha = .53$; Investigative, $\alpha = .41$; Artistic, $\alpha = .49$; Social, $\alpha = .62$; Enterprising, $\alpha = .67$; Conventional, $\alpha = .43$.

Four questions investigated preferences for group or individual career intervention (two questions for each). No items were dropped. Reliability for the two group counselling items was $\alpha = .58$, as was for the individual counselling preference items ($\alpha = .58$).

Construct	Alpha (α)	N of cases	N of items	Item Mean
'Doers'	.67	59	7	4.46
'Thinkers'	.61	57	8	4.32
Impt. of Work	.76	60	2	5.22
Counselling Need	.58	58	3	4.41
Holland type R	.53	60	2	4.36
Holland type I	.41	59	2	3.09
Holland type A	.49	59	2	3.85
Holland type S	.62	59	2	4.56
Holland type E	.67	59	2	3.81
Holland type C	.43	59	2	2.89
Prefer Group	.58	60	2	3.08
Prefer Individual	.58	58	2	3.14

CCPQ construct correlations (intra-instrument).

Doer-Thinker Constructs. A Pearson r correlation revealed a significant positive correlation ($r = .33, p < .05$) between these two constructs (Table 9).

Importance of Work and Perceived Need for Career Counselling Constructs. These two constructs were found to be significantly and positively correlated ($r = .40, p < .01$, Table 9).

Preference for Group Counselling and Preference for Individual Counselling Constructs. A Pearson r correlation revealed a significant negative correlation ($r = -.38, p < .01$) between these two constructs (Table 9).

	Pearson r	Significance level
Doer - Thinker	.331*	.012
Impt. of Work - Need for Counselling	.404**	.005
Prefer Group - Prefer Individual	-.377**	.004
* $p < .05$ ** $p < .01$		

Work Personalities (RIASEC). Fifteen correlations were computed to assess the relationship of each construct with the other five (see Table 10). A total of nine significant correlations were found. Investigative was found to be positively correlated with Artistic ($r = .43, p < .01$), Social ($r = .32, p < .05$), Enterprising ($r = .44, p < .01$) and Conventional ($r = .52, p < .001$). Artistic was also found to be significantly correlated with Social ($r = .39, p < .01$) and Enterprising ($r = .31, p < .05$). Social was found to have a strong positive correlation with Enterprising ($r = .52, p < .001$) and a positive correlation with Conventional ($r = .26, p < .05$). Finally, a positive correlation was found between Enterprising and Conventional ($r = .42, p < .05$).

Table 10: CCPQ Intra-correlations (RIASEC)						
	R	I	A	S	E	C
R Pearson Sig. level		-.175 .186	.099 .455	-.221 .093	-.249 .057	-.161 .223
I Pearson Sig. level			.432** .001	.321* .013	.438** .001	.520*** .000
A Pearson Sig. level				.387** .002	.308* .019	.234 .075
S Pearson Sig. level					.524*** .000	.264* .043
E Pearson Sig. level						.420** .001
*p<.05 **p<.01 ***p<.001						

Self Directed Search (SDS-E)

SDS-E reliability.

Reliability of this instrument was examined for each of the 18 subsections that comprise the major portion of the SDS-E (Table 11). One subsection, "Rating Your Abilities", was not examined for reliability because it contains only one score for each typology. Reliability was found to be high for this instrument, with all subsections achieving an alpha of .80 or higher. The only exception was one item ("Become a good leader") in the Enterprising Skills section that considerably reduced the reliability of this section ($\alpha = .63$). Elimination of this item brought the reliability to $\alpha = .81$.

Scale		Alpha (α)	N of cases	N of items	Scale Mean
Realistic	Abilities	.89	58	10	6.90
	Skills	.83	59	10	7.66
	Jobs	.86	57	10	7.12
Investigative	Abilities	.83	60	10	3.33
	Skills	.89	60	10	3.85
	Jobs	.91	58	10	3.09
Artistic	Abilities	.88	57	10	3.98
	Skills	.87	60	10	3.22
	Jobs	.88	58	10	3.19
Social	Abilities	.83	59	10	5.93
	Skills	.84	60	10	7.40
	Jobs	.91	59	10	5.49
Enterprising	Abilities	.80	59	10	4.75
	Skills	.81	59	9	5.15
	Jobs	.87	60	10	3.58
Conventional	Abilities	.87	58	10	2.41
	Skills	.87	59	10	4.44
	Jobs	.90	59	10	2.37

SDS-E construct correlations (intra-instrument)

Fifteen correlations were computed to assess the relationship of each Holland Work Typology (RIASEC) with the other five (Table 12). Because these constructs were found to be significantly correlated with the equivalent CCPQ constructs (see Table 16), findings are very similar as those reported for CCPQ.

A total of ten significant correlations were found. Investigative was found to be positively correlated with Artistic ($r = .65, p < .001$), Social ($r = .41, p < .01$), Enterprising ($r = .51, p < .001$) and Conventional ($r = .49, p < .01$). Artistic was also found to be significantly correlated with Social ($r = .46, p < .01$) and Enterprising ($r = .63, p < .001$). Social was found to have a strong positive correlation with Enterprising ($r = .59, p < .001$) and a positive correlation with

Conventional ($r = .47, p < .01$). Finally, a strong, positive correlation was found between Enterprising and Conventional ($r = .61, p < .001$).

Table 12: SDS-E Intra-correlations (RIASEC)						
	R	I	A	S	E	C
R Pearson Sig. level		-.194 .159	-.213 .130	-.029 .834	-.216 .117	-.110 .439
I Pearson Sig. level			.594*** .000	.448** .001	.488*** .000	.557*** .000
A Pearson Sig. level				.423** .001	.601*** .000	.225 .105
S Pearson Sig. level					.566*** .000	.467*** .000
E Pearson Sig. level						.588** .000
* $p < .05$ ** $p < .01$ *** $p < .001$						

Learning Style Inventory (LSI)

LSI reliability.

Reliability of this instrument was examined for each of the four learning style constructs that the questionnaire was designed to investigate (Table 13). These areas include Concrete Experience (CE), Reflective Observation (RO), Abstract Conceptualization (AC) and Active Experimentation (AE). Each construct was comprised of 12 items. The reliability findings are as follows: Concrete Experience $\alpha = .33$, Reflective Observation $\alpha = .48$, Abstract Conceptualization $\alpha = .71$, and Active Experimentation $\alpha = .64$.

When seven unreliable items (3d, 5a, 6c, 8d, 10b, 11a, and 12b) were eliminated from the CE scale, reliability increased to $\alpha = .65$ for this construct.

Construct	Alpha (α)	N of cases	N of items	Scale Mean
Concrete Experience (5 items)	.65	60	5	-
Reflective Observation	.48	60	12	34.10
Abstract Conceptualization	.71	60	12	28.63
Active Experimentation	.64	60	12	34.18

LSI construct correlations (intra-instrument).

Six correlations were computed to assess the relationship of each LSI construct with the other three (Table 14). Four significant relationships were found. As expected, CE and AC were found to be negatively correlated ($r = -.37, p < .01$) as were RO and AE ($r = -.43, p < .01$). In addition to these correlations, CE was found to be negatively correlated with RO ($r = -.28, p < .05$) as was AC with AE ($r = -.53, p < .001$). Finally, the two combination scores which indicate the extent to which abstractiveness is emphasized over concreteness (AC - CE) and action over reflection (AE - RO) were found to be negatively correlated ($r = .31, p < .05$).

	Concrete Experience	Reflective Observation	Abstract Conceptual.	Active Experiment.	AE - RO
CE Pearson Sig. level		-.278* .032	-.370** .004	.039 .767	
RO Pearson Sig. level			-.031 .813	-.426** .001	
AC Pearson Sig. level				-.530*** .000	
AC - CE Pearson Sig. level					-.311* .016
* $p < .05$ ** $p < .01$ *** $p < .001$					

Correlational Comparisons

All correlational analyses were computed utilizing the Pearson r correlation method.

Research Question 1: What is the relationship between scores on the Holland Self-Directed Search (SDS-E) and scores on the Kolb Learning Style Inventory (LSI) in this offender population?

A total of 36 correlations were computed to examine this relationship (Table 15). Six significant correlations were found. The Investigative score for participants was found to be positive correlated with the Abstract Conceptualization score ($r = .35, p < .01$) as well as the Abstract - Concrete (AC - CE) score ($r = .30, p < .05$) and negatively correlated with the Active Experimentation score ($r = -.36, p < .01$). The SDS-E Artistic score for participants was negatively correlated with their Reflective Observation score ($r = -.28, p < .05$). Finally, participants' score for Holland's Conventional typology was found to be negatively correlated with their Active Experimentation score ($r = -.33, p < .05$) and their Active - Reflective (AE - RO) score ($r = -.29, p < .05$).

		CE	RO	AC	AE	AC - CE	AE - RO
R	Pearson	-.197	.130	-.015	.084	.088	-.019
	Sig. level	.145	.340	.910	.536	.521	.888
I	Pearson	-.104	.051	.346**	-.355**	.296*	-.254
	Sig. level	.437	.706	.008	.006	.024	.054
A	Pearson	.077	-.275*	.132	-.128	.055	.067
	Sig. level	.578	.042	.337	.353	.692	.627
S	Pearson	.131	-.051	-.016	-.028	-.075	.011
	Sig. level	.326	.703	.905	.834	.573	.935
E	Pearson	-.084	-.110	.187	-.144	.173	-.029
	Sig. level	.530	.410	.160	.280	.194	.827
C	Pearson	-.137	.137	.224	-.329*	.226	-.286*
	Sig. level	.315	.315	.097	.013	.094	.032
*p<.05 **p<.01							

Research Question 2: What is the relationship between scores on the Career Counselling Preferences Questionnaire (CCPQ) and scores on the Holland Self-Directed Search (SDS-E) for offenders?

Correlations were computed for each of the six CCPQ work typologies (Realistic, Investigative, Artistic, Social, Enterprising and Conventional) and its corresponding score in each of the six types as measured by the SDS-E. Correlations between all six pairs of the typologies were found to be statistically significant at the $p<.01$ level or higher (Table 16).

	CCPQ R SDS-E R	CCPQ I SDS-E I	CCPQ A SDS-E A	CCPQ S SDS-E S	CCPQ E SDS-E E	CCPQ C SDS-E C
Pearson Sig. level	.604*** .000	.343** .009	.402** .130	.548*** .000	.534*** .000	.423** .001
p<.01 *p<.001						

Correlations between the 'Thinker' and 'Doer' CCPQ constructs and each of the SDS-E typology scores were also calculated. Significant positive correlations were found between scores of four Holland types (Investigative, Artistic, Social and Enterprising) and the CCPQ Thinker construct (Table 17). One Holland type, Social, was found to be correlated with the CCPQ Doer construct.

	R	I	A	S	E	C
CCPQ Thinker						
Pearson	-.066	.387**	.423**	.347**	.270*	.130
Sig. level	.639	.003	.002	.009	.046	.354
CCPQ Doer						
Pearson	-.011	.126	.081	.282*	.006	-.009
Sig level	.937	.350	.560	.034	.965	.947
*p<.05 **p<.01						

Relationships between typology scores of the SDS-E and the four remaining CCPQ constructs (importance of work, perceived need for career counselling, preference for group counselling and preference for individual counselling) were examined (Table 18). One significant negative correlation ($r = -.27, p < .05$) was found between the SDS-E Social typology and the CCPQ preference for individual counselling.

Table 18: CCPQ Importance of Work, Need for Counselling, Preference for Group/Individual Counselling and SDS-E correlations (RIASEC)							
		R	I	A	S	E	C
CCPQ Impt. of Work	Pearson	.019	.017	-.050	.184	.083	.123
	Sig. level	.889	.902	.715	.167	.535	.368
CCPQ Need for Couns.	Pearson	-.049	.254	.155	.122	.085	.177
	Sig. level	.723	.059	.266	.372	.533	.201
CCPQ Prefer Group	Pearson	-.070	.188	.148	.027	.044	-.021
	Sig. level	.609	.158	.280	.838	.742	.878
CCPQ Prefer Individ.	Pearson	.062	-.238	-.149	-.266*	-.170	-.235
	Sig. level	.656	.078	.289	.047	.210	.088
*p<.05							

Research Question 3: What is the relationship between scores on the Career Counselling Preferences Questionnaire and scores on the Kolb Learning Style Inventory for offenders?

The relationships of six CCPQ constructs (Thinker, Doer, importance of work, perceived need for career counselling, preference for group counselling and preference for individual counselling) with each LSI learning style were examined (Table 19). Only one relationship, CCPQ Thinker and LSI Abstract Conceptualization learning style was found to be significant ($r = .33$, $p < .05$).

Table 19: CCPQ Thinker, Doer, Importance of Work, Need for Counselling, Preference for Group/Individual Counselling and LSI (CE, RO, AC, AE) correlations					
		Concrete Experience	Reflective Observation	Abstract Conceptual.	Active Experiment.
CCPQ Thinker	Pearson Sig. level	-.044 .745	-.118 .382	.328* .013	-.096 .479
CCPQ Doer	Pearson Sig. level	.067 .612	-.155 .241	.243 .063	.000 .999
CCPQ Impt. of Work	Pearson Sig. level	-.093 .478	.090 .495	.032 .807	-.052 .692
CCPQ Need for Coun.	Pearson Sig. level	.074 .583	-.004 .973	-.077 .567	-.203 .127
CCPQ Prefer Group	Pearson Sig. level	-.249 .055	-.092 .484	.163 .215	-.026 .841
CCPQ Prefer Individ.	Pearson Sig. level	.112 .404	-.079 .557	-.033 .803	.101 .450
*p<.05					

Relationships between each of the six CCPQ work typologies (RIASEC) and each of the four LSI learning styles were also examined (Table 20). Six relationships were found to be significant. The CCPQ Realistic type was found to be negatively correlated with the Concrete Experience learning style ($r = -.36, p < .01$) and positively correlated with Reflective Observation ($r = .26, p < .05$) and Abstract Conceptualization ($r = .26, p < .05$). The CCPQ Investigative type was significantly correlated with Abstract Conceptualization ($r = .42, p < .01$) and negatively correlated with Active Experimentation ($r = -.28, p < .05$). Finally, the CCPQ Social type was found to be negatively correlated with Reflective Observation ($r = -.27, p < .05$).

		Concrete Experience	Reflective Observation	Abstract Conceptual.	Active Experiment.
CCPQ R	Pearson Sig. level	-.361** .005	.255* .049	.255* .049	-.112 .395
CCPQ I	Pearson Sig. level	-.061 .645	-.194 .141	.416** .001	-.276* .034
CCPQ A	Pearson Sig. level	.045 .735	-.195 .140	.210 .110	-.060 .649
CCPQ S	Pearson Sig. level	.209 .113	-.273* .036	.098 .461	-.083 .530
CCPQ E	Pearson Sig. level	-.037 .778	-.152 .249	.207 .116	-.058 .661
CCPQ C	Pearson Sig. level	-.074 .578	-.009 .949	.099 .457	-.231 .078
*p<.05 **p<.01					

Research Question 4: What is the relationship between offender preferences for career counselling (doing versus thinking) as measured by the career counselling preferences questionnaire and Holland code?

Initial analysis involved the examination of relationships between the CCPQ Thinker construct and each of the theorized Holland corresponding typologies, Artistic, Social and Enterprising. Each correlation was found to be positive and significant (Table 17). An additional correlation was computed using the combination of Artistic, Social and Enterprising (ASE) to compare with CCPQ Thinker (Table 15). Using the SDS-E combination of ASE compared with the CCPQ Thinker, a strong positive correlation was found ($r = .41, p < .01$). No significant relationship was found between the combination of Realistic, Investigative and Conventional (RIC) with the CCPQ Thinker.

A parallel analysis was made of the relationships between the CCPQ Doer construct and each of the theorized Holland corresponding typologies, Realistic, Investigative and Conventional. Individually, none of these were significantly related to the Doer construct (Table 15). Only one Holland type, Social, was found to be correlated with the CCPQ Doer. A correlation computed with the combination of Realistic, Investigative and Conventional (RIC) with the CCPQ Doer was found to be not significant (Table 21). Also, the relationship of the Holland RIC combination with the CCPQ Thinker was not significant.

Table 21: ASE / RIC combinations and CCPQ Thinker/Doer correlations			
		SDS-E ASE	SDS-E RIC
CCPQ Thinker	Pearson Sig. level	.411** .003	.249 .091
CCPQ Doer	Pearson Sig. level	.162 .253	.102 .487
*p<.05 **p<.01			

Interestingly, examination of the relationship of SDS-E ASE with SDS-E RIC revealed a strong positive correlation ($r = .58$, $p < .001$).

Research Question 5(a): What is the prevalence of 'Thinkers' as indicated by the career counselling preferences questionnaire?

The mean score for participants in the eight CCPQ items which comprise the Thinker construct was 4.32 ($n=57$). This compares to the Doer mean (seven items) of 4.46 ($n=59$). Average Thinker and Doer scores were compared for each participant (Table 22) and 40% ($n = 55$) were found to have higher Thinker scores. Using a differentiation criteria of .5 between mean scores, 28.7% ($n = 31$) were found to have higher Thinker scores. Increasing this differentiation

criteria to a full 1.0 between mean scores decreases the proportion of Thinkers to 25% (n = 12).

Using the criteria of highest score in one of the six CCPQ RIASEC types as definition of Holland type and a differentiation criteria of two or more points, the prevalence of CCPQ Artistic, Social and Enterprising types (ASE) was examined. Of the 21 remaining cases, ASE types accounted for 33% of differentiated typologies (Table 22). If the differentiation criteria is increased to three or more points, this proportion decreases to 25% (n = 12).

Research Question 5(b): What is the prevalence of 'Thinkers' as indicated by SDS-E results (Artistic, Social and Enterprising differentiated types)?

Using the criteria of highest score in one of the six SDS types as definition of Holland type, only 36.4% (16 cases of n = 44) were either Artistic, Social or Enterprising (Table 22). Note that the sample was reduced due to some items not answered (14 cases) and also when there was a tie for highest score between an RIC type and ASE type (2 cases). Using a differentiation criteria of eight points in determination of Holland type (Holland's "Rule of 8" which suggests that only those with a difference of eight or more points between the first and second letters of their Holland code should be considered a "pure type"), only five of 22 differentiated typologies (22.7%) were ASE.

Research Question 5(c): What is the prevalence of 'thinkers' as indicated by LSI results (Abstraction and Reflection learning styles) in the offender population?

An examination of each mean score across the four learning styles of the LSI revealed the AC mean to be 2.38. The CE mean was 1.57, while both the RO mean and the AE mean were found to be 2.84 (n=60). The combination scores AC - CE (Abstraction over Concreteness) and

AE - RO (Action over Reflection) were examined for each participant. An AC - CE score was considered to indicate an Abstraction style if the score was 13 or higher (upper quartile). An AE - RO score was considered a Reflective style if the score was -5 or lower (lower quartile). These criteria were established based norms provided with the LSI (Kolb, 1999). As Table 22 indicates, this analysis suggested that Thinkers were a minority in the study sample as indicated by Abstraction style (15%) and Reflecting style (36.7).

	CCPQ DOER/THINKER \bar{x}			CCPQ ASE		SDS-E ASE		LSI	
	Highest \bar{x}	.5 pt. Diff	1.0 pt. Diff	2 pt. Diff	3pt. Diff	High Point	Rule of 8	AC-CE abstract	AE-RO reflect
%	40	28.7	25	33	25	36.4	22.7	15	36.7
n	55	31	12	21	12	44	22	60	60

Research Question 7: What is the prevalence of offenders who perceive a need for career counselling?

Three items of the CCPQ which remained following the reliability analysis (1,37,44), showed a mean score of 4.41 (n=58) for this construct (note that item 37 is reverse scored). Using a scale midpoint of 3.5 (scale ranging from 1, Strongly Disagree, to 6, Strongly Agree) as a differentiation criterion, 86.2% of the participant's mean scores for the three items were above the midpoint (Table 23). This would suggest that a large majority of the sample feel they require career or employment assistance. If the differentiation criterion is increased to a mean score of 4.0 or higher, 70.7% of participants still fall into this category.

Using an alternate differentiation strategy, a criteria was established requiring that a

participant score a 5 (Agree) or 6 (Strongly Agree) in two or more of the three items in order to be included. Based on this approach, 58.6% of participants perceive a need for career help (Table 23).

Differentiation Criterion	\bar{x} of >3.5	\bar{x} of 4 or higher	score 5 or 6 in two or three items
n = 58	86.2% (50)	70.7% (41)	58.6% (34)

Research Question 8: What is the prevalence of offenders who prefer group counselling over individual?

Four items of the CCPQ investigated these preferences. The mean of the scores for the two group counselling preference items (2, 41) was 3.08 (range .27, n = 60). The individual counselling preference (items 22, 32) mean score was 3.14 (range .62, n = 58). As was stated above, a Pearson r correlation revealed a significant negative correlation between these two constructs ($r = -.38$, $p < .01$). An examination of the case summaries for these items revealed that 46.7% of participants did not score above the midpoint score of 7 (range of 2 to 12) in either group or individual counselling scores (Table 24). An additional 6.7% scored above the midpoint in both group and individual scores. The remainder were equally split at 23.3% each in scoring above the midpoint for either group or individual preferences.

	score of < 7 in both	score of > 7 in both	score of > 7 in group preference	score of > 7 in indiv. preference
n = 60	46.7% (28)	6.7% (4)	23.3% (14)	23.3% (14)

Research Question 9: What is the relationship of specific demographic variables such as age, size of hometown, past career counselling, years of education, length of current sentence, number of previous convictions, and total months spent incarcerated to offenders' preferences for career counselling?

Correlations were computed to examine the relationships between CCPQ constructs (Thinker, Doer, importance of work, need for counselling, RIASEC, preference for group intervention, preference for individual intervention) and age. This process was replicated for hometown size (smaller/larger than 5,000), past career counselling (yes/no), level of education, length of current sentence, number of previous convictions, and total months spent incarcerated in the past (Tables 25 and 26). Five significant relationships were found. Size of hometown was found to be negatively correlated with the CCPQ Enterprising (E) score ($r = -.27, p < .05$). Level of education was negatively correlated with CCPQ Realistic (R) score ($r = -.29, p < .05$) and positively correlated with CCPQ Investigative (I) score ($r = .36, p < .05$). Total time spent incarcerated was positively correlated with CCPQ Realistic typology ($r = .29, p < .05$) and time incarcerated was negatively correlated with CCPQ Investigative typology ($r = -.35, p < .01$).

Table 25: Age, Hometown Size, Past Career Counselling and Level of Education with CCPQ correlations

		Age	Home-town size	Past Career Counselling	Level of Education
CCPQ Thinker	Pearson Sig. level	-.217 .106	-.029 .832	.197 .142	.274 .068
CCPQ Doer	Pearson Sig. level	.112 .397	-.230 .083	-.016 .907	-.010 .946
CCPQ Impt of Work	Pearson Sig. level	.151 .250	-.014 .916	.001 .994	.076 .613
CCPQ Need for Coun	Pearson Sig. level	-.135 .312	.192 .154	.112 .402	.009 .952
CCPQ Prefer Group	Pearson Sig. level	.230 .077	-.023 .864	.072 .584	-.056 .709
CCPQ Prefer Indiv	Pearson Sig. level	-.244 .065	.082 .545	-.057 .670	.082 .589
CCPQ Realistic	Pearson Sig. level	.108 .412	-.115 .384	-.118 .371	-.292* .045
CCPQ Investigative	Pearson Sig. level	-.123 .354	-.126 .344	.080 .545	.360* .014
CCPQ Artistic	Pearson Sig. level	.056 .674	-.076 .570	.053 .693	-.035 .820
CCPQ Social	Pearson Sig. level	.091 .492	-.037 .783	.127 .338	.129 .394
CCPQ Enterprising	Pearson Sig. level	.248 .058	-.269* .041	.056 .671	.264 .076
CCPQ Conventional	Pearson Sig. level	-.052 .695	.107 .424	-.052 .693	.280 .059
*p<.05 **p<.01					

Table 26: Length of Current Sentence, Total Convictions and Total Time Incarcerated with CCPQ correlations				
		Length Curr. Sent.	Total # Convict.	Total Time Incar.
CCPQ Thinker	Pearson	-.142	.014	.013
	Sig. level	.397	.924	.924
CCPQ Doer	Pearson	-.183	.094	.050
	Sig. level	.264	.497	.716
CCPQ Impt of Work	Pearson	.225	.097	.097
	Sig. level	.169	.483	.474
CCPQ Need for Coun	Pearson	-.032	-.089	-.179
	Sig. level	.848	.526	.192
CCPQ Prefer Group	Pearson	-.126	-.010	-.191
	Sig. level	.443	.940	.155
CCPQ Prefer Indiv	Pearson	-.240	.186	.202
	Sig. level	.142	.182	.139
CCPQ Realistic	Pearson	.087	.217	.291*
	Sig. level	.600	.111	.028
CCPQ Investig.	Pearson	-.248	.075	-.350**
	Sig. level	.128	.590	.008
CCPQ Artistic	Pearson	-.259	.019	-.058
	Sig. level	.112	.889	.671
CCPQ Social	Pearson	.111	-.070	.188
	Sig. level	.500	.614	.166
CCPQ Enterpris.	Pearson	.138	-.061	-.021
	Sig. level	.408	.663	.876
CCPQ Convent.	Pearson	-.153	-.087	-.225
	Sig. level	.352	.530	.095
*p<.05 **p<.01				

Correlations were similarly computed for SDS-E scores (RIASEC) and LSI scores (CE, RO, AC, AE). Three significant correlations were found (Tables 27 and 28). Level of education was found to be positively correlated (Table 27) with both the SDS-E Investigative score ($r = .29$, $p < .05$) and the SDS-E Artistic score ($r = .38$, $p < .05$).

Table 27: Age, Hometown Size, Past Career Counselling and Level of Education with SDS-E and LSI correlations					
		Age	Home-town size	Past Career Counselling	Level of Education
SDS-E Realistic	Pearson	.124	-.103	-.096	-.197
	Sig. level	.363	.456	.481	.205
SDS-E Investigative	Pearson	.054	-.119	-.029	.293*
	Sig. level	.687	.376	.830	.048
SDS-E Artistic	Pearson	-.075	.158	.175	.380*
	Sig. level	.585	.250	.202	.012
SDS-E Social	Pearson	.142	-.254	.088	.133
	Sig. level	.289	.057	.510	.382
SDS-E Enterprising	Pearson	.107	-.021	-.035	.220
	Sig. level	.425	.878	.795	.147
SDS-E Conventional	Pearson	.070	-.087	-.122	.006
	Sig. level	.606	.529	.369	.969
LSI CE	Pearson	-.202	-.099	-.032	.015
	Sig. level	.122	.454	.809	.921
LSI RO	Pearson	.131	.046	.060	-.062
	Sig. level	.318	.731	.650	.680
LSI AC	Pearson	.041	-.220	-.029	.035
	Sig. level	.754	.093	.824	.817
LSI AE	Pearson	.108	.096	.132	-.040
	Sig. level	.411	.468	.314	.790
*p<.05					

A third significant relationship (Table 28) was found to exist between time incarcerated and the SDS-E Realistic typology ($r = .28, p < .05$).

Table 28: Length of Current Sentence, Total Convictions and Total Time Incarcerated with SDS-E and LSI correlations				
		Length Curr. Sent.	Total # Convict.	Total Time Incar.
SDS-E Realistic	Pearson	.080	.116	.281*
	Sig. level	.650	.420	.042
SDS-E Investigative	Pearson	.041	.030	.039
	Sig. level	.805	.831	.777
SDS-E Artistic	Pearson	-.206	-.003	-.082
	Sig. level	.234	.983	.559
SDS-E Social	Pearson	.103	-.053	.210
	Sig. level	.537	.707	.124
SDS-E Enterprising	Pearson	.070	.030	.070
	Sig. level	.682	.829	.611
SDS-E Conventional	Pearson	.167	-.098	-.114
	Sig. level	.329	.494	.416
LSI CE	Pearson	-.148	-.097	-.254
	Sig. level	.369	.480	.057
LSI RO	Pearson	.197	-.106	.146
	Sig. level	.229	.440	.280
LSI AC	Pearson	-.091	.093	-.099
	Sig. level	.583	.499	.463
LSI AE	Pearson	.041	.055	.145
	Sig. level	.805	.690	.283
*p<.05				

Summary

A brief synopsis of the major findings of the study has been provided as a conclusion to this chapter. A more detailed summary, examination and discussion of the results will follow in Chapter V.

The majority of participants were found to be unemployed, repeat offenders who had not

received any form of career counselling previously. Over 70% have been imprisoned at some time, almost 40% for more than two years. The most common Holland personality was found to be the Realistic type in this sample, as indicated by results of both the SDS-E and the CCPQ. Reliability of the SDS-E was found to be .80 and higher, while reliability of the other standardized instrument used in the study, the LSI, was lower (alpha of .33 to .71). The study-designed instrument, the CCPQ, was found to produce reliability alphas ranging from .41 to .76 for this sample.

Strong positive correlations were found between the SDS-E and the CCPQ on each of the six Holland typologies, suggesting a role for the CCPQ in screening for work personality. The CCPQ also indicated that the majority of participants perceived a need for career counselling but that approximately half preferred neither group nor individual interventions, the remainder equally split in their preferences for these two approaches. The only Holland typology found to be correlated with the group/individual preference was the Social type, showing a negative correlation with individual career counselling.

The Thinker construct of the CCPQ was found to be significantly and positively correlated with four of the Holland types, Artistic, Social, Enterprising and Investigative. The Doer construct, however, was found to be correlated with only the Social typology. The Realistic and Conventional Holland types were not found to be significantly correlated with either of these constructs. Approximately 25% of the sample were found to be 'Thinkers'. An unexpected finding was a positive correlation between the Thinker and Doer scores on the CCPQ, suggesting the possibility that another construct may be involved in the explanation of these findings.

Results from the LSI showed a positive correlation between the abstract score (AC) and the CCPQ Thinker score. Interestingly, the LSI AC score was also positively correlated with the

Investigative typology, supporting the finding of this Holland type's affinity to the Thinker construct.

Finally, significant correlations were found between four Holland typologies and three demographic variables of the sample. Years of education was found to be positively correlated with both the Investigative and Artistic types, but negatively correlated with the Realistic typology. On the other hand, the total time incarcerated was found to be positively correlated with the Realistic scores but negatively correlated with Investigative scores. The last demographic variable found to be significantly correlated with a Holland type was size of home town. This was found to be negatively correlated with the Enterprising typology scores of the CCPQ.

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

Introduction

The major conclusions and recommendations of this study have been placed in Chapter V. Consisting of two primary sections, this chapter includes a summary of the major findings as well as a discussion of their significance and implications. This section is organized around the major themes emerging from the results of this study. The second section of Chapter V provides a description of the recommendations arising from the study's findings. Recommendations are made for both intervention strategies as well as for future research directions.

Conclusions and Implications

Participant Responding

From the early onset of this study design, a concern arose regarding the responses of an offender study group in regards to possible 'antisocial' approaches to questionnaire responding. Specifically, questions were raised about the validity of their responses: would the questionnaire be taken seriously, would answers be skewed deliberately, would participants attempt to guess the purpose of the questions, would answers be made randomly to shorten the response time?

Efforts were made throughout the study design and procedure to address these concerns. The instruments chosen were easy to read and reverse scoring on many items was incorporated into the study-designed instrument (CCPQ). The voluntary nature of participation was emphasized to respondents in an attempt to reduce resistance. Participants were treated very respectfully at all points of contact. The introductory description of the purpose behind the study was given orally prior to commencing a test session and included a brief description of possible benefits to future offenders by way of improved career services.

The results of the study appear to indicate that participants' responses were genuine and valid. There are several pieces of evidence which indicate this. First of all, the unemployment rate which was self-reported by participants (71.7%) very closely matches that reported by Correctional Services Canada (76%). Second, a strong positive correlation ($r = .40, p < .01$) was found to exist between the importance of work to participants and their perception of their need for career help. This would appear to be logical, as offenders who do not feel that work is an important element of their lives at this point in time would be expected to possess a low perceived need for a career intervention. Third, a strong negative correlation ($r = -.38, p < .01$) was found between a preference for group intervention and preference for individual intervention. This also, fits with ones' expectations, as the two approaches are opposed. Finally, all of the six Holland types were reported consistently by two instruments, the SDS-E and the CCPQ, with strong positive correlations existing between them on each type (RIASEC).

Compromising the validity of the study was raised when it was found that the response rate for the probation strata was lower than expected. Reasons for this low response are uncertain, although a higher dropout rate in treatment programs is often attributed by field staff to probationers than to other supervised groups, leading to staff speculation about the motivation of probationers in general. However, this portion of the sample remained the largest strata in the present study and represented 6.4% of the probation population. Also, although it could be argued that the final probation sample may under-represent offenders of high need and risk (the reasoning that these individuals would be less likely to keep appointments), the inclusion of parolees and institutionalized offenders ensures that high need/risk offenders are represented. In fact, over 80% of participants were repeat offenders and over 70% had been incarcerated, with almost 40% of the sample having been incarcerated for over two years in total.

Usefulness of the Study-designed Instrument: the CCPQ

The results of this study indicated that the Career Counselling Preferences Questionnaire provides a self-reporting, brief and moderately reliable instrument for assessing a number of issues important to the design and delivery of meaningful career interventions for offenders. Participants for the most part, were able to complete the questionnaire independently, requiring practically no assistance (the only exception to this was in the case of two participants who were functionally illiterate and required oral administration of all three instruments). Participants completed the CCPQ in typically ten or fifteen minutes and reported no comprehension or language problems.

Through reliability testing employing Cronbach's alpha, the total number of items on the instrument was reduced from 50 to 36. This was due mainly to removal of nine items from the 24 dedicated to assessing Thinkers and Doers. Reliability of the instrument was favourable, with alphas of .61 and .67 for Thinkers and Doers respectively, .76 for the importance of work and .58 for the perceived need for career counselling. The preference for group or individual counselling interventions also were found to be reliable at $\alpha = .58$. Reliability measures for the six Holland types that the instrument assessed ranged from alphas of .41 for Investigative to .67 for Enterprising (see Table 8). These reliability findings are adequate for research purposes but further refinement and data are needed before the instrument could be used for clinical applications.

Perhaps one of the more notable findings regarding the CCPQ were the very strong relationships between each of the six Holland type scores it generated and the corresponding Holland scores on the SDS-E (see Table 16). Investigative and Artistic typologies were significantly correlated at the $p < .01$ level while the other four showed even stronger correlations. significant at the $p < .001$ level. Considering that a total of 12 questions on the CCPQ were

devoted to determining Holland type compared to 198 questions on the SDS-E, these findings are quite impressive. Obviously, the major trade-off for brevity is reliability, as the SDS-E proved superior in this regard, with alphas ranging from .80 to .91 in this study (see Table 11). Despite this however, the CCPQ would appear to provide an efficient screening tool for Holland type, allowing the clinician to easily determine client preferences based on this factor, without having to administer a much longer questionnaire such as the SDS-E. Until reliability of the CCPQ is improved, however, it will not replace the SDS-E in its role of identifying specific occupational interests of clients with a strong degree of confidence.

The CCPQ was also able to assess the degree to which respondents indicate a need for career intervention. The importance of work to the respondent was found to be reliable at $\alpha = .76$, the highest for any of the CCPQ constructs. The purpose of this construct was to assist with screening: clients scoring low in this area would be thought to be either focussed on other more pressing personal issues or to be unmotivated to deal with career issues at this time.

Related to this was the construct of perceived need for career counselling or career help. This added construct was necessary due to the likelihood that some clients indicating that work is very important to them may not have a need for career intervention. The reverse is also true: some clients who may not feel that work is not important to them at this point in their lives may none the less perceive a need for career help. The CCPQ indicated that the majority of participants perceived a need for some assistance. Additionally, the CCPQ was able to screen for those who indicated they needed career intervention at different levels of need, based on the criteria used (see Table 23). The CCPQ would thus be useful in screening through a large number of offenders to determine the quantity and intensity of career counselling need in that population, and which individuals, in fact, are motivated to receive help in this area.

The CCPQ was also designed to screen respondents for preferences regarding group or individual counselling interventions. This construct was considered important as these are the two primarily different ways of delivering interventions and in fact, represent the two major forms of career intervention services currently available to this population. Identifying these preferences has implications both broadly and individually. Broadly, the CCPQ could assist in the allocation of resources in prison and community corrections for group and individual services and could also play a role in shaping a particular service. Individually, the CCPQ could also serve as a screening tool to assist individual clients in choosing which service is most suited to their preferences and style. Both of these factors would serve to enhance offender responsiveness to the intervention. The CCPQ was able to indicate approximately half the sample preferred one type of intervention over the other. As with the need for counselling construct, the intensity of these preferences could also be determined by the CCPQ by adjusting the scoring criteria on these items.

Thinking versus Doing in Response to Career Distress

One of the primary purposes of this study was to investigate the idea put forward by Riverin-Simard (1999) that in times of occupational stress, individuals tend towards one of two opposite poles, either of clarifying who they are and will become (Thinker) or what they produce (Doer) depending upon their characteristics. To briefly review, this theory maintains that a 'Thinker's' first priority would be to redefine themselves through examination of their personal assets, qualities of their being that make them act and motivate them in career activities. Only after rediscovery of these qualities can they resume action. Further, Riverin-Simard postulates that this group share three of Holland's vocational typologies: Artistic, Social and Enterprising.

On the other hand, a 'Doer' must define themselves first by acting and doing. According to this concept, the work product is the foundation for the continual redefinition of the self. Thus,

taking action and accomplishment are key to their preferred approach. This type is represented mainly by Holland's other three typologies (Realistic, Investigative, Conventional).

Although some support was found for this theory, the results were mixed. Comparisons of the SDS-E scores with the CCPQ Thinker scores revealed that four of Holland's six typologies were significantly correlated with this construct. Three of these four were Artistic, Social and Enterprising (ASE); Holland types proposed by Riverin-Simard to share the Thinker pole. Further, when scores of these three types are totaled for each participant, this combined ASE score on the SDS-E was found to be strongly correlated with the CCPQ Thinker score ($r = .41$, $p < .01$). The equivalent combination of Realistic, Investigative and Conventional (RIC) SDS-E scores was found to be not significantly correlated with the CCPQ Thinker scores. Finally, when comparing scores for the CCPQ Doer with the SDS-E ASE combination, the resulting correlation was not significant.

These results then, lend support to the existence of a relationship between Holland's artistic, social and enterprising work personalities and a 'Thinker' approach to career distress or transition. However, other findings from this study suggest this whole postulate to be more complex than first proposed, at least for this population. One of the greatest detractors is the results regarding the Investigative typology. Scores for this type on the SDS-E were found to be strongly and positively correlated with the Artistic, Social and Enterprising typologies (as well as the Conventional typology). This effect was replicated through the CCPQ results. Additionally, the Investigative scores on the SDS-E were found to be positively correlated with the CCPQ Thinker scores ($r = .39$, $p < .01$). It would appear then, that the Investigative typology does not conform to its proposed membership in a 'doing' genre. In fact, higher scores in this typology are correlated to higher scores in the 'thinking' typologies (ASE) as well as to the CCPQ Thinker

construct.

This notion that the Investigative typology is actually distinct from the Realistic typology, instead of similar, is supported by other results of the study. For example, higher Investigative scores (in both SDS-E and CCPQ) were found to be positively correlated with years of education and negatively correlated (CCPQ scores only) with time spent in jail. Conversely, higher Realistic scores (in both SDS-E and CCPQ) were found to be positively correlated with time spent in jail and negatively correlated (CCPQ scores only) with years of education, the complete opposite. Additionally, scores for the LSI Abstract Conceptualization (AC) learning style were found to be positively correlated with both the SDS-E and CCPQ Investigative scores. The LSI AC - CE (abstraction over concreteness) score was also positively correlated with the SDS-E Investigative score. Furthermore, SDS-E Investigative scores were found to be negatively correlated with the LSI Active Experimentation (AE) scores and the CCPQ Investigative scores were found to be negatively correlated with the LSI Concrete Experience (CE) scores. These findings strongly suggest that the Investigative occupational personality is very much an abstract learner and prefers a “thinkers” approach to career transition and counselling as opposed to a “doers” approach.

Alternatively, no significant correlations were found between any of the Holland Realistic, Investigative and Conventional typologies and the CCPQ Doer scores. Upon examination of the relationship of these three Holland types and LSI learning styles, it was found that the SDS-E Conventional type was negatively correlated with LSI active over reflective (AE-RO) scores. Similarly, the CCPQ Realistic type was negatively correlated with LSI Concrete Experience (CE) scores but positively correlated with LSI Abstract Conceptualization (AC) and Reflective Observation (RO) scores. These findings would not be expected of “doers” and indeed, are somewhat surprising. This is particularly true of the negative correlation between the Realistic

type and the LSI Concrete learning style. One possible explanation for this may rest with the LSI's ability to accurately measure this style. The LSI's reliability in CE scores for this sample was very low when all 12 items were included ($\alpha = .33$) and was only improved when seven items were dropped ($\alpha = .65$). Also, upon examination of the five remaining items that are used to construct the CE score, it is apparent that the respondents feelings are emphasized (eg. "when I learn, I like to deal with my feelings", "I learn by feeling", "I learn best when I rely on my feelings", "I learn best when I trust my hunches and feelings") in this learning style. It may be possible that offenders reacted negatively to these items based on this emphasis and, as Realistic types were the most common in this sample, this significant negative correlation was found. Thus, the usefulness of the LSI instrument to indicate an inclination towards a 'concrete' learning style in this sample is doubtful. In fact, Kolb in defending the LSI, has often argued that the best measure of his instrument was not reliability, but construct validity (Highhouse and Doverspike, 1987). As well, none of the significant correlations found by Highhouse and Doverspike between LSI styles and Holland type were replicated by this study.

Overall, results from the LSI proved to be mixed on finding a means of triangulating evidence in the investigation of Riverin-Simard's theory. Support for the theory and for the CCPQ's ability to identify Thinkers, came from the LSI when a positive correlation was found between the LSI Abstract Conceptualization score and the CCPQ Thinker score for participants. However, the positive correlation of the LSI AC score and the CCPQ Realistic typology contradicts the theory, as mentioned above. The impact of this correlation on the theory is somewhat diminished, however, as it was not replicated by the SDS-E Realistic scores. None-the-less, the correlation is opposite to that expected based on the theory and cannot be dismissed, especially when the relationship between the two measures (SDS-E and CCPQ) of Realistic

typology is strong ($r = .60, p < .01$).

The LSI Reflective Observation (RO) scores also presented findings contradictory to Riverin-Simard's theory. As mentioned above, the CCPQ Realistic typology was positively correlated with LSI RO scores while the CCPQ Social and SDS-E Artistic typologies (both proposed 'thinkers') were found to be negatively correlated with the LSI RO scores. The Reflective Observation style is described by Kolb (1999) as "learning by reflecting" and involves viewing issues from different perspectives and looking for the meaning of things. It should be noted that the RO scores were the least reliable of the LSI instrument ($\alpha = .48$) and perhaps should not receive undue attention here because of this. At the very least however, one may conclude that these Holland typologies are not simply categorized on one continuum, such as thinking-doing, and most probably represent a number of complexities and constructs.

Thinking, Doing and Readiness for Change

Another unexpected finding which is quite interesting is the positive correlation found between CCPQ Thinker and Doer scores ($r = .33, p < .01$). Thus, individuals who scored higher on the thinking construct, also scored higher on the doing construct. This was also found to be true for the Artistic, Social and Enterprising (ASE) total score on the SDS-E when compared to Realistic, Investigative and Conventional (RIC) total scores. These Holland type combinations (based on the Thinking/Doing dichotomy theory) were found to be positively correlated ($r = .58, p < .001$) with each other. Again, this would suggest that the higher the score on the ASE combination, the higher the score on the RIC combination. This effect would appear to be mainly attributed to the Investigative typology (correlated positively with each of Artistic, Social and Enterprising) and the Conventional typology (correlated positively with both Social and Enterprising). Perhaps another construct is involved in the explanation of these findings: readiness

for change.

If the Prochasta and DiClemente (1986) stages of change model described earlier were considered in light of these findings, one could speculate that individuals scoring higher in both Thinker and Doer constructs have moved through the Precontemplation and Contemplation stages of change, and are well established in the Determination and perhaps Action stages of the model. Such an individual may be responding affirmatively to the Thinker items on the CCPQ based on his self-reflective progress in a Contemplation stage of dealing with a career dilemma and affirmatively to Doer items based on things he has done in an Action stage of addressing a career dilemma. Conversely, individuals scoring lower in the both these constructs may not have moved beyond Precontemplation stage or perhaps are in a relapse stage, and therefore may reflect an unwillingness to engage in either a thinking or doing form of change, as indicated by lower scores.

Another related construct that could help explain this positive correlation between Thinking and Doing is the concept of ambivalence. Miller and Rollnick (1991) describe ambivalence as a central phenomenon of addictive behaviours and may indicate how far the person has progressed into the Contemplation stage. It is characterized by an 'I want to, but I don't want to' conflict regarding change and may be compared to an approach-avoidance psychological conflict. The individual, it appears, may be attracted to the idea of making a career transition or resolving a career problem while simultaneously repelled by the effort and stress that they believe such a process entails. If this ambivalent state were unresolved for an individual, then one could anticipate undifferentiated responses regarding a thinking or doing approach to dealing with a career dilemma.

The process of assessing treatment readiness is not unknown to the field of corrections.

The process of motivational interviewing (Miller and Rollnick, 1991) has been incorporated into the program assessment procedures of Correctional Services Canada and is currently practiced in all regions of the country. The process utilizes a questionnaire that serves to identify the stage of change, dominant for the candidate at time of assessment. This information is then presented back to the individual at the end of the intake assessment in order to provide them with more information for deciding whether or not to engage in the program. This generic questionnaire could be used to assist with answering questions posed here regarding treatment readiness and career interventions.

It would appear then, that the two constructs of thinking and doing as opposing approaches to dealing with career distress are not as clearly distinct from each other as first proposed. In regards to how this relates to Holland types, it is likely that four of the typologies, Investigative, Artistic, Social and Enterprising, would be comfortable with a “thinking approach” to career counselling and would benefit from the inclusion of exercises which utilize this. The Investigative type in particular, would seem to have most to benefit from this approach. This typology showed a strong positive correlation ($p < .01$) to CCPQ Thinkers, LSI AC and LSI AC-CE scores. Although mentioned above, it should again be noted here that CCPQ Thinker and LSI AC were also positively correlated. However, because of the Thinker/Doer positive correlation (as discussed above), it would appear that components of a “doing approach” should also be incorporated into such an intervention for these four typologies. This would be especially true for the Social types, as this SDS-E score, in addition to being correlated with the CCPQ Thinker score, was the only one of the six types correlated with the CCPQ Doers score ($r = .28, p < .05$).

Thus, a career intervention for these four typologies would definitely begin with a process that would foster self-reflection and assist the person in moving through a process of redefinition

of self. In addition, these findings would suggest that this abstract process be supplemented with activities that support this redefinition and allow participants to act upon these new insights. This would be particularly important for the Social types in a “Thinkers” career intervention.

The Realistic Typology: Neither Thinker, Nor Doer

The Realistic type, however, appears to be less clearly defined along this continuum. As this type appears to be the most common amongst this population, comprising over half (see Table 6) the sample, issues related to interventions for the Realistic typology warrant careful consideration.

Several interesting results regarding this Holland type were found. First of all, it was no surprise to find that this was the dominant typology among the offender population. The majority of the 40 previous occupations listed by participants were unskilled, blue collar jobs, not uncommon to what is generally known about the profile of this group. Offenders often drop out of school early to work as labourers, and for many, becoming experienced in work with tools or machinery is their highest aspiration. In this study, it was found that the Realistic types, the only Holland type negatively correlated with years of education, were less educated than the other five typologies. It was also found that they have spent more of their lives in prison than any of the other types; the only group showing a significant correlation with months spent in jail.

A second interesting finding about this group is that the Realistic type was not found to be correlated with either the CCPQ Thinker or Doer scores. One explanation for this may be as was discussed above, that readiness for change may be an important variable to ascertain before an intervention can be designed for this group. It is possible that the Realistic type is more rigid in their thinking, less likely to see options and more likely to be in a Precontemplation stage of change or to be experiencing ambivalence about change. This would tend to fit with the finding

that this group is more likely to have spent more time in jail and be less educated.

The Conventional typology was the only other to show no significant correlation to either Thinker or Doer. That both of these types should produce these results is likely to be more than coincidental, as Holland maintains that Conventional is the type most closely correlated to Realistic (Holland, 1991) with a correlation of .51 (although no significant correlation was found between the two in this study). Conventional types have been described as seeing themselves as rigid, masculine and dominant (McDaniels and Gysbers, 1992). These similarities, probably amplified in this population due to the rigid environment offenders find themselves, appear to add support to the treatment readiness theory.

This would lend itself to the suggestion that assessment of treatment readiness for the Realistic or Conventional types would be especially important prior to the design and delivery of a career counselling intervention for these groups. If these types were found to be in a precontemplative stage of career development more frequently than the other four Holland types, then a pre-treatment process that addresses motivation to change issues should be provided following the initial screening process. This would allow the client to be more aware of the stages of change and of which stage he currently occupies. Based on this and other information on the individual's career problem, the client could then complete a decisional balance process to help resolve any ambivalence around change, thus clearing the path for a career intervention, should the client decide to proceed.

An alternate explanation could rest in the area of socialization or social skills. It is interesting to note that while the Realistic types were not significantly correlated with either the CCPQ Thinker or Doer scores, the Social types were positively correlated with both. According to Holland's theory, these two types are very dissimilar, placing on opposite sides of the hex

model. Perhaps the largest contributing factor to this difference, is the preference to either socialize or be non-social. That the Social types in this study preferred social interaction when dealing with career transition was confirmed. They were the only SDS-E score significantly correlated with either a preference for individual or group intervention, showing a significant negative correlation to preferring individual career counselling. The Realistic Holland types in this study possessing anti-social or non-social inclinations cannot be verified by supplementary evidence in this study's results. However, given the well-established findings on the characteristics of the Realistic typology, combined with the correctional findings regarding the poor social skills of the majority of offenders (Ross and Fabiano, 1985) and the findings here that the Realistic types have spent more time incarcerated on average than the other types, it can be assumed that this is very likely the case. Therefore, it is possible that a lack of social skills may be a factor in the Realistic types' lack of preference for either of the thinking or doing approaches to career counselling examined in this study. Although there was no indication of resistance to a group or individual treatment setting (ie. no correlations found); perhaps, social skill deficits contribute to their lack of affiliation to either form of intervention.

The implications of this for career interventions with offenders of the Realistic Holland type are quite significant. Many correctional programs such as Cognitive Skills Training (Ross, Fabiano and Ross, 1991) include sessions that seek to develop or enhance social skills and social functioning. This makes sense from a criminogenic perspective: offenders need social skills to help them function better in social situations. However, if the purpose of career counselling for this group is to resolve career dilemmas or help with career transitions, then the initial focus should first be to engage the client in this process. This may be best accomplished by accommodating the individual's preferences around the intervention structure and delivery. In this case, this may be at

the forfeiture of addressing social skill deficits and providing an intervention that does not require the client to engage in a lot of socialization. Once engaged in an intervention, the Realistic type may come to see, while moving through a career transition, that improved social skills are a necessary ingredient to career development, and activities can be built in gradually to address these deficits.

Constructivism

As discussed earlier, constructivism, as an emerging theory of career intervention, would be expected to fulfill some type of role in the career counselling of offenders. However, cautions have been made around the overuse of such an approach or its application in isolation, especially in consideration of criminogenic issues and the principles of risk, need and responsivity (see Chapter II).

In light of the present findings, it would appear that a place for constructivist approaches, as distinguished by the development of self as a function of construction in the context of social participation, relationships and dialogue (Peavy, 1996), does indeed exist in the area of career interventions for offenders. The four “thinking” Holland types, Artistic, Investigative, Social and Enterprising, would appear to be most suited to this approach. Based upon the characteristics the CCPQ Thinker items attempted to identify, it would seem that these typologies would benefit from an intervention where reflection and meaningful activity are essential processes and the broader perspective of the client’s whole life is considered as opposed to simply making a career choice or focusing on the occupational aspect of the client’s life. Approaches such as Peavy’s (1992: 1996) outlined earlier, where the intervention will be active, dynamic and re-constructive and the focus of the intervention will be the client’s own perception’s and personal meanings of what was, is and will be significant for them, would be appropriate to include in career

interventions for these typologies. Typical constructivist activities such as counsellor elicited stories, metaphors, narratives and dialogues soliciting the clients' self-reflections would comprise some of the methods used.

If a group intervention were to be designed to address career issues for these four typologies, then a wide range of constructivist exercises and activities could be incorporated into the program so that differences within the 'thinkers' approach between Holland types could be accommodated. For example, Artistic types may prefer word sculpturing (a type of doodling which evokes the expression of ideas, feelings and hunches into a meaningful graphic), while Investigative types may find satisfaction with conceptual mapping (drawing a map of their life space in relation to future career) and Enterprising types may find autobiographical work, such as keeping a journal, helpful. This suggestion is prompted by the conclusion stated earlier regarding the complexity of these typologies and that, even though they may share 'thinking' characteristics, variations within this approach would be important.

Within this group of 'thinker' typologies that could benefit from constructivist approaches, the Social typology deserves extra attention due to the fact that a positive correlation was also found to exist between it and the 'doing' preference for career counselling. A logical response to this, would be to provide Social types within a constructivist-oriented career intervention, opportunities to complement these activities with action-oriented exercises and tasks in social settings, *early* in the intervention. An example would be to include occupational interviewing as real life assignments for Social types during the early self-reflective stage of the intervention. The focus of their interviewing, however, would be to explore with the interviewee their process of self-discovery as it relates to their current career/life path.

Innovations regarding approaches for Realistic and Conventional types (who comprise

approximately half of the sample) are less diaphanous. Fundamentally, it would be anticipated that constructivist approaches such as those described above would be less effective. More structure would be expected to be preferred in these interventions with a greater emphasis placed on assessments and other such tools to assist decision-making techniques. Additionally, opportunities to observe various occupations of interest through job shadowing and videos would be expected to be preferred activities. It should be cautioned that constructivist approaches need not be ruled out entirely for these groups; however, sensitivity to the Realistic and Conventional types' lack of preference for a 'thinking' approach to career transition must be preserved while designing the intervention strategy.

Convergence of Theories

In several ways, this study attempted to bring together a number of concepts and theories relevant to the advancement of an enhanced perspective on providing career interventions to offenders. This was necessitated primarily by the lack of interest in career interventions for offenders by the correctional community in Canada in recent years and the correctional system's consequential failure to consider the applicability of emerging career theories to the offender population.

This merger of criminogenic research findings with recent career theories such as constructivism, constituted the first convergence of theories. This was best illustrated by the homogeneity of the responsivity principle in corrections and the focus on the subjective experience of the client in a constructivist approach. Both maintain that the intervention must be both meaningful to the client given his current needs and promote his ability to make meaning of his future based on his self-knowledge. The point of convergence of these two ideas was embodied in this study's focus on identifying client preferences regarding career interventions and

using this information in such a way that the client's responsivity to the intervention is maximized, thus reducing criminogenic risk, while his affinity to constructivist-oriented career intervention is identified and utilized meaningfully, thus contributing to increased responsivity also. From this perspective, correctional programs and constructivist approaches are not on opposite ends of the continuum, as some, arguing that client centered approaches do not reduce recidivism, would maintain. The important distinction is that the career interventions proposed here are not intended to change antisocial thinking, but instead to aid in the *sustainment* of these changes that would have been initiated by other cognitive-behavioural correctional interventions.

The second convergence of theories witnessed in this study is the addition of the concept of readiness to change to the mix of responsivity and constructivism. The stages of change model and this influence on client responsivity to various interventions can be viewed in a developmental context. The most obvious comparison is to Super's modification of the life span maxi-cycles into mini-cycles (McDaniels and Gysbers, 1992) comprised of the stages of growth, exploration, establishment, maintenance and decline. These stages are surprisingly similar to Prochaska and DiClemente's (1986) six stage model (precontemplation, contemplation, determination, action, maintenance and relapse) discussed earlier. The significance of the client's stage of change in considering treatment readiness, then, would appear to be supported by both models.

A third convergence of theories within this study is that of an objective orientation on career development, such as Holland's model, with a subjective oriented theory of career development, such as the constructivist epistemology. Chen (1998) maintains that despite discrepancies between the two, there is an inter-relationship between them and that when context is considered, an objective event can in fact be given various meanings through the individual's subjective perspective.

Keeping with this reasoning, the current study illustrated the common components of both theories of career: that career intervention must consider the interaction between person and environment, and that this intervention must consider and utilize individual differences arising from their subjective experiences, in how this interaction is best addressed. This study proposed and found support for the idea that both approaches can be useful to this end. More specifically, it suggests that people can be objectively identified by their Holland type that reflects their subjective experiences regarding career, and that this determination can be used to enhance the subjective meaningfulness of the intervention for each, dependant upon their preference for either objective or subjective grounded approaches to career transition.

Recommendations

Recommendations for Programming

1. As the majority of offenders on the Avalon peninsula of Newfoundland are unemployed (72%) and receive no career counselling (66.7%), an effort to direct more attention and resources (i.e. hiring of additional career counsellors familiar with offender issues) to this need should be made within the correctional system.
2. Offenders are currently assessed on their need in the employment domain utilizing risk/need instruments designed by criminologists. It is recommended that supplementary to this information, all offenders should be assessed for more specific information regarding their preferences for a career development intervention. This would include factors such as those assessed by the Career Counselling Preferences Questionnaire: importance of work, need for career counselling, preference for group versus individual career services, Holland type

and preferred style of learning.

3. Current and future career counsellors in the correctional system should be exposed to emerging philosophies of career transition and be trained in non-traditional techniques of career counselling in order to provide them with a broader perspective of intervention strategies.
4. Offenders indicating an affinity to 'thinker-oriented' approaches to career intervention (such as Artistic, Investigative, Social and Enterprising Holland types) should be afforded the opportunity to engage in a career intervention that would be more meaningful to them. This would involve the adoption of constructivist techniques and the application of them in an appropriate manner and setting.
5. Offenders not showing such an affinity (such as Realistic and Conventional Holland types) should be provided with a career intervention that is more suited to their preferred approach to career transition. This could involve a more traditionalist approach to career counselling with a greater emphasis on structure, assessments and learning through observing.
6. Offenders showing a proclivity to group-oriented career counselling (such as Social Holland types) should be afforded the opportunity to participate in groups of similarly oriented individuals.
7. Offenders should be assessed for their readiness for change as part of a standard intake assessment for career counselling needs.
8. Prior to engaging in career counselling, offenders showing cognitive deficits or distortions that increase their criminogenic risks should be engaged in cognitive-behavioural interventions designed to address these problem areas.

9. As 86% of offenders in this study perceived a need for career help, all offenders should be provided information regarding career services available to them and provided with the opportunity to contact resources first hand.
10. Career services to offenders should be better coordinated. This could be accomplished through a process of early assessment in the institution or community probation followed by referral to an appropriate, networked system of service providers that can share resources, and therefore offer interventions geared to address differences in offender preferences.
11. Career services to offenders should strive to be more holistic in approach. In addition to better coordination and networking, services should include opportunities such as apprenticeships, job shadowing and mentoring as components of the career development intervention. This would serve three purposes: to address the preferences of experiential learners, to better connect offenders with the workforce and the community and to extend the period of support to the offender in the community.

Recommendations for Future Research

1. Based on the findings regarding thinking versus doing as a response to career transition, more research is required to further understand these constructs and to effectively identify these preferences in clients. Future efforts to understand the interaction of learning styles and work personalities could benefit from the utilization of an assessment tool other than the LSI. This is due to the lack of strong reliability of the instrument in this study and difficulty in providing an index of concrete learning style.

2. **Refinement of the study-designed instrument, the CCPQ, should endeavour to increase the reliability of this instrument. For example, the addition of an extra one or two items to each of the two items dedicated to identification of Holland code could result in increased reliability of this determination, eliminating the need to administer the SDS in addition to the CCPQ.**
3. **As the Realistic Holland typology is the predominate one in this population, future research should attempt to better understand the preferences and learning styles of this group.**
4. **More research is required to develop the optimum differentiation criteria when assessing intervention preferences such as thinker/doer, group/individual and perceived need for career counselling.**
5. **This study should be replicated with a population other than offenders in order to determine the generalizability of these findings.**
6. **Replication of this study with the inclusion of a readiness for change assessment could assist in the understanding of why some of the significant relationships found in this study exist.**
7. **Further investigation is required to better understand why nearly half of the participants showed no preference for either group or individual intervention.**
8. **Further research would be necessary to better understand the finding that the Social Holland type preferred both a thinking and a doing approach to career counselling and what this implies for program delivery.**
9. **A longitudinal study would provide useful information about the stability of offender preferences for career intervention and their learning styles. This could**

also illuminate the effect, if any, that stages of change (readiness) has on these factors.

10. The next substantial step in this process of improving career services for offenders is to actually implement and study the findings of this study in a field setting. The design of an appropriate intervention strategy that accommodates the offender preferences identified in this study, integrated with an appropriate control group and pre/post testing that measures client satisfaction, long term success in the workforce and recidivism, would be recommended.

REFERENCES

- Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In J. Kuhl & J. Beckman (Eds.), Action control: From cognition to behavior (pp. 11-39). New York: Springer-Verlag.
- Ajzen, I. (1988). Attitudes, personality, and behavior. Chicago: Dorsey.
- Andrews, D.A. (1995). The psychology of criminal conduct and effective treatment. In J. McGuire (Ed.), What Works: Reducing Reoffending. Guidelines from research and practice. West Sussex, England: John Wiley & Sons.
- Andrews, D.A. & Bonta, J.L. (1995). The Level of Service Inventory - Revised. Toronto: Multi-Health Systems, Inc.
- Andrews, D. A., & Bonta, J.L. (1994). The psychology of criminal conduct. Cincinnati: Anderson.
- Andrews, D. A., Bonta, J., & Hoge, R. D. (1990). Classification for effective rehabilitation: Rediscovering psychology. Criminal Justice and Behavior, 17, 19-52.
- Andrews, D. A., Zinger, I., Hoge, R. D., Bonta, J., Gendreau, P., & Cullen, F. J (1990). Does correctional treatment work? A clinically relevant and psychologically informed meta-analysis. Criminology, 28, 369-404.
- Antonowicz, D.H., Izzo, R.L. and Ross, R.R. (1995). Characteristics of effective offender rehabilitation programs. In R.R. Ross and R.D. Ross, R.D. (Eds.), Thinking Straight (pp. 39-61), Ottawa: AIR Training and Publications.
- Arthur, M.B., Hall, D.T., and Lawrence. (1989). Generating new directions in career theory: the case for a transdisciplinary approach. In Arthur, M.B., Hall, D.T., and Lawrence (Eds.), Handbook of Career Theory (pp. 7-25). New York: Cambridge University Press.

- Auditor General of Canada. (1996). The Auditor General of Canada's report on Correctional Service of Canada offender programs. Forum on Corrections Research, 8 (3), 30-31.
- Bandura, A. (1977). Social Learning Theory. New Jersey: Prentice-Hall.
- Bandura, A. (1997). Self-Efficacy: The Exercise of Control. New York: W.H. Freeman.
- Beck, A. Cognitive Therapy: Nature and relation to behavior therapy. Behavior Therapy, 1970, 1, 184-200.
- Betz, N.E. (1994). Self-concept theory in career development and counselling. The Career Development Quarterly, 43, 32-42.
- Bloom, B.S. (1976). Human Characteristics and School Learning. New York: McGraw-Hill.
- Bonta, J. (1997). Offender Rehabilitation: From Research to Practice. Ottawa: Public Works and Government Services Canada.
- Boyd, C.J. and Cramer, S.H. (1995). Relationship between Holland high-point code and client preferences for selected vocational counselling strategies. Journal of Career Development, 21(3), 213-221.
- Brown, D. & Brooks, L. (1991). Career Counselling Techniques. Boston: Allyn & Bacon
- Brown, A., Brooks, L. and Associates (Eds.). (1990). Career Choice and Development (2nd ed.). San Francisco, CA: Jossey-Bass.
- Brown, S. P. (1996). A meta-analysis and review of organizational research on job involvement. Psychological Bulletin, 120, 235-255.
- Cahill, M. (1997). Career Education and Career Counselling, Course Manual. St. John's, NF: Memorial University of Newfoundland.
- Cahill, M. & Martland, S. (1996). Soft Systems: Non-Hierarchical Evaluation of Career

Counselling Programs. Guidance and Counselling. Ontario Institute for Studies in Education, Vol. 11 (3), 15-18.

Chen, C. (1998). Understanding Career Development: a Convergence of Perspectives. Journal of Vocational Education and Training, 50(3), 437-461.

Ciechalski, J. (1998). Review of The Self-Directed Search, Form E-1990 Revision. In J.C. Impara & B.S. Plake (Eds.), 13th Mental Measurements Yearbook. (pp. 893-894). Lincoln, NA: University of Nebraska.

Correctional Service of Canada (unpublished). Employment Profile: Newfoundland vs Maritimes, February 15, 2000. Performance Assurance, Regional Headquarters, Atlantic Region.

Department of Justice, Government of Newfoundland and Labrador. (In Press). Biannual Report. Adult Corrections Division for the periods April 1, 1994 - March 31, 1995 and April 1, 1995 - March 31, 1996, St. John's, NF.

Diamond, E. (1998). Review of The Self-Directed Search, Form E-1990 Revision. In J.C. Impara & B.S. Plake (Eds.), 13th Mental Measurements Yearbook. (pp. 894-896). Lincoln, NA: University of Nebraska.

Drummond, R.J. & Ryan, C.W. (1994). Career Counselling: A Developmental Approach. New Jersey: Prentice Hall.

Dunn, R. (1996). How to Implement and Supervise a Learning Style Program. Alexandria, VA: Association for Supervision and Curriculum Development.

Dunn, R. and Griggs, S.A. (1995). Multiculturalism and Learning Style: Teaching and Counselling Adolescents. Westport, Conn.: Praeger.

Eagly, A.E., & Chaiken, S. (1993) The psychology of attitudes. New York: Harcourt Brace Javanovich College Publishers.

- Ellis, A. (1962). Reason and Emotion in Psychotherapy. NJ: Lyle Stuart.
- Erez, E. (1987). Rehabilitation in Justice: The Prisoner's Perspective. Journal of Offender Counselling, Services and Rehabilitation, 11, 5-19.
- Fabiano, E., LaPlante, J. and Loza, A. (1996). Employability: from research to practice. Forum on Corrections Research, 8 (1), 25-28.
- Galassi, J.P., Crace, R.K., Martin, G.A., James, R.M., and Wallace, R.L. (1992). Journal of Counselling Psychology, 39(1), 46-55.
- Gay, L.R. (1996). Educational Research: Competencies for Analysis and Application, Fifth Edition. Upper Saddle River, N.J.: Prentice-Hall.
- Gelatt, H.B. (1989). Positive uncertainty: A new decision-making framework for counselling. Journal of Counselling Psychology, 36(2), 252-256.
- Gendreau, P. (1996). The principles of effective intervention with offenders. In A. Hartland (Ed.) Choosing Correctional Options That Work. Thousand Oaks, CA: Sage.
- Gendreau, P. and Goggin, C. (1996). Principles of effective correctional programming. Forum on Corrections Research, 8 (3).
- Gendreau, P., Goggin, C., & Gray, G. (1998). Case need domain: "Employment". Forum on Corrections Research, 10 (3).
- Gendreau, P., Little, T., & Goggin, C. (1996). A meta-analysis of the predictors of adult offender recidivism: What works! Criminology, 34, 575-607.
- Gillis, C. (1998). The prediction of employment stability in a sample of federal offenders on conditional release. Dissertation prospectus. Ottawa, ON: Psychology Department, Carleton University.
- Gillis, C., Robinson, D., & Porporino, F. (1996). Inmate employment: The increasingly

influential role of generic work skills. Forum on Corrections Research, 8 (1), 18-20.

Gregg, N. (1989). Review of the Learning-Style Inventory. In J.C. Conoley & J.J. Kramer (Eds.), 10th Mental Measurements Yearbook. (441-442). Lincoln, NA: University of Nebraska.

Gregorc, A. (1979). Learning styles: their nature and effects. National Association of Secondary School Principals, pp.19-26.

Guynes, R. & Grieser, R. (1986). Contemporary prison industry goals. In American Correctional Association (Ed.), A study of prison industry: history, components and goals, 19-29. College Park, Maryland.

Hall, D.T. (1996). The Career is Dead- Long Live the Career. San Francisco: Jossey-Bass Publishers.

Herr, E.L. and Cramer, S.H. (1996). Career Guidance and Counselling Through the Life Span: Systematic Approaches. New York: Harper Collins.

Herr, E.L. (1989a). Career development and mental health. Journal of Career Development, 16(1), 5-18.

Herr, E.L. (1993). Contexts and influences on the need for personal flexibility for the 21st century, part I. Canadian Journal of Counselling, 27(3), 148-164.

Hewitt, R.L. (1995). The nature of adult learning and effective training guidelines. In R.R. Sims and S.J. Sims (Eds.) The Importance of Learning Styles. (pp. 162-178) Westport, Conn.: Greenwood Press.

Hickcox, L.J. (1995). Learning styles: a survey of adult learning style inventory models. In R.R. Sims and S.J. Sims (Eds.) The Importance of Learning Styles. (pp.25-47) Westport, Conn.: Greenwood Press.

Highhouse, S. & Doverspike. (1987). The validity of the LSI 1985 as a predictor of

cognitive style and occupational preferences. Educational and Psychological Measurement, 47, 749-753.

Holland, J. (1966). The Psychology of Vocational Choice. Waltham, MS: Blaisdell Publishing Company.

Holland, J. (1973). Making Vocational Choices: a theory of careers. Englewood Cliffs, NJ: Prentice-Hall.

Holland, J.L. (1985). Making Vocational Choices. A theory of vocational personalities and work environments (2nd ed.). Englewood Cliffs, NJ: Prentice-Hall.

Holland, J. (1991). The Self-Directed Search Professional Manual-1985 Ed. Canadian Edition. USA: Psychological Assessment Resources, Inc.

Hunt, D.E., Butler, L.F., Noy, J.E. & Rosser, M.E. (1978). Assessing Conceptual Level by the Paragraph Completion Method. Toronto: Ontario Institute for Studies in Education.

Isaacson, L. & Brown, D. (1996). Career Information, Career Counselling and Career Development. Boston: Allyn and Bacon.

Jung, C. (1921). Psychological Types. Princeton, NJ: Princeton University Press.

Kagan, J. (1965). Impulsive and reflective children: significance of conceptual tempo. In J.D. Krumboltz (ed.) Learning and the Educational Process. Pp.131-161. Chicago, IL: Rand McNally.

Kahle, L.R. (1984). Attitudes and Social Adaption. Oxford, U.K.: Pergamon Press.

Katz, N. (1986). Construct validity of Kolb's learning style inventory, using factor analysis and Guttman's Smallest Space Analysis. Perceptual and Motor Skills, 63, 1323-1326.

Keefe, J.W. (1987). Learning Style Theory and Practice. Reston, VA: National Association of Secondary School Principals.

Kennedy, S. and Serin, R. (1997). Treatment responsivity: contributing to effective correctional programming. The ICCA Journal, April, 46-52.

Kolb, D.A. (1984). Experiential Learning: Experience as a Source of Learning and Development. Englewood Cliffs, N.J.: Prentice Hall.

Kolb, D.A. (1999). Learning Style Inventory, version 3. Boston: Hay/McBer.

Loo, R. (1996). Construct validity and classification stability of the revised learning style inventory (LSI-1985). Educational and Psychological Measurement, 56 (3), 529-536.

Lösel, F. (1996). Effective correctional programming: what empirical research tells us and what it doesn't. Forum on Corrections Research, 8 (3), 33-37.

Marshall, E.A. (1985). Relationship between client-learning style and preference for counselor approach. Counselor Education and Supervision, 24, 353-359.

Martinson, R. (1974). What works? Questions and answers about prison reform. The Public Interest, 35, 22-54.

McConaughy, E., Prochaska, J. & Velicer, W. (1983). Stages of change in psychotherapy: measurement and sample profiles. Psychotherapy: Theory, Research and Practice, 20 (3), 368-375.

McDaniels, N. & Gysbers, N. (1992). Counseling for Career Development: Theories, Resources and Practice. San Francisco: Jossey-Bass Publisher.

Meichenbaum, D. (1977). Cognitive-Behavior Modification: An Integrative Approach. New York: Plenum Press.

Messick, S. & Assoc. (1976). Individuality in Learning. San Francisco, CA: Jossey-Bass.

Miller, W. & Rollick, S. (1991). Motivational Interviewing: Preparing People to Change Addictive Behavior. New York: Guilford Press.

- Motiuk, L. (1996). Targeting employment patterns to reduce offender risk and need. Forum on Corrections Research, 8 (1), 22-24.
- Mulgrew, P. (1996). Generic and employability skills for inmates. Forum on Corrections Research, 8 (1), 29-31.
- Murphy, L., Impara, J. & Plake, B. (Eds.) (1999). Tests in Print 5, V.1. Lincoln, NA: Buros Institute of Mental Measurement, University of Nebraska-Lincoln.
- Myers, I. (1962). Introduction to Typel. Palo Alto, CA: Consulting Psychologists Press.
- Neimeyer, R.A. (1993). An appraisal of constructivist psychotherapies. Journal of Consulting and Clinical Psychology, 61(2), 221-234.
- Niles, S.G. (1993). The relationship between Holland types preferences for career counseling. Journal of Career Development, 19(3), 209-220.
- Oyserman, D. & Markus, H.R. (1990). Possible Selves and Delinquency. Journal of Personality and Social Psychology, 59(1), 112-125.
- Palamore, E.B. (1969). Predicting longevity: A follow-up controlling for age. Gerontologist, (9), 247-250.
- Peavy, V. (1996). Constructivist Career Counselling and Assessment. Guidance and Counselling. Ontario Institute for Studies in Education, 11(3), 8-14.
- Peavy, V. (1992). A constructivist Model of Training for Career Counselors. Journal of Career Development, Vol. 18(3), 215-228.
- Prochaska, J. & DiClemente, C. (1982). Transtheoretical therapy toward a more integrative model of change. Psychotherapy: Theory, Research and Practice, 19, 276-288.
- Prochaska, J. & DiClemente, C. (1986). Toward a comprehensive model of change. In W. Miller & N. Heather (Eds.) Treating Addictive Behaviours: Processes of Change. New York:

Plenum Press, 3-27.

Reiff, J.C. (1992). Learning Styles. Washington, D.C.: National Education Association.

Riverin-Simard, D. (1999). Key Roles in the Revolution of Work. Ottawa: Canadian Career Development Foundation.

Rosenberg, H.G. and Smith, S.S. (1985). Six strategies for career counseling. Journal of College Placement, 45, 42-46.

Ross, R.R., Fabiano, E.A. & Ross, R.D. (1991). Reasoning and Rehabilitation: A Handbook for Teaching Cognitive Skills. University of Ottawa.

Ross, R.R. & Fabiano, E.A. (1985). Time to Think. Johnson City: Institute of Social Sciences and Arts, Inc.

Ross, R.R. and Ross, R.D. (1995). Program development through research. In R.R. Ross and R.D. Ross, R.D. (Eds.), Thinking Straight (pp. 25-37), Ottawa: AIR Training and Publications.

Savickas, M.L. (1995). Constructivist counseling for career indecision. Career Development Quarterly, 43(June), 363-373.

Saylor, W.G. and Gaes, G.G. (1996). The effect of prison employment and vocational/apprenticeship training on long-term recidivism. Forum on Corrections Research, 8 (1), 12-14.

Schlossberg, N.K. (1981). A model for analyzing human adaption to transition. The Counseling Psychologist, 9(2), 2-18.

Schlossberg, N.K. and Leibowitz, Z. (1980). Organizational support systems as buffers to job loss. Journal of Vocational Behaviour, 17, 204-217.

Shay, J. (1996). "Okay, I'm here, but I'm not talking!" Psychotherapy with the reluctant

male. Psychotherapy, 33(3), 503-513.

Simonson, M. and Maushak, N. (1996). Situated learning, instructional technology, and attitude change. In H. McLellan (ed.) Situated Learning Perspectives. Englewood Cliffs, N.J.: Educational Technology Publications.

Sims, S.J. and Sims, R.R. (1995). Learning and Learning Styles: A Review and Look to the Future. In R.R. Sims and S.J. Sims (Eds.) The Importance of Learning Styles. (pp. 193-210) Westport, Conn.: Greenwood Press.

Solicitor General Canada. (1999). The effect of prison on criminal behaviour. Research Summary, 4(6). [On-Line]. Available: <http://www.sgc.gc.ca/EPub/Corr/e199911/e199911.htm>.

Statistics Canada. (1999a). The Daily. Wednesday, July 21, 1999. [On-Line]. Available: <http://www.statcan.ca/Daily/English/990721>.

Statistics Canada. (1999b). Labour Force Survey, November, 1999. [On-Line]. Available: <http://www.statcan.ca/english/Subjects/Labour/LFS/lfs-en.htm>.

Statistics Canada. (2000). Census 96, Statistical Profile: St. John's, Newfoundland. [On-Line]. Available: <http://ww2.statcan.ca/english/profil/>.

Watkins, R.E. (1992). An historical review of the role and practice of psychology in the field of corrections. Ottawa: Research and Statistics Branch, Correctional Service of Canada.

Witkin, H. (1976). Cognitive style in academic performance in teacher-student relations. In S. Messick and Associates (eds.) Individuality in Learning, pp.38-72. San Francisco, CA: Jossey-Bass.

Young, R.A., Valach, L., and Collin, A. (1996). A contextual explanation of career. In D. Brown, L. Brooks, and Associates (Eds.), Career Choice and Development (3rd ed.), 477-512. San Francisco, CA: Jossey-Bass.

APPENDIX A

Career Counselling Preferences Questionnaire (CCPQ)

CCPQ Item Groupings/Scoring Code

Career Counseling Preferences Questionnaire

Thank-you for agreeing to participate in this study. All information provided will be kept strictly confidential. Please do not write your name on any of the questionnaires that you answer today. Please complete the following:

Age: _____ Marital Status: _____ Home Town Size: smaller than 5,000
 larger than 5,000

Now living in: HMP SCI
 CCC Howard House
 the community on my own (eg. renting, family, etc)

If in community, type of supervision: Fed Parole Prov Parole
 Probation Conditional Sent
 Electronic Monitoring UTA
 Current Employment Status: No Supervision Other

Last Job: _____ From: _____ To: _____

Prior Jobs: _____

Highest Education: _____ Other Training: _____

Career Counseling in Past: Y N If yes, when: _____ and give a brief
 description: _____

Current Offense(s): _____

Sentence: _____ Date Sentenced: _____

Total Number Previous Convictions: _____ Total Time Spent in Jail in Past (please
 estimate): _____ months



Career Counseling Preferences Questionnaire

Instructions: We are interested in the way you would prefer to receive help on deciding on a career and finding work. This is not a test and there are no "right" or "wrong" answers. Your answers will give us a better idea of how career counseling and employment services should be provided to offenders and ex-offenders.

THIS PAGE IS AN EXAMPLE which will show you how to answer the questionnaire. You will be asked to please indicate how you feel about each statement by circling one of the answers.

Example:

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
1	2	3	4	5	6

1. Getting career advice is the most important thing that I have to do to become employed. 1 2 3 4 5 6

If you **Disagree** with this statement, you would circle 2.

1. Getting career advice is the most important thing that I have to do to become employed. 1 ② 3 4 5 6

For this statement, if you **Somewhat Agree** that getting career advice is the most important thing that you have to do to become employed, you would circle 4.

1. Getting career advice is the most important thing that I have to do to become employed. 1 2 3 ④ 5 6

If you **Strongly Agree** with this statement, you would circle 6.

1. Getting career advice is the most important thing that I have to do to become employed. 1 2 3 4 5 ⑥

Please ask if you have any questions before you begin.

Circle any words that you do not understand or are not sure about.
If you are not sure about anything when you are filling out the questionnaire, feel free to ask for help.

Instructions: Please read the following statements, thinking about the way you prefer to learn and make decisions about work. Please indicate how much you agree or disagree with each statement, using the scale.

	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree		
	1	2	3	4	5	6		
1.	Getting help with deciding on a career is important to me.	1	2	3	4	5	6	
2.	I like to learn in a group setting rather than one-on-one.	1	2	3	4	5	6	
3.	The best way to decide on a career is to beat the streets and put in resumes, talk to lots of employers and workers.	1	2	3	4	5	6	
4.	The only career counseling I really want is with finding employers who are hiring.	1	2	3	4	5	6	
5.	Thinking about who I am would help me to choose the right job.	1	2	3	4	5	6	
6.	I am good at figuring out on my own how to use computers.	1	2	3	4	5	6	
7.	The people who get the jobs are the ones who have spent a lot of time figuring out their career plan.	1	2	3	4	5	6	
8.	Most of my personal life goals relate to working.	1	2	3	4	5	6	
9.	Knowing what work I am best suited to do is OK but what I really want is to just be working.	1	2	3	4	5	6	
10.	I am good at routine paperwork.	1	2	3	4	5	6	
11.	The most important things that happen in life involve work.	1	2	3	4	5	6	
12.	I am good at artistic things.	1	2	3	4	5	6	

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
1	2	3	4	5	6

- | | | | | | | | |
|-----|---|---|---|---|---|---|---|
| 13. | What would help me most in career counseling is some help first in job searching. | 1 | 2 | 3 | 4 | 5 | 6 |
| 14. | I learn best by thinking things through. | 1 | 2 | 3 | 4 | 5 | 6 |
| 15. | It is important to me to have a 'picture' in my mind of where I will be in five years from now. | 1 | 2 | 3 | 4 | 5 | 6 |
| 16. | I am good at organizing people to do things. | 1 | 2 | 3 | 4 | 5 | 6 |
| 17. | When I am uncertain about my future, I deal with it best by keeping busy and taking action. | 1 | 2 | 3 | 4 | 5 | 6 |
| 18. | A good career service would help me figure out the type of work that suits me as a person. | 1 | 2 | 3 | 4 | 5 | 6 |
| 19. | People who spend a lot of time thinking things through miss out on golden opportunities. | 1 | 2 | 3 | 4 | 5 | 6 |
| 20. | I am good at helping people. | 1 | 2 | 3 | 4 | 5 | 6 |
| 21. | I feel best about myself when I am <u>not</u> working. | 1 | 2 | 3 | 4 | 5 | 6 |
| 22. | I like to learn by myself rather than in a group. | 1 | 2 | 3 | 4 | 5 | 6 |
| 23. | I already know what type of work I want to do; I do <u>not</u> need help with this decision. | 1 | 2 | 3 | 4 | 5 | 6 |
| 24. | My ideal job would be working with tools. | 1 | 2 | 3 | 4 | 5 | 6 |
| 25. | When I am in new situations, I like to try things out for myself. | 1 | 2 | 3 | 4 | 5 | 6 |
| 26. | I learn best from ideas and my imagination. | 1 | 2 | 3 | 4 | 5 | 6 |
| 27. | I would like to take some time to figure out what type of work I am really cut out for. | 1 | 2 | 3 | 4 | 5 | 6 |

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
1	2	3	4	5	6

- | | | | | | | | |
|-----|---|---|---|---|---|---|---|
| 28. | With problems, I like to jump right in and deal with them. | 1 | 2 | 3 | 4 | 5 | 6 |
| 29. | My ideal job would allow me to use my creative or artistic ability. | 1 | 2 | 3 | 4 | 5 | 6 |
| 30. | When I deal with changes in my life, I prefer to first sit back and think things through. | 1 | 2 | 3 | 4 | 5 | 6 |
| 31. | My ideal job would be where I help or teach other people. | 1 | 2 | 3 | 4 | 5 | 6 |
| 32. | I do <u>not</u> learn very well in group situations. | 1 | 2 | 3 | 4 | 5 | 6 |
| 33. | My ideal job would involve figuring things out with logic, science or math. | 1 | 2 | 3 | 4 | 5 | 6 |
| 34. | When I am in new situations, I like to think things through before I do anything. | 1 | 2 | 3 | 4 | 5 | 6 |
| 35. | My job makes up a big part of who I am. | 1 | 2 | 3 | 4 | 5 | 6 |
| 36. | Some people think I take too long to make up my mind. | 1 | 2 | 3 | 4 | 5 | 6 |
| 37. | Because I have a job waiting for me, I do <u>not</u> need career help. | 1 | 2 | 3 | 4 | 5 | 6 |
| 38. | I am a "hands on" type of person. | 1 | 2 | 3 | 4 | 5 | 6 |
| 39. | My ideal job would be working in an office. | 1 | 2 | 3 | 4 | 5 | 6 |
| 40. | I like to size everything up before making a decision. | 1 | 2 | 3 | 4 | 5 | 6 |

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
1	2	3	4	5	6

- | | | | | | | |
|--|---|---|---|---|---|---|
| 41. I would enjoy a career counseling group more than seeing a career counselor alone. | 1 | 2 | 3 | 4 | 5 | 6 |
| 42. I learn best by doing things. | 1 | 2 | 3 | 4 | 5 | 6 |
| 43. I usually tackle things head on. | 1 | 2 | 3 | 4 | 5 | 6 |
| 44. I need help in finding a job. | 1 | 2 | 3 | 4 | 5 | 6 |
| 45. My ideal job would involve leading others. | 1 | 2 | 3 | 4 | 5 | 6 |
| 46. I am more of a “man of action” than most other people my age. | 1 | 2 | 3 | 4 | 5 | 6 |
| 47. I am good at operating machinery. | 1 | 2 | 3 | 4 | 5 | 6 |
| 48. I do <u>not</u> have a clue what type of work I am best suited for. | 1 | 2 | 3 | 4 | 5 | 6 |
| 49. Sometimes, I like to daydream about “my perfect job”. | 1 | 2 | 3 | 4 | 5 | 6 |
| 50. Being unemployed is no big deal to me. | 1 | 2 | 3 | 4 | 5 | 6 |

Career Counseling Preferences Questionnaire Item Groupings for Analysis

High score (4,5, or 6) indicates

	Doer	Thinker
on item #'s:		
3	7	
4	18	
9	5	
13	27	
17	30	
19	49	
25	34	
28	36	
38	26	
42	14	
43	40	
46	15	

High score (4,5, or 6) indicates

	Group	Individual
on item #'s:		
2	22	22
41	32	32

**Importance
of work items**

8
11
21
35
50

work is important
if score high/low:

high
high
low
high
low

**Perceived need
for counseling**

#'s 1
23
37
44
48

need perceived
if score hi/low:

high
low
low
high
high

High score (4,5, or 6) indicates

Holland type	on items:
R	24, 47
I	6, 33
A	12, 29
S	20, 31
E	16, 45
C	10, 39

APPENDIX B

CCPQ Back Translation Validity Test 1

Validity Test 1 Results

CCPQ Back Translation Validity Test 2

Back Translation Validity Test

Thanks for agreeing to help with this. Please record the item #'s in the boxes as follows:

Which of the items in the CCPQ:

Determine 'do-ers'? (12)

--	--	--	--	--	--	--	--	--	--	--	--

Determine 'thinkers'? (12)

--	--	--	--	--	--	--	--	--	--	--	--

Determine how important work is to them? (5)

--	--	--	--	--

Determine their perception of their need for career counseling? (5)

--	--	--	--	--

Determine what their main Holland type is? (12)

Realistic (2)		
Investigative (2)		
Artistic (2)		
Social (2)		
Enterprising (2)		
Conventional (2)		

Determine if they prefer group versus individual career counseling? (4)

group intervention (2)		
individual intervention (2)		

Back Translation Validity Test Results

<u>Judge</u>	<u>Misplacements</u>	<u>Placed as:</u>	<u>Should be:</u>
#1	4	need	doer
	13	need	doer
	23	omitted	need
	35	thinker	importance
	37	doer	need
	49	importance	thinker
#2	4	need	doer
	9	need	doer
	13	need	doer
	23	doer	need
	37	doer	need
	48	doer	need
#3	4	thinker	doer
	18	need	thinker
	37	doer	need
#4	6	doer	investigative
	9	need	doer
	18	need	thinker
	26	investigative	thinker
#5	All placed correctly		

Problem Items

4 (doer)	3 misses, two placed in need, one in thinker
9 (doer)	2 misses, both placed in need
13 (doer)	2 misses, both placed in need
18 (thinker)	2 misses, both placed in need
23 (need)	2 misses, one omitted, one placed in doer
26 (thinker)	1 miss, placed in investigative
35 (import)	1 miss, placed in thinker
37 (need)	3 misses, all placed in doer
48 (need)	1 miss, placed in doer
49 (thinker)	1 miss, placed in importance

40 items correctly placed by 5/5 Judges

44 items correctly placed by 4/5 Judges

48 items correctly placed by 3/5 Judges

All 50 items correctly placed by 2/5 Judges

Possible Item Modifications

Missed by 3/5 judges:

4. The only career help I really need is with finding employers who are hiring.
Change to:
 The only career *counseling* I really *want* is with finding employers who are hiring.
37. I have a job waiting for me.
Change to:
 Because I have a job waiting for me I do not need career help.

Missed by 2/5 judges:

9. Knowing what work I am best suited to do is OK but not really all that helpful to me.
Change to:
 Knowing what work I am best suited to do is OK but *what I really want is to just be working.*
13. What would help me most in career counseling is some help in job searching.
Change to:
 What would help me most in career counseling is some help *first* in job searching.
18. A good career service would help me figure out the type of work that I am good at.
Change to:
 A good career service would help me figure out the type of work that *matches me as a person.*
23. I already know what type of work I want to do.
Change to:
 I already know what type of work I want to do; I do not need help with this decision.

NOTE:

The remaining four items were placed correctly by four out of five judges and probably should not be modified.

Back Translation Validity Test - (the sequel)

The following 10 items on my theses questionnaire showed some degree of ambiguity during the first back translation that was completed by you and four other judges. They have been modified as below. Could you have a second look at these ten and try to place them in their appropriate category as before?

- 4. The only career counseling I really want is with finding employers who are hiring.
- 9. Knowing what work I am best suited to do is OK but what I really want is to just be working.
- 13. What would help me most in career counseling is some help first in job searching.
- 18. A good career service would help me figure out the type of work that suits me as a person.
- 23. I already know what type of work I want to do; I do not need help with this decision.
- 26. I learn best from ideas and my imagination.
- 35. My job makes up a big part of who I am.
- 37. Because I have a job waiting for me, I do not need career help.
- 48. I do not have a clue what type of work I am best suited for.
- 49. Sometimes, I like to daydream about "my perfect job".

Category

Item #'s

Do-er's			
Thinker's			
Need for career counseling			
Importance of work to them			

Thank`s again for your help!
Randy.

APPENDIX C

Information for Participants

Participant Consent Form

**Memorial University of Newfoundland
Faculty of Education
Graduate Programmes and Research**

**Career Counseling Preferences Study
INFORMATION FOR PARTICIPANTS**

Thank-you for your interest in this study. It is hoped that this study will help improve career counseling services for offenders. The aim is to develop a questionnaire which will help career counselors better match clients to different types of career counseling services. This study will look at learning style, work interests and the career counseling approaches offenders prefer. If you agree to take part, you will be filling out three questionnaires about these three things.

In agreeing to participate, please be assured of the following:

1. your participation in this study is completely voluntary,
2. you have the right to refuse to answer any question or drop out of the study,
3. doing so will in no way affect your access to future services or counseling,
4. the information you provide will be kept confidential, your name will not be used.
5. your participation will involve the completion of a set of three questionnaires: the Self Directed Search, the Learning Styles Inventory and the study designed questionnaire, through a one-time session which is expected to take approximately 75-90 minutes,
6. you can work on the questionnaires alone, or the questions can be read aloud to you if you prefer,
7. this study has been reviewed and approved by the Ethics Review Committee of Memorial University.

If you have any other questions, please feel free to ask.

Thank you,

Randy Penney
Researcher

Memorial University of Newfoundland
Faculty of Education
Graduate Programmes and Research

CONSENT FORM

I, _____, hereby confirm that my participation in this study is of my own choosing and free will. I consent to providing some personal information about myself as well as to the completion of three questionnaires.

I understand that:

1. any information gathered (as noted above) will be used only for educational/research purposes and may be shared with the researcher’s thesis supervisor, thesis review committee members and possibly with other legitimate professionals or consultants.
2. that all information gathered is to be kept strictly confidential and to be used only for the purposes stated; my name will not be recorded on the questionnaires.
3. I have the right to revoke my permission at any time.

Signature of Consenting Party

Signature of Witness - Optional

Printed Name of Consenting Party

Printed Name of Witness

Signature of Researcher

Date

APPENDIX D
Agency Consent Forms

Ms. Clara Rendell
District Director
Correctional Service of Canada
531 Charter Ave.
St. John's, NF
A1A 1P7

April 27, 2000

Dear Ms. Rendell:

My name is Randy Penney and I am a graduate student in the Faculty of Education, Memorial University of Newfoundland. As partial fulfillment of the requirements of my Masters of Educational Psychology Degree, I am conducting a research study in the area of improving career counseling interventions for offenders. Dr. Mildred Cahill has agreed to supervise on behalf of the Faculty of Education. This study will examine several characteristics of the offender target group such as risk/need level, learning style, work personality and career counseling approach preference.

The aim is to develop an assessment tool which will assist in placing clients in one of several selected types of career counseling interventions. This would be expected to improve the responsiveness element of this intervention as well as allow the incorporation of recent developments in the field of career counseling to this client population. This study was designed to answer the following research questions:

1. What is the relationship between work personality, learning style, and preferences for career counseling in the offender population?
2. To what degree can the Career Counseling Preferences Questionnaire (designed for this study) predict these factors?
3. What is the relationship of variables such as risk, age, number of convictions, months spent incarcerated and years of education to offenders' preferences for career counseling?

In order for the study's client sample to be representational of the local offender population, I would like to include clients who are under the jurisdiction of your department. This could include clients who are currently residing in the Community Correctional Centre, as well as clients under your department's supervision while in the community. In considering this request, please be assured of the following:

1. this study has been reviewed and approved by the Ethics Review Committee of Memorial University,
2. participation in the study will be completely voluntary on the part of the client,
3. confidentiality will be strictly maintained, client name will not be recorded and client personal information will be used in aggregate form only,
4. client participation will be limited to their completion of a set of three questionnaires, the Self Directed Search, the Learning Styles Inventory and the study designed

- questionnaire, through a one-time, individual interview with me which is expected to take approximately 75-90 minutes,
5. clients will be informed of the purpose/nature of the study and treated respectfully,
 6. departmental resources, such as staff time, will not be required; nor is it expected that this study will interfere with any staff persons' performance of duties or provision of services,
 7. your department has the right to withdraw approval at any time.

I am interested in obtaining some background demographic information on each participant, a brief job history, a brief criminal history and their risk/need score. I will have sole access to these questionnaires once completed and all materials will be securely maintained during the study, then destroyed. As a reward to offenders agreeing to participate, results of their Self Directed Search (vocational interests) will be shared and interpreted with them by the researcher.

I would like to include approximately 15 of your clients in my sample. I am requesting your permission to proceed with these interviews. It is expected that client interviews will be conducted from May to July, 2000. Should you have any questions or concerns regarding the study or this request, please feel free to contact me at 739-7953, my supervisor Dr. Mildred Cahill at 737-6980, or Dr. Bruce Sheppard, Associate Dean Graduate Programs and Research, at 737-8587. The results of this research will be made available to you at your request. If this request meets with your approval please sign below. Thank you for your attention to this matter.

Sincerely,

Randy Penney

I, _____ hereby allow Randy Penney to conduct individual interviews of clients of Correctional Service of Canada , St. John's Area Office, in order to administer questionnaires investigating the career counseling needs of Newfoundland offenders. I understand that all information collected is strictly confidential and that no individual will be identified.

Signature: _____
 Date: _____

Witness: _____
 Date: _____

Marvin McNutt
 Director, Corrections and Community Services
 Department of Justice

Government of Newfoundland
St. John's, NF
A1B 4J6

April 27, 2000

Dear Mr. McNutt:

My name is Randy Penney and I am a graduate student in the Faculty of Education, Memorial University of Newfoundland. As partial fulfillment of the requirements of my Masters of Educational Psychology Degree, I am conducting a research study in the area of improving career counseling interventions for offenders. Dr. Mildred Cahill has agreed to supervise on behalf of the Faculty of Education. This study will examine several characteristics of the offender target group such as risk/need level, learning style, work personality and career counseling approach preference.

The aim is to develop an assessment tool which will assist in placing clients in one of several selected types of career counseling interventions. This would be expected to improve the responsivity element of this intervention as well as allow the incorporation of recent developments in the field of career counseling to this client population. This study was designed to answer the following research questions:

1. What is the relationship between work personality, learning style, and preferences for career counseling in the offender population?
2. To what degree can the Career Counseling Preferences Questionnaire (designed for this study) predict these factors?
3. What is the relationship of variables such as risk, age, number of convictions, months spent incarcerated and years of education to offenders' preferences for career counseling?

In order for the study's client sample to be representational of the local offender population, I would like to include clients who are under the jurisdiction of your department. This could include clients who are currently incarcerated at Her Majesty's Penitentiary and Salmonier Correctional Institute, as well as clients under your department's supervision while in the community (on probation, temporary absence, conditional sentencing and electronic monitoring). In considering this request, please be assured of the following:

1. this study has been reviewed and approved by the Ethics Review Committee of Memorial University,
2. participation in the study will be completely voluntary on the part of the client,
3. confidentiality will be strictly maintained, client name will not be recorded and client personal information will be used in aggregate form only,
4. client participation will be limited to their completion of a set of three questionnaires, the Self Directed Search, the Learning Styles Inventory and the study designed questionnaire, through a one-time, individual interview with me which is expected to take approximately 75-90 minutes,

5. clients will be informed of the purpose/nature of the study and treated respectfully,
6. departmental resources, such as staff time, will not be required; nor is it expected that this study will interfere with any staff persons' performance of duties or provision of services,
7. your department has the right to withdraw approval at any time.

I am interested in obtaining some background demographic information on each participant, a brief job history, a brief criminal history and their risk/need score. I will have sole access to these questionnaires once completed and all materials will be securely maintained during the study, then destroyed. As a reward to offenders agreeing to participate, results of their Self Directed Search (vocational interests) will be shared and interpreted with them by the researcher.

I would like to include approximately 60 of your clients in my sample. I am requesting your permission to proceed with these interviews. It is expected that client interviews will be conducted from May to July, 2000. Should you have any questions or concerns regarding the study or this request, please feel free to contact me at 739-7953, my supervisor Dr. Mildred Cahill at 737-6980, or Dr. Bruce Sheppard, Associate Dean Graduate Programs and Research, at 737-8587. The results of this research will be made available to you at your request. If this request meets with your approval please sign below. Thank you for your attention to this matter.

Sincerely,

Randy Penney

I, _____ hereby allow Randy Penney to conduct individual interviews of adult provincial clients (inmates and probationers) of the Department of Justice in order to administer questionnaires investigating the career counseling needs of Newfoundland offenders. I understand that all information collected is strictly confidential and that no individual will be identified.

Signature: _____
Date: _____

Witness: _____
Date: _____



