UNIVERSITY STUDENTS' PERCEPTIONS OF THEIR READINESS TO ENTER THE WORKFORCE UPON GRADUATION

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Abstract

The purpose of this study was to explore and gain a greater understanding of senior

university students' perceptions of their readiness to enter the work force following

program completion, as well as their perceptions of the availability and helpfulness of

career-related resources and services. Due to the exploratory nature of this research, no *a*

priori hypotheses were generated. A sample of 324 undergraduate students attending the

University of Lethbridge in Lethbridge, Alberta, Canada was surveyed using the

Comprehensive Career Needs Survey Post-Secondary Form, a revision of the

Comprehensive Career Needs Survey developed by Magnusson and Bernes (2001). The

resulting data analysis provided an overview of student perceptions of readiness to enter

the work force, their thoughts about the availability and usefulness of career-related

services and resources, as well as their actual use of those services and resources. This

research supports previous findings regarding the benefit of experiential learning as part

of the university experience and contributes information regarding the resources that

students feel would be most helpful as they make the transition from school to work.

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Chapter 1. Introduction

Background

Students who are preparing to leave university and enter the work force face

many important decisions and wrestle with many questions: What occupations am I

interested in? What type of job am I qualified for? In what direction would I like my

career to proceed? Such questions may cause confusion and anxiety and may have a

negative impact on students' perceptions about their readiness to enter the work force or

to pursue additional education. Most universities provide specific services aimed at

helping students to answer such questions, with the goal of alleviating some of their

uncertainty as they move towards the next step in their careers.

Even with the best intentions, a wealth of information, and creative presentation

methods, it is very difficult to entice students to participate in workshops, read brochures

and/or actively seek out necessary information. In an attempt to reach as many

individuals as possible, many campus-based services continually strive to become more

student focused (Wagner, 1993). For example, Career Resource Centres attempt to

provide career development material that is relevant and useful for the majority of

students. However, despite their apparent need for information and guidance, few

students actually take advantage of the many career resources that are available on

university campuses (Heppner & Johnston, 1994; Hopkins, 1995; Ogletree, 1999).

The apparent inconsistency between the perceived institutional need to provide

career-related services and the actual student use of the available resources led to the

formation of the main question to be answered by this research: What are third and fourth

year university students' perceptions of their personal readiness to enter the work force

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following completion of their program? In order to answer this question, students' perceptions of personal readiness to enter the work force, as well as their perceptions regarding the services and resources available on campus (e.g., accessibility, usefulness), were examined. In addition, data was gathered to determine whether students had accessed any of the available career-related services during their time at the institution.

Research Focus

This study focuses primarily on the career-planning perceptions, understanding and needs of senior undergraduate university students. In order to examine students' individual readiness to enter the work force once their program is nearing completion, several sub-questions were posed. Information was gathered on students' perceptions of their readiness to enter the work force, including their plans following graduation; what resources they thought would aid in the transition to the work force; what resources they thought would have been helpful throughout their program; and their level of satisfaction with their program's ability to prepare them for the next step in their career.

It is possible that students' perceptions of readiness are influenced by other factors, such as their program of studies. Therefore, student perceptions of readiness were compared and contrasted with a number of variables: the Faculty or School in which they were enrolled, the practicality of the student's program of studies (that is, if practicum experience, internships, and/or technical semesters are included in required course work), anticipated program completion date, gender, and age. Furthermore, this study attempted to determine whether students' perceptions are influenced by the resources available on campus, such as academic resources (e.g., professors), and student services (e.g., the

Career Resource Centre). Sub-questions in this area explored students' awareness, level of use, and perceived benefit of available services and resources.

This study was modelled on the Comprehensive Career Needs Study undertaken by Magnusson and Bernes (2001), who explored the career-planning perceptions, understanding and needs of students in grades seven through twelve in Southern Alberta, Canada. Their findings indicated what students in grades seven through twelve thought to be most important to the career-planning process for secondary students. While other researchers have begun to examine the career needs of the post-secondary population (Alexitch, 1994; Alexitch & Page, 1997; Barnes & Herr, 1998; Mariani, 1998; Ogletree, 1999; Ware, 1986), a comprehensive examination has not been done.

Purpose of the Study

The primary purpose of this research was to determine what career-planning services and resources university students want and need, as they prepare for the transition into the work force. If post-secondary institutions can integrate the needs and wants of their students into the services and resources they provide, the researcher hypothesizes that it is likely that students will experience greater success in making the transition to the work force. For example, if it can fully comprehend the career needs of its students, it may be easier for a post-secondary institution to implement more valuable programs, develop more useful resources, and extend the services provided to ensure that students are getting the career-planning information they need to succeed.

In addition, Career Resource Centres may be better able to market themselves to their intended audience by offering services that students truly find useful, in a manner that will attract and hold their interest. It is hoped that this study will facilitate the

creation of programs and services that better meet the needs of post-secondary students,

and that, as a result, students will have confidence in choosing a career path and the tools

and resources to achieve their goals. The results of this study are intended to be useful to

the development of career-related services and resources that better meet the needs, wants

and interests of university students across Canada.

Overview

Following this brief introduction to the background, focus, and purpose of the

study, Chapter Two reviews the literature relevant to the developmental stages of the

population of interest, as well as other variables which have been linked to the career

development process and therefore to perceptions of career readiness. Chapter Three

describes the methods used in collecting and analyzing the data for this study, followed

by Chapter Four, which reports the results. Finally, Chapter Five includes a discussion of

the results, implications for practice, and recommendations for future research.

Chapter 2. Literature Review

Introduction

Students' perceptions of their readiness to enter the work force following program completion may be influenced by a variety of factors, including the resources and services available to them and their perceptions of those services and resources. Career Resource Centres in universities across Canada provide extensive career-related resources. However, few students actually take advantage of these services as they plan the next step in their career (Heppner & Johnston, 1994; Hopkins, 1995; Ogletree, 1999). This chapter reviews the literature relating to the development of student perceptions of career readiness.

This section first reviews psychological development, including developmental stages, career maturity, identity formation, and career indecision as related to the development of senior undergraduate university students' perceptions of their career readiness. An overview of transition research is provided, followed by a discussion of university students' perceptions of the university experience, and of variables such as locus of control and self-efficacy beliefs that may influence those perceptions. The focus then shifts to a discussion of university students' satisfaction with their degree, the availability of and perceived benefits associated with experiential learning, and its impact on career readiness. Finally, career resources available to the undergraduate university student population are described, along with their role in developing positive student perceptions of readiness.

Psychological Development

According to Cross and Markus (1991), "What an individual is striving for, or is in the process of 'becoming,' is at least as significant for explaining individual functioning as what the individual currently is" (p. 213). Therefore, it is essential for career-related service providers to take into consideration this process of "becoming" when they are planning career-related interventions or developing information meant to assist students in the career-planning process. In support of this notion, Heppner and Johnston (1994) assert that a greater understanding of developmental stages or tasks can help career practitioners to normalize a student's feelings of uncertainty about what the future may hold. While being mindful of these developmental stages, one must also realize that "Career selection is a lifelong process" (Krumboltz, 1981, p. 65).

Developmental Stages

As students move through their program of studies, they must begin to prepare to enter the next phase or stage of their career. Blos (1979) notes that undergraduate students have "postponed, either willingly or under moral or social pressures, the full attainment of adulthood for the sake of educational advantages or social prestige" (p. 55). Many theorists have developed detailed descriptions of the stages and phases that young adults progress through as they prepare to make that transition (Blos, 1979; Cross & Markus, 1991; Erikson, 1982; Kegan, 1982; Kleiber & Kelly, 1980; Levinson, 1978; Loevinger, 1976; Palladino Schultheiss, 2000; Super, 1957; Super & Bohn, 1970). Important tasks such as "finishing one's education, getting started in a career, selecting a partner, and starting a family" (Maatta, Nurmi, & Majava, 2002, p. 297) are typical of developmental tasks one might encounter during this life stage.

Super and Bohn (1970) outline several vocational life stages that individuals progress through during the course of their lives. The stages and phases most relevant for the university student population are the exploration stage (ages 15-24), which includes "self-examination, role tryouts, [and] occupational exploration" (Super & Bohn, 1970, p. 136), and the establishment stage (ages 25-44) in which, "having found an appropriate field, effort is put forth to make a permanent place in it" (p. 136). Within the exploration stage, there are two phases that are particularly relevant for university students. The transition phase (ages 18-21) involves the individual giving more thought and consideration to the reality of entering the work force or continuing with professional training and sees the young adult trying to implement the adult self-concept that is starting to develop. The trial phase (ages 22-24) involves the individual finding employment in the field of choice in an attempt to determine if the chosen field is indeed suitable as "life work" (Super & Bohn, 1970). While the tasks outlined in each stage appear to be relevant to university students, based on the population sampled for the current research, the rigidity of the age ranges may not be. While many of the students surveyed in the current research fell into the age ranges described above, a significant portion of the sample (20.4%, n=66) did not.

The tendency to group students who fall outside of the traditional age range for university students into an all-encompassing "adult" learner category is cause for some concern. As Schlossberg (1986) points out, "Adults come in all shapes and sizes, with widely differing personalities, perceptions and life experiences" (p. 8). Therefore, it is important to resist lumping students into age-based groups when making assumptions about developmental issues. In particular, we must be mindful when evaluating and

applying developmental theories to the process of career development that "Life events or transitions are more important than chronological age in understanding and evaluating behaviour" (Schlossberg, 1986, p. 8).

Career Maturity

The ability to successfully navigate the path to a meaningful career is related in many ways to an individual's ability to act in an appropriate manner. Kleiber and Kelly (1980) theorize that young adults are deeply engaged in developing a feeling of confidence in themselves as adults, in their ability to form meaningful relationships with others, and in the goals that they have set. The corresponding development of "a more positive self-image, [and] a greater sense of interpersonal and intellectual competence" (Tan, 1996, np) is the result of this effort and can be seen in changes in attitudes, values and self-concept. Super (1990) defines this "career maturity" as "readiness to cope with the developmental tasks with which [the individual] is confronted because of his or her biological and social developments and because of society's expectations" (p. 213). The process of developing this sense of maturity can be a complicated one, as it involves individuals attempting to transfer their self-concept into terms that fit with their occupational goals (Super, 1990) based on their "previous experiences, current relationships, and future expectations" (Kenny & Rice, 1995, p. 433).

Several developmental theories discuss the importance of individuals taking increased responsibility for their life choices (Blos, 1979; Kegan, 1982; Loevinger, 1976). Kegan (1982) suggests that, as students near completion of their degree, their personal growth begins to take them towards a more developed sense of self, based on the need to take control of their career direction. Loevinger (1976) describes this as a move

from the conscientious-conformist level where individuals are more concerned with their

ability to adapt to their situational environment, to the conscientious stage where the

individual can begin to "focus on understanding the role that the self plays; character

development involves self-evaluated standards, self-critical thinking, self-determined

ideals and self-set goals" (Cavanaugh, 1997, p. 291). Similarly, Blos (1979) posits that

the function of character development is the advancement of "independence of the

organism from the conditions of its environment" (p. 191).

Palladino Schultheiss (2000) corroborated these claims, finding that the more

personally meaningful the attitudes, values and beliefs that students develop as they move

towards a more mature understanding of their adult identity, the more likely it is that they

will progress successfully with their career plans. Similarly, Chickering and Reisser

(1993) found that "Students who are clear on their purpose in life – and are increasingly

able to make conscious choices based on a defined set of values and beliefs – also will be

more persistent in reaching all of their goals, including those specific to career" (p. 48).

These students tend to be more motivated, more active in the career development process,

and more confident in their ability to create an effective career plan (Chickering &

Reisser, 1993). One might guess that those individuals who have a clear sense of career

direction when entering university might be able to translate that focus into clear career

plans and goals.

Identity Formation

Individuals who are able to create a well developed conceptualization of

themselves in the future are more likely to recognize important cues in the world around

them and use those cues to reach their career goals (Cross & Markus, 1991). In

developing a detailed picture of what the future might be like, students are constructing

what Cross and Markus (1991) call "possible selves." Visualization of these "possible

selves" can increase students' motivation to achieve the career plans they have

established for themselves, and assist them in successfully negotiating any transitions that

they may face along the way (Cross & Markus, 1991). Levinson's (1978) description of

the first phase of developing an adult identity, the "novice phase" (age 17 to 33), adds

validity to Cross and Markus' (1991) theory. This "novice phase" includes four important

developmental tasks. The first task is the development of a mental picture of how life as

an adult might materialize. Tasks two through four involve the establishment of an

occupational goal, a mentor relationship and intimate relationships with others. However,

in a recent work Werbel (2000) cautions that, "In this stage of career development, self-

exploration is likely to be unrealistic and lead to unreliable assessments" (p. 390).

Palladino Schultheiss' (2000) seven dimensions of college student psychosocial

development coincide with Levinson's theory. These seven dimensions include

"developing competence (intellectual, physical and interpersonal), managing emotions,

moving through autonomy toward interdependence, developing mature interpersonal

relationships, establishing identity (discovery and confirmation of one's core

characteristics), developing purpose, and developing integrity" (pp. 47-48). Many of

these dimensions have been linked with an individual's level of indecision regarding

career planning and choice, but the ability to form a clear adult identity has proven to be a

particularly strong mediating factor. Students who are exploring and developing their

adult identity "also tend to be in the planning phase of decision making" (Palladino

Schultheiss, 2000, p. 45), the result of which may be the inability to feel confident in one's skill in making well informed career decisions.

Career Indecision

Unfortunately, universities are filled with many of what Parker (1993) terms "wannabes." These are students who believe that dreaming about being successful is all that is necessary. They have not yet come to the realization that, to turn career dreams into reality, they must possess the necessary skills and abilities; they "must eliminate the distance between dreams and reality" (p. 65).

The polar opposite of the "wannabes" are the students who have not made any discernable career decisions. This can be troublesome as well, work by Kenny and Rice (1995) indicates that career indecision is negatively related to adjustment and well-being for college students. Krumboltz (1981) suggests that indecisive students have not been exposed to enough opportunities for learning, including the use of role models. Peronne, Zanardelli, Worthington and Chartrand (2002) have found that "A supportive, high-quality role model relationship can benefit both male and female college students as they make career decisions" (p. 112). A discussion follows of the beneficial relationship between experiential learning and the necessary role modelling that takes place in such situations, and increased levels of confidence regarding the ability to make career-related decisions.

The level of career indecision experienced by an individual has been linked to several developmental variables. Sepich (1987) found that an individual's sense of identity and vocational or career maturity are strong indicators of level of career indecision. Research by Fuller, Blinne and Johnston (1994) indicates that students with a

low sense of vocational identity are more likely to request information related to the decision-making process and measurement of interests and aptitudes. Developmental obstacles may have an effect on individuals' inability to make decisions confidently regarding their career path. Additional factors may include inexperience in decision making, unavailability of sufficient learning experiences relevant to career (Krumboltz, 1981), perceived barriers to the decision-making process, lack of a sense of urgency (Sepich, 1987), decision-making style, and level of ego identity (Guay, Senecal, Gauthier & Fernet, 2003). The lack of urgency expressed by many students in regard to the career-planning process is a topic of interest in the current research and is generally examined by asking senior university students how important they feel career planning is at this time in their lives.

Sepich's (1987) work also presented evidence that links level of anxiety (both in general and in regard to making decisions) to level of career indecision. Students who were high on measures of both trait and state anxiety were less likely to be able to formulate a clear picture of their future self, including their career goals. As a result, these students were also "least likely to make a career decision" (p. 11). Another factor that has been shown to influence career decision-making is perceived interestingness. A recent study by Morgan, Isaac and Sansone (2001) showed that "Anticipated experience of interest when engaged in career-related activities is a critical factor on career choice" (p. 295). In addition, individual competence, sense of control and congruence between the students' goals, the anticipated work environment and perception of occupations can all exert influence on perceived interestingness of occupational choices (Morgan et al.,

2001). Not only does the occupation need to seem interesting for students to choose it, but they must also feel that they will be able to do the work successfully.

Kelly and Pulver (2003) describe several indecision types. "Decided" students are those whose vocational identity is fairly well developed, and as a result they have little anxiety or indecision about their career plan. "Developmentally undecided" students have not yet fully engaged in the career-planning process. They have a good sense of their vocational identity but are in need of career-related information, and as a result, have some anxiety regarding career-related issues. "Chronically undecided" individuals are unclear about how they view themselves in occupational terms, generally have lower self-esteem and confidence in their ability to make wise career decisions, and experience higher levels of anxiety. These students are most in need of effective career-related information and interventions based on evidence that "Effective decision making and information gathering are closely intertwined" (Werbel, 2000, p. 382). Gaffner and Hazler (2002) support this notion, finding that lack of information can influence students' level of career readiness and therefore their readiness to make corresponding career-related decisions.

Three factors have been found to influence levels of readiness: low level of motivation, myths surrounding the career-planning process, and lack of knowledge and understanding about how the process should progress (Gaffner & Hazler, 2002). Unfortunately, too much information or too many options can also cause a problem, as students may feel unable to compare their options adequately, and therefore unable to make a sound decision (Krumboltz, 1981). The idea that too much or too little information can be detrimental to the decision-making process raises questions about

how much information students would find useful, and in what format it should be presented for students to benefit from it fully.

Ferrari and Dovido (2000) discuss the concept of "decisional procrastination," which they describe as the "maladaptive pattern of postponing a decision when faced with conflicts and choices" (p. 127). Students who could be described as decisional procrastinators are more likely to be high on measures of need for certainty and perfectionism, and low on measures of level of confidence and ability to negotiate life's transitions. In addition, when faced with a particularly difficult decision, students who are prone to decisional procrastination are less likely than others to engage successfully in any sort of productive decision-making behaviour.

The ability to make career-related decisions can also be linked to an individual's self-efficacy beliefs surrounding career planning (Guay et al., 2003; Lent, Hackett & Brown, 1996). Specifically, Guay et al. (2003) found that "self-efficacy and autonomy toward career decision-making exert an important and direct effect on career indecision" (p. 166). Perceptions of autonomy and career self-efficacy are often influenced by interactions with both peers and family members (Guay et al., 2003). In addition, Lent, Hackett and Brown (1996) found that self-efficacy expectations are strong predictors of how many occupational choices will be considered before a decision is made.

Sepich (1987) points out that, "[Because of] the transitional nature of college for most individuals, career indecision reflects the contributions of an identity search, a clarification of values, and an entry into autonomy" (p. 8). For university students, the feeling of confusion caused by the interaction of so many life forces may make the transition from student to another role in society quite challenging.

Transition Research

According to Bandura (1997), "Beginning a productive vocational career poses a major transitional challenge in early adulthood" (p. 184). Maatta et al. (2002) found that this period of transition may have far-reaching consequences, impacting the formation of an individual's adult identity. As Rickinson (1998) points out, "At important transition points in the undergraduate learning process, students' inherent drive for maturation and academic success may come into conflict with their fear of losing control" (np). This transition is likely to be influenced by the society – and the corresponding beliefs, values and attitudes – in which the individual lives (Maatta et al., 2002).

As university students look towards graduation, they may begin to feel anxiety over making the transition to the work force. Bruce (1999) states that the key to success is to "prepare mentally and physically for the transition" (p. 81). Transition, whether from school to work, from occupation to occupation, or from one stage of life to another, requires the individual to draw upon his or her coping assets and liabilities as well as on existing resources (Brammer, 1992; Maatta et al., 2002). Super (1957) describes this process as moving from one subculture to another: "[The individual] leaves the society of youth and moves into the society of adults" (p. 101). In order to make the move successfully, individuals must actively engage in learning the appropriate behaviours, attitudes and beliefs that will allow them to experience success (Super, 1957). Cross and Markus (1991) suggest that students in the 18-24 age range are more likely to develop "hoped-for selves" that reflect upcoming transitions that they will need to face, such as marriage and a family. They note that, "A major concern of this age group was to embrace the social roles and relationships that define early adulthood" (p. 240).

Interestingly, "Despite feeling very capable of accomplishing their possible selves, [this group of] respondents reported the fewest number of actions taken to accomplish their most important hoped-for selves" (p. 249). In addition, Riverin-Simard (1995) suggests that, in order for individuals to proceed through the transition process successfully, they must realize that transition is cyclical and continuous. Additionally, they will find it necessary to "renew their relationship with the world" (Riverin-Simard, 1995, np).

Brammer (1992) describes several transitional stages that students may face as they move from one phase of life (school) to another (the world of work). The first stage is one of confusion and emotional discomfort, followed by the second stage, which is categorized by sadness and despair. At this point, most individuals will move into a period of stabilization where their coping skills, resources, and defence mechanisms may appear. If they are not able to use their skills and resources successfully, they may experience anger and/or fear of the future. Successful use of these resources will lead the individual to the final stage of transition, a stage of renewal. This stage includes goals, plans and actions taken towards reaching the desired outcome.

Super's (1990) work indicates that within each transition that an individual experiences, a mini-cycle of the life stages occurs: growth, exploration, establishment, maintenance and decline. The theoretical move from the initial maxi-cycle conceptualization of the life stages to the incorporation of mini-cycles throughout the life cycle adds flexibility to Super and Bohn's (1970) theory. It also allows application of Super and Bohn's (1970) theory to a wider variety of situations less restricted by categorical age groups.

It is important to note that decisions made and transitions negotiated are likely to be recurrent in nature. As Bandura (1997) points out, "With rapid changes in the occupational structure, people must make occupational decisions recurrently rather than deciding on a pursuit that then sets the occupational path for their lifetime" (p. 427). Krahn's (1996) research adds another dimension to the discussion. His work has shown that, because of changes that have taken place in the Canadian labour market, such as "industrial restructuring, higher levels of unemployment, and the emergence of the temporary/contract labour market" (p. 38), the school to work transition may have become much more difficult for young adults to negotiate successfully. In addition, transition patterns are changing, and roles such as "student" and "worker" are becoming less clearly defined. These changes may have a direct impact on "young people's timing of entry into adult roles" (p. 4). Furthermore, transitions associated with other roles that one may encounter as an adult (e.g., marriage, starting a family) may make career-related transitions even more multidimensional (Krahn, 1996).

The changes described by Krahn (1996) may have some impact on young adults' ability to make a transition successfully into the work force. However, in a comparison of Canadian university students graduating in 1982, 1986, and 1990, no significant change was found in students' descriptions of the school to work transition (Finnie, 1999). What Finnie (1999) did report was that "[The] school-to-work transition is clearly an extended process, with many outcomes changing significantly from two to five years following graduation" (p. 74). What affects these outcomes has not been studied in depth, but one might hypothesize that an individual's perception of his or her ability to succeed in the world of work may play a part.

Perceptions of the University Experience

Alexitch's (1994) research on the perceptions and expectations of a university education indicates that students often choose to attend university for career-related reasons, listing "career or job-preparation as the single most important role of a university" (p. 165). In earlier work by Remegio and Page (1991), 63.83% of students indicated that they attended university mainly for preparation and experience related to establishing clear occupational goals. Approximately 95% of those students thought that their peers were attending university for the same reasons. An explanation for these findings is suggested:

> Counsellors openly advocate future jobs as the predominant value with which to
> guide university course selection, and as the primary reason for university
> attendance. Knowledge thus becomes evaluated and reinforced in terms of its
> instrumental rather than intrinsic value. (p. 164)

In addition, intrinsically rewarding goals, such as finding meaning in one's life, are being replaced by goals focusing on extrinsic rewards, such as becoming wealthy and/or popular (Alexitch, 1994).

In a related study by Tan (1996), students were asked what they felt to be the most important outcome of their post-secondary experience. Topping the list were preparation for a career, increasing their knowledge in an academic area, and learning skills that will be useful in their daily lives, all cognitive outcomes. Interestingly, when students were asked about their actual progress through their post-secondary experience, all of the highest ranked outcomes were in the affective domain. This incongruence between what students believe to be important and what they actually get out of their

university education may influence the way they feel about their experience and therefore their perceptions of their readiness to leave the post-secondary environment. In support of this idea, Wilson and Hodges (1992) have found that, "People are often unaware that the reasons they bring to mind are incomplete or biased; they assume that these reasons reflect how they feel" (p. 45).

Variables Influencing Perception

Several variables have been found to affect an individual's perception. These include, but are not limited to, the individual's beliefs, mood, and feelings of personal control (Clore, 1992; Hansen Lemme, 1999; Wilson & Hodges, 1992). University students' perceptions of their readiness to enter the work force after completion of their program of studies may be influenced by all these factors. Mood may play a role, depending on the degree to which the individual attributes his or her current mood state "as a reaction to the object of judgement" (Clore, 1992, p. 135). Wilson and Hodges (1992) found that, "Depending on the context, people have been shown to base their attitudes on their behaviour, their mood, or a subset of their beliefs about the attitude object" (p. 43).

Negative core beliefs, such as the belief that something is "what I can get" rather than "what I choose'" (Borders & Archadel, 1987, p. 74) may also affect perceptions of potential occupational options. Borders and Archadel (1987) report that perceptions of one's own abilities, interests and personalities may limit effective self-evaluation and occupational choice. Super (1990) defines occupational choice as "the choice by the individual of a role and a setting in which he or she will fit comfortably" (p. 219). Therefore, faulty or negative core beliefs may prevent or impede sound decision making.

Wilson and Hodges (1992) report that the reconstruction and reprioritization of data that

individuals use to create their attitudes and beliefs may result in positive attitude change.

This positive change may also benefit the individual by facilitating productive decision-

making behaviour. Self-perception, therefore, may also have an effect on other career-

related perceptions, such as readiness to enter the work force.

Values such as those associated with work and culture can also influence

perception (Brown, 2002; Super, 1990). Work values are those that "individuals believe

should be satisfied as a result of their participation in the work role" (Brown, 2002, p.

49). As a result, these values influence many aspects of the career development process,

including the decision-making process, occupational choice, and occupational success

and satisfaction (Brown, 2002). In addition, self-perception comes into play because

"Choosing a career involves estimates regarding the skills and abilities that will be

required to be successful" (p. 51). A study by Lent, Brown, Talleyrand, McPartland,

Davis, Chopra, Alexander, Suthakaran, and Chai (2002) corroborates this claim, finding

that students' interests and values are important considerations when they are deciding

among occupational options. In addition, "The perceived quality of family relationships

… and family-supported goals … may play small, yet significant roles in college

students' confidence in engaging in developmentally appropriate career-planning

activities and ability to formulate clear and stable career goals" (Hargrove, Creagh, &

Burgess, 2002, p. 197).

Differing value and belief systems have a direct impact on the viability of various

career-related interventions. Counsellors and career practitioners need to be mindful that

not all clients will adhere to the normative model that is often used (Tracey & Darcy,

2002). For example, career theories practiced in Canadian universities may be based on Western belief systems and may not be relevant or valuable to students from different cultures. As Tracey and Darcy (2002) point out, "Counsellors may benefit from being aware of deviations in client adherence to the normative model and the diversity in how people think about vocational interests and occupations" (p. 425). Effective interventions, therefore, need to take into consideration different cultures, races, backgrounds, and viewpoints in order to be optimally effective.

Locus of Control

As Hansen Lemme (1999) argues, "Feelings of personal control may be especially crucial in areas that people value highly and that may therefore have a significant effect on psychological well being" (p. 416). Dollinger (2000) has found that, "Because they are more perceptive of their situations, internals seem to exert more control over their lives" (p. 537). In addition, those with an internal locus of control are more likely to recognize and correctly interpret information and knowledge that will assist them in reaching their career goals (Dollinger, 2000). A key factor here is the students' experiencing some form of success as they strive towards reaching their career-related goals. As Maatta et al. (2002) have found, "[Success] increases the belief of individuals in their personal control and agency" (p. 309), thus reducing their tendency to attribute life events to external sources. In addition, students with an external locus of control are more likely to have difficulty making career-related decisions (Gaffner & Hazler, 2002; Sepich, 1987).

Self-Efficacy Beliefs

Self-efficacy expectations have been found to be a factor in the career-planning productivity, interest development, and success of students (Bandura, 1997; Brown,

2000, McAuliffe, 1992; Tracey & Darcy, 2002). In particular, social cognitive theory asserts that self-efficacy beliefs are one of the main "determinants of human thought, motivation and action" (Bandura, 1997, p. 426). Self-efficacy expectations account for student success to a greater degree than does actual ability or interest in the activity. These expectations are acquired in several ways: through performance accomplishments (e.g., grades); vicarious learning (e.g., observation and interpretation); verbal persuasion (e.g., messages from others); and physical or affective status (e.g., stress and anxiety) (Bandura, 1997). Several dimensions of self-efficacy have been defined, including career self-efficacy, occupational self-efficacy (Betz & Hackett, 1986), and social self-efficacy (Anderson & Betz, 2001). Most relevant to this discussion is career self-efficacy, defined by Betz and Hackett (1986) as "self-efficacy expectancies in relation to the wide range of behaviours necessary to the career choice and adjustment process" (p. 280).

High career self-efficacy beliefs have been shown to be strong predictors of number and range of career options considered (Bandura, 1997; Betz, 2001; Borders & Archadel, 1987; DeWitz & Walsh, 2002; Lent et al., 1996); exploratory activity (Betz, 2001; Borders & Archadel, 1987; Diegelman & Subich, 2001; Lent et al., 1996; Werbel, 2000); level of anxiety related to the career-planning process (Borders & Archadel, 1987; Dwyer & Cummings, 2001); ability to change behaviour and therefore negotiate transition successfully (Borders & Archadel, 1987); and level of career indecision (Betz & Hackett, 1986; Guay et al., 2003). A positive relationship has also been shown between "self-efficacy beliefs and individual's performance, persistence, and outcome expectations" (DeWitz & Walsh, 2002, p. 316). Low self-efficacy beliefs, specifically in the areas of communication skills, stress management, leadership and coping with high

work place demands, can significantly impede the career decision-making process and subsequent career advancement (Bandura, 1997). It should also be noted that social self-efficacy expectations may relate to successful career development and level of career indecision, due to their role in the psychological adjustment of the individual (Anderson & Betz, 2001).

The self-efficacy beliefs of women and their subsequent impact on career development has been a topic of interest for some time. As Betz and Fitzgerald (1987) point out, "Females' tendency to underestimate themselves may negatively influence their career development" (p. 116). Females are consistently less confident in themselves in traditionally male-oriented domains, such as math and science, even when compared to males of equal ability; this "tendency to underestimate their abilities and their probable levels of future performance" (p. 114) may have a direct impact on their ability to visualize themselves as being successful in the world of work. Therefore, an examination of the effect gender may have on students' perceptions of work force readiness may provide important information for career-related service providers.

Lent et al.'s (1996) research indicates that success can significantly strengthen an individual's perceptions of self-efficacy as well as influence outcome expectations. Evidence supports the claim that "Personal accomplishments are a particularly compelling source of self-efficacy" (Lent et al., 1996, p. 6). Betz and Hackett's (1986) research also confirms that, when an individual experiences success, his or her level of self-efficacy for that task increases, As Betz (2001) points out, "Self-efficacy mediates the effects of prior performance on interests which, in turn, mediate the effect of self-efficacy on choice intentions" (p. 71). Therefore, when an individual experiences success,

in a certain area, he or she is more likely to continue to pursue activities in that area in the future. Individuals with high levels of self-efficacy in specific areas are more likely to have higher outcome expectancies in those areas, and subsequently produce a higher level of performance (DeWitz & Walsh, 2002). As a result, it could be hypothesized that students who have experienced a high degree of success in their academic pursuits will have a higher outcome expectancy for other tasks related to academia, including the transition from school to work.

Interest in a particular occupation, pursuit intentions, and task interest have been linked to both a high level of self-efficacy and positive outcome expectations (Betz & Hackett, 1986; Diegelman & Subich, 2001). Nauta, Kahn, Angell and Cantarelli (2002) assert that "Vocational interests develop over time, partially as a function of self-efficacy expectations" (p. 290), and that "The relationship between career interests and self-efficacy is largely reciprocal" (p. 297). Self-efficacy beliefs involve a level of uncertainty about the outcome of the task, directly affecting the amount of interest an individual may have in that particular task; the aspect of uncertainty, not self-efficacy, promotes "interestingness" (Silvia, 2003, p. 239). It should also be noted that a high level of self-efficacy may actually hinder the career development process in that it may cause related activities to be perceived as uninteresting (Silvia, 2003).

It has been found that "[efficacy based interventions] promote the personal and contextual factors that lead to high self-efficacy" (Brown, 1999, np). Betz (2001) suggests that interventions involving increased exposure to career-related experiences may be helpful in increasing students' self-efficacy levels. Caution should be exercised when implementing interventions focused solely on self-efficacy beliefs, as those beliefs

may be grounded in the individual's core belief system. If this is the case, the core belief system is often harder to change and may need attention before self-efficacy levels can be increased (Borders & Archadel, 1987). Interventions that target clients' outcome expectations may also be useful to help them "identify salient aspects of careers which may be important to them, but of which they had been unaware previously" (Diegelman & Subich, 2001, p. 404).

<p style="text-align:center">Student Satisfaction</p>

Buck and Barrick (1987) state that employers are looking for a "sense of responsibility, self-discipline, pride, teamwork and enthusiasm ... the ability to learn and solve problems" (np), and that schools are not sufficiently developing these attitudes, abilities and skills. The idea that "the public expects schools to help prepare students to plan for careers and develop useful job skills" (Wall, 1998, p. 46) suggests that there is a need for career-planning and skill development emphasis at all school levels, including post-secondary.

In a 1998 survey of graduates from four universities and five university colleges in Alberta, Canada, Krahn and Sorensen (2000) found that 60% of students were satisfied with the relevance of their course work. In addition, 77% of the same students rated their transition into the work force as "somewhat easy" or "very easy"; the higher the level of education, the easier the transition. Sixty-nine percent of the graduates in this study held a job directly related to the content of their program, and 78% were working in an area directly related to their general skills and abilities. Sixty percent of graduates reported using their "speaking, problem-solving, independent working and team work skills 'to a great extent' in their current job" (p. vii).

In another survey of students graduating in 1982 from Canadian universities, colleges and trade schools, graduates in engineering, math and physical science reported being happier with the narrower career aspects associated with their field of choice, while "non-natural science/engineering students [reported] greater satisfaction with more general developmental aspects" (Finnie, 1995, p. 27).

Students' perceptions and expectations regarding the world of work may not be as accurate as they think. Alexitch (1994) reports that alumni are less satisfied with their employment situation than they expected to be as undergraduate students. Specifically, the findings indicate that, "Employment expectations held by individuals while they are undergraduates tend to be more positive and optimistic than their actual employment outcomes" (p. 157). Briihl (2001) states that students often overestimate starting salary ranges for entry into their chosen field, as well as the importance of information gathering skills. Conversely, students commonly underestimated the importance of interviews, letters of reference and GPA as well as social skills.

Other research has shown that students graduating from programs with a more practical focus (i.e., professions and applied disciplines) find work that is more closely related to their skills and qualifications (Finnie, 2002). In this study, "[The] highest approval ratings went to the disciplines most directly connected to labour market skills sets and career paths" (p. 8). Similarly, Palmer (1986) found that vocational graduates gave colleges high marks for "technical knowledge" or "job skills." According to Laanan (1995), this may be due to the practical focus (e.g., apprenticeships and cooperative education work terms) of many college programs. However, Palmer (1986) also found that graduates gave colleges lower marks for providing knowledge about career

opportunities or transitions. Alexitch (1994) found that university students were more likely to rate themselves as being "moderately prepared for employment in terms of knowledge, thinking skills, communication skills, and technical skills, but they felt unprepared due to a perceived lack of practical or field-related experience" (p. 166).

Experiential Learning

Today's world of work is constantly changing and is therefore somewhat unpredictable (Laanan, 1995). The new workplace eliminates the need for programs focused only on job skill acquisition; instead, the ability to connect knowledge to context is key (Lankard, 1996b). Employability skills such as individual competence, personal reliability, economic adaptability, and group and organizational effectiveness are at the top of most employers' lists (Lankard, 1990; Wall, 1998). As a result, job security is now often tied to skills related to career management and resilience (Brown, 2000). As the world of work evolves, employees have become more responsible for the development and refinement of their own skills. As Haigh and Kilmartin (1999) point out, "The development of personal transferable skills is a fundamental part of achieving most of that we consider essential to good education" (p. 203).

Educational institutions have begun to realize that students perceive the purpose of university education to be a combination of educational and vocational preparation (Alexitch & Page, 2001). Specifically, "Competence development is now more often seen as a central goal of business and management degree courses" (Arnold, Loan-Clarke, Harrington & Hart, 1999, p. 45). Many university programs now use case-studies, projects and group work to increase the degree to which students are able to improve their "interpersonal, communication, team working and problem solving competencies"

(Arnold et al., 1999, p. 45). Alexitch and Page (2001) have also found that students often choose degree programs on the basis not only of interest but also their perceived utility for a career.

One of the best ways to discover work that is truly meaningful to an individual is through experiential learning. Contextual learning strategies involving problem-based learning, brain-based learning, or authentic assessment help to enhance the individual's self-knowledge and ability to apply theory to practice (Brown, 1999; Cantor, 1997; Lankard, 1996a). Some examples of such strategies include internships, apprenticeships, worksite experiences, practicum placements and cooperative education work terms (Brown, 1998, 1999; Cantor, 1997). Involvement in these types of activities may be beneficial from a developmental perspective as well, as Super (1990) argues: "Interactive experiential learning, self-concept, and occupations-concept formation take place through interaction of the individual and the environment" (p. 204). Increased self-knowledge may be the cornerstone of success. For example, Brown (2000) found that workers who know their own strengths, interests and values experience the greatest success.

Drew (2001) found that "[Students'] motivation level can be influenced by teaching relevance and applicability to 'the real world'" (p. 320). The study also showed that participating in "hands-on" activities had a positive effect on students' ability to learn the material. This can be seen in the high perceived competence development generally reported by students participating in work placements, particularly in placements where students experienced high levels of autonomy in their work (Arnold, Auburn & Ley, 1995; Arnold et al., 1999). Furthermore, "[An] increased sense of competence and self-esteem can be expected to increase a young person's actual and

perceived readiness to tackle career decision making" (Arnold et al., 1995, p. 97). In Lent et al.'s (2002) study, "direct and vicarious work experiences" (p. 68) were often listed as two of the variables that students felt most affected their future career choices. It may be safe to assume, then, that the inclusion of some form of practical experience in a student's program of studies may enhance feelings of career and work force readiness.

Research has also shown that learning experiences can directly impact the development of career-related interests. For Krumboltz (1981), "It is the learning experiences themselves that have an impact on an individual's future development of educational and occupational skills and selection of a course of study, an occupation, or a field of work" (p. 51). Occupational preferences are often influenced by whether the individuals have been rewarded for involvement in activities related to that occupation, observed a respected other being rewarded, been rewarded themselves by the respected other, and been exposed to positive information about the chosen occupation (Krumboltz, 1981). Lent et al.'s (2002) research supports this position, as subjects reported "access to role models or mentors" (p. 69) as an important source of support for their occupational choice. In addition, exposure to successful role models may have a positive impact on occupational self-efficacy (Bandura, 1997). Once an occupational choice has been made, individuals are more likely to take action to reach their occupational goals if the preference has been recently expressed, if they have been exposed to learning and employment opportunities, and if there is a skill match (Krumboltz, 1981).

While practical experience has been found to be an important variable, it may not be enough on its own. Drew's (2001) research indicated that "Practice was not enough in itself and students also like specific teaching and support" (p. 322). Bandura (1997)

defines "mastery-oriented instruction" as "an enactive means for developing basic entry skills for diverse careers and persuading people that they possess the potentialities and learning capabilities to succeed in a wide range of occupational pursuits" (p. 438). Another important finding of Drew's (2001) study was that students are interested in career information throughout their university experience. Students reported that "Uncertainty about career options makes you nervous," and that it's "never too early to start having job ideas" (p. 324).

The issues and concerns that university students face as they prepare to enter the next phase of their career should have a direct impact on the career resources that institutions provide. Developmental issues such as career maturity, identity formation and career indecision, as well as the individual's ability to cope with transition, are important considerations for career resource providers. Student perception should also be taken into account when providers are developing services and resources, since locus of control, self-efficacy beliefs, and the expectations a student may have for his/her university experience may all impact perceived helpfulness. Those planning interventions to assist students with their career needs need to recognise that experiential learning is beneficial to students and provide it wherever possible. The following section explores the career services generally provided by universities and their attempts to deal with the issues and concerns that students face as they progress through the career-planning process.

Career Resources

Just as there are many different developmental stages, ways of viewing the world, and levels of indecision, so too should there be different ways of presenting career-related material to students. Heppner and Johnston (1994) note that "Too often all clients who

come in for career counselling are treated the same with little attention paid to how their needs or circumstances are unique" (p. 179). Chickering and Reisser (1993) state that due to the "interconnected nature of career development, identity development, the role of relationships and college student adjustment" (p. 59), there is clear support for counselling interventions that cross both career and non-career domains.

Generally speaking, university career resource centres provide services and resources aimed at career planning and development. These services may include "occupational and educational information … promoting thoughtful career planning and decision making; providing job placement and employability skills information; assisting individuals in assessing and understanding their attitudes, values, interests and aptitudes; and preparing individuals for life-role transitions" (Marshall, 1981, np).

Underlying these services is the knowledge that the formulation of a clear and realistic occupational outlook can not only provide students with meaning and relevance in their studies, it can also build their self-efficacy (Bandura, 1997). Career exploration is essential as a starting point, as it often promotes readiness to engage in, and assists in preparation for, the job-search process (Werbel, 2000). Self-exploration behaviour can also be useful in positively changing students' attitudes concerning self-knowledge (Ware, 1986). It is also important to note that "Training in job-search skills bolsters perceived efficacy to navigate the competitive job market" (Bandura, 1997, p. 429). Saks and Ashforth (2000) have also found that anxiety related to searching for a job and preparatory behaviour is linked to both self-esteem and job-search self-efficacy.

Despite providers' best intentions, career services and resources may still not be utilized effectively. Providing career information does not guarantee that students will

take advantage of the resources that are available (Heppner & Johnston, 1994; Hopkins, 1995; Ogletree, 1999). "At a time when career-counselling services are increasingly essential, they remain marginalized and under-used" (Hopkins, 1995, np). Super (1990) suggests that to be effective resources must pay close attention to the decision-making style of students and the sequential nature of the career decisions they are apt to make.

Career practitioners should also be mindful that the progression through the career-planning process may not be continuous. The fact that students may reduce their career planning and preparation after choosing a major and may not re-engage until their final semester – and that graduate or professional school may further extend this process – may account for some of the lack of use of relevant resources at the undergraduate level (Super, 1990). Unfortunately, as Super (1990) points out, "Too often ... career education deals only with occupations and not with career development" (p. 258).

Research suggests that a good marketing strategy by career resource centres may increase use of services and resources (Hopkins, 1995). An effective marketing plan should analyze the needs (career development) and wants of the target group, as well as accessibility, cost, awareness of services, and awareness of the benefits the services can provide. Vocational identity should also be taken into consideration, with available interventions having enough flexibility to be tailored towards specific students (Fuller et al., 1994). Shivy and Koehly (2002) also outline the importance of cultural background. They surveyed 133 students about their perceptions and preferences for university-based career services. Results indicate that "Cultural background may impact [students'] perceptions of career services" (p. 56), and that interventions involving direct contact with members of the work force were highly preferred over methods that include "written

exercises, individualized interpretations and feedback, and building support" (p. 58).

Therefore, in addition to information about the client's cultural background, information

about student perceptions of services provided may be very useful.

One of the goals of a successful career resource centre may be to "reframe career

counselling as being personally, socially and economically essential" (Hopkins, 1995,

np), while at the same time identifying the multitude of individual variables that influence

the viability of available interventions for the student population. Alexitch and Page's

(1997) research supports the notion of matching counselling information to student

characteristics. Additional care should be taken due to personal and or emotional barriers

that may prevent students from making well-informed career decisions (McAuliffe,

1992). It should be noted however, that, "[While] having information available helps

people make better informed decisions, the information per se does not stimulate [the]

decision making [process]" (Sepich, 1987, p. 16).

In a study of the efficacy of the Psychology Career Advising Centre in the

Department of Psychology at South West Texas University, Ogletree (1999) found that

graduates of the psychology program gave the Advising Centre an average rating of 3.44

(out of 5) on helping students plan for the future. Suggested improvements to the Centre

included internships or practical experience; career counselling; information about

graduate school and/or related employment; and classes with a specific job focus (e.g.,

interview skills). Mariani (1998) found that having alumni act as job shadow hosts is

another effective way for students to both explore and prepare for occupations that are of

interest. Other benefits include seeing the job in action and networking with professionals

in a similar field. Providing information to students through a variety of different

methods may be essential for effective student assistance. Using a variety of approaches (e.g., presenting the same material in different ways) may allow the information to reach a wider audience (Ware, 1986). For example, offering career-planning information on the internet appears to be useful; however, there has been no significant research done on the benefits or effectiveness of this method of presentation (Peterson, 2000).

Work by Alexitch (1994) and Alexitch and Page (1997) indicates that students rate advice on career opportunities and job preparation received from their professors more positively than advice from any other source. When compared with university advisors, professors were perceived to be more empathetic and experientially based (Alexitch & Page, 1997). Students are often not able to choose an advisor with whom they feel comfortable to discuss their concerns, which may also influence these perceptions (Alexitch & Page, 1997). Ware (1986) suggests that instructors are perceived to be among the foremost sources of career-related information. In general, university counsellors have been rated as moderately useful, with the majority of information sought relating to adaptation (for new students), future goals, achievement (e.g., degree requirements), and career preparation (Alexitch, 1994). In addition to professors and counsellors at the university level, family, friends, high school teachers and counsellors have also been named as important influences on career-related decisions, including attendance at a post-secondary institution (Alexitch, 1994).

Types of career-related information have also been analyzed (Barnes & Herr, 1998; Ware, 1986). Information about the world of work has been found to be used more frequently than any other type of information (Ware, 1986). Information on specific skills such as resume writing and interview and job search skills is also in high demand (Ware,

1986). Many students are also interested in identifying their career interests and aptitudes (Barnes & Herr, 1998; Ware, 1986). Research has shown that "Students who are interested in taking an interest inventory and obtaining their results show more gain in certainty and satisfaction with their planned occupation" (Barnes & Herr, 1998, p. 188). Barnes and Herr's (1998) study indicates that both counselling alone and counselling in conjunction with either the Strong Interest Inventory or the DISCOVER program "reduced undecidedness and increased [students'] certainty about their academic and career goals, clarifying their career identity and the elements [values, interests, abilities] related to career planning" (p. 188). However, counselling was found to be more effective than either the Strong Interest Inventory or the DISCOVER program alone (Barnes & Herr, 1998).

Rationale for Current Study

A brief survey of the web sites of 25 major Canadian universities indicates that all 25 institutions provide career services for their students. However, a review of the literature revealed no comprehensive work examining the efficacy of these services. Several studies (Alexitch & Page, 1997; MacFarland, 2001; Nelson & Johnson, 1997; Ogletree, 1999; Weglarz, 2002) have surveyed students in order to gather information on general levels of satisfaction with their university experience, including career services. None of these studies, however, provided an in-depth discussion of career service efficacy, and only Alexitch & Page (1997) used a Canadian population. Other studies have surveyed student issues (both personal and career-related) and awareness of student services (Schweitzer, 1996), student perceptions of relevance and helpfulness of career-related assistance (Puchkoff & Lewin, 1987; Shivy & Koehly, 2002; Ware, 1986), and

satisfaction with service provided (Heppner & Krieshok, 1983). While these studies provide an excellent starting point, they do not focus specifically on student perceptions of available services and resources, and the impact of those perceptions on perceived readiness to enter the work force upon completion of the program of studies.

The goal of the current research is to extend previous work by exploring university students' perceptions of the availability and efficacy of the career resources available to them, and the impact of these resources on students' perceived readiness to enter the work force and on their satisfaction with their university experience. In addition, these perceptions will be cross-tabulated with several variables: age, gender, Faculty or School in which the student is enrolled, expected program completion date, and inclusion in the student's program of some form of practical experience. It is hoped that the findings will be generalizable across university populations and result in a clearer picture of what university students need and want as they progress through the career-planning process

Chapter 3. Methods

Introduction

The purpose of this study was to explore senior university students' perceptions of their readiness to enter the work force upon completion of their program of study. This chapter discusses the methods used to complete the research: the population sampled, the procedure used, instrument administered, data collection methods, and the statistical techniques used to analyze the data.

Factors related to readiness were cross tabulated with age, gender, program of studies, expected program completion date, and inclusion or not in the student's program of some form of practical experience. Information was also gathered concerning student perceptions of the availability and helpfulness of career-related services and resources.

Population

The population of interest was senior (third and fourth year) university students. The sample consisted of 324 undergraduate students attending the University of Lethbridge in Lethbridge, Alberta, Canada. Students were chosen based on their registration in a third or fourth year course normally taken by students in the corresponding Faculty or School. Undergraduate Faculties and Schools at the University of Lethbridge include the Faculty of Arts and Science, Faculty of Management, Faculty of Education, Faculty of Fine Arts, and the School of Health Sciences. Within the sample of 324 students, 115 were enrolled in the Faculty of Arts and Science, 90 in the Faculty of Management, 74 in the Faculty of Education, 23 in the School of Health Sciences, and 14 in the Faculty of Fine Arts.

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Procedure

Prior to administering the instrument, the researcher received permission from the Deans of the Faculty of Arts and Science, Faculty of Management, Faculty of Education, Faculty of Fine Arts and School of Health Sciences to access students in their respective Faculty or School, as well as to contact individual instructors to gain access to their classes. Approximate total enrolment counts in each Faculty and School and a complete course listing for the Fall 2003 semester were obtained from the Registrar's Office at the University of Lethbridge.

Based on this information, the researcher calculated approximate desired Faculty and School distributions based on a sample size of 400 students. It was determined that for a sample size of 400, the researcher would need to survey 160 Arts and Science students (40% of total), 144 Management students (36% of total), 56 Education students (14% of total), 24 Fine Arts students (6% of total), and 16 Health Sciences students (4% of total). The preceding percentages correspond with total enrolment figures for each Faculty and School at the University of Lethbridge. The researcher then examined the course listing for Fall 2003 and, using a method of convenience, employed a cluster sampling procedure to choose third and fourth year courses with a minimum enrolment of 30 students that could also be scheduled to allow all of the surveys to be administered within a one-week time period. Thirty-seven courses were determined to be an acceptable fit using this sampling procedure, and the researcher contacted each individual instructor to ask permission to access his or her students during class time.

Of the 37 instructors contacted, 26 responded to the request to administer the survey in the first ten minutes of their class time. Twenty-three of the responses from

instructors were positive, while the remaining three instructors indicated that it would not be convenient for their class to participate in research at that point in the semester. If the researcher had administered the survey to all 23 courses to which she was allowed access, the sample size would have been 1,586 students. Therefore, the researcher applied a random sampling procedure to choose courses from the larger group of 23 to reduce the sample size to approximately 400 students.

Initially, 12 courses were selected, consisting of four Arts and Science courses (total enrolment 167), four Management courses (total enrolment 149), two Education courses (total enrolment 51), one Fine Arts course (enrolment 33) and one Health Sciences course (enrolment 32). Upon examination of the data from the Fine Arts course, it was determined that only one student in the class was actually enrolled in the Faculty of Fine Arts. Consequently, the data was rejected for this class, and an additional Fine Arts course (enrolment 39) was surveyed several weeks later. The initial surveys were administered October 27 to 30, 2003 (approximately half-way through the Fall semester). The additional Fine Arts course was accessed November 26, 2003.

Instrument

The instrument administered (see Appendix A) is a revision of the Comprehensive Career Needs Survey used by Magnusson and Bernes (2001) in their study of the career-planning perceptions, understanding and needs of students in grades seven through twelve in Southern Alberta, Canada. The Comprehensive Career Needs Survey was modified in order to make the content more applicable to the post-secondary population, resulting in the Comprehensive Career Needs Survey Post-Secondary Form. The survey included 20 questions designed to collect demographic information, as well

as students' perceptions of the importance of career planning, readiness to enter the work force upon graduation, satisfaction with their degree, resources that would aid in a smooth transition to the work force, future plans, preference of occupational location, whether students had accessed the resources and services available on the University of Lethbridge campus, and how helpful they perceived these services and resources to be in career planning.

Part A: General Information consisted of Questions 1 through 10. The first six questions were demographic, providing a basic description of the sample (age, gender, program enrolled in, practical experience, and expected program completion date). Questions 7 through 10 focused on career-planning importance, perceptions of readiness, degree satisfaction, and resources that would assist in the transition to the work force. Questions 7 through 10 were in a forced-choice format and consisted of three-point Likert scales and checklists. Questions 7 and 10 also included an open-ended component to allow students to record additional information if necessary.

Part B: Career Plans, consisting of Questions 11 through 13, focused on students' plans following completion of their program. Again, these questions were in a forced-choice format using three-point Likert scales and checklists to solicit responses. Question 12 also included space for participants to describe their response. The final section of the survey, Part C: Career Help, included Questions 14 through 20. This section focused on students' knowledge and perceptions of the availability and helpfulness of career-related services and resources, whether the students had a specific occupation in mind following graduation, and how confident they were that they would be able to find a job in their

occupation of choice. Questions 14 through 20 were in a forced-choice format, consisting of three- and four-point Likert-scales and yes/no responses.

A pilot study was conducted for this survey using three undergraduate students at the University of Lethbridge, students who were known to the researcher before the pilot study. Participants in the pilot study were asked for feedback concerning the readability and clarity of questions. They indicated that no changes to the pilot questionnaire were necessary, and the instrument was used for all subsequent data collection.

Data Collection

The survey was administered to all participants during the first ten minutes of one of their regularly scheduled classes, with the exception of the final Fine Arts course, where the last ten minutes of class time was used. The researcher explained the Consent for Research Participation form (see Appendix B), which all students who wished to participate were required to sign, prior to administration of the survey. The researcher also remained present during the administration of the instrument in order to clarify any wording and to answer any questions that arose.

Data Analysis

As this study was purely exploratory in nature, no *a priori* hypotheses were generated. The goal of this study was to generate understanding of senior undergraduate students' perceptions of their readiness to enter the work force upon completion of program, and their knowledge of and perceptions of availability and helpfulness of the career-related resources available to them.

Quantitative Analysis

Some of the survey items were demographic in nature (Questions 1 through 6).

Therefore, descriptive statistics were used to describe responses. Raw frequencies were

reported as well as the percentage of respondents in each category (e.g., male/female).

Descriptive statistics were also used to describe responses to Questions 10, 12, 14,

15, 16, 18, 19 and 20. These questions asked respondents to identify resources that would

be helpful in the transition to the work force, their plans following program completion,

and information that would be helpful to them at that point in their program. Respondents

were also asked to assess how helpful different individuals and groups of people had been

as they planned their career, and their level of confidence in being able to find a job in the

occupation of their choice. Raw frequencies of responses were reported for these

questions, as well as the percentage of participants who chose each response category.

Descriptive statistics were also used to describe Questions 7, 8, 9, 11, 13, and 17.

These questions requested information on the importance of career planning, perceptions

of readiness, degree satisfaction, plans following degree completion, the importance of

finding work that would allow them to stay in their community, and whether they had a

specific occupation in mind following graduation. Raw frequencies of responses were

calculated, as well as percentage of responses in each category. In addition to the

descriptive statistics, inferential statistics were also used to analyze these questions. The

Chi-square statistic was used to determine if significant differences existed between the

sub-groups of age, gender, program of studies, practical experience, and expected

program completion date and responses to Questions 7, 8, 9, 11, 13, and 17. The Chi-

square statistic was determined to be an appropriate measure due to the categorical nature

of much of the survey. To add to the raw frequencies described, observed Chi-square

results were reported and determined to be significant if they reached a confidence level

of 95% (p = <0.05). Chi-square results reaching a confidence level of 99% (p = <0.01)

were additionally noted.

Qualitative Analysis

Survey questions that were open-ended in nature were analyzed using the constant

comparison method. Randomly selected responses were analyzed and sorted into several

categories. Comments similar in nature were placed in the same category in order to

condense the information into more concise categories for reporting purposes. Open-

ended questions were included in Questions 7 and 10 (career-planning importance and

resources that would aid in the transition to the work force). Where a statistically

significant Chi-square result was observed between one or several of the sub-groups (age,

gender, program of studies, practical experience, and expected program completion date)

and responses to Question 7, qualitative data was used to provide insight into responses

from that sub-group. Where a statistically significant Chi-square result was observed,

responses to the corresponding open-ended question in Question 7 were randomly

selected from the 324 surveys to supplement the finding.

Responses to Question 10 that were similar in nature were also grouped into

themes and reported, to supplement the qualitative data provided by responses to the

checklist in that question. The open-ended questions in the survey were all linked to

questions that provided quantitative data. Discussion of the qualitative results will occur

in conjunction with discussion of the quantitative results of those questions. The

quantitative and qualitative results for this survey are reported in detail in Chapter 4.

Chapter 4. Results

Introduction

This chapter summarizes the results of the administration of the Comprehensive

Career Needs Survey Post-Secondary Form, which was given to senior undergraduate

students in order to explore their perceptions of readiness to enter the workforce

following graduation. A total of 324 surveys were administered to undergraduate students

attending the University of Lethbridge in Lethbridge, Alberta, Canada. The students were

registered in third and fourth year courses.

Part A: General Information collected demographic statistics about the

participants, as well as basic information regarding their perceived career readiness. Part

B: Career Plans focused on students' plans for the year following graduation, including

the importance of finding work in their community. Part C: Career Help posed questions

regarding the people and resources that students might access as part of the career

planning process, the perceived helpfulness of these people and resources, and whether or

not students believed they were likely to find work in their chosen occupation in the

location of their choice.

Descriptive Results

Demographic Information

Question 1 asked students to provide their age. Subjects were then grouped into

three age ranges for ease of applying Chi-square analyses (see Table 1). A total of 115

students (35.7%) fell into the first age category (ages 18-21), 154 students (47.8%) were

in the second age grouping (ages 22-25), and 53 students (16.5%) were in the final

category (ages 26 and older). These categories were chosen to represent students who

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traditionally would still have at least one year remaining in a four or five year program, assuming university entrance immediately following graduation from high school (ages 18-21); students who traditionally would be graduating from a four or five year program, with allowance for less than a full course load throughout the degree (ages 22-25); and students whom the researcher assumed had graduated from high school eight or more years earlier (ages 26 and older).

Table 1. Participants by Age Group

Age Group	n	% Responses
18-21	115	35.7
22-25	154	47.8
26 +	53	16.5
	322	100

Question 2 asked students to indicate their gender (see Table 2). In all, 195 participants (60.2%) were female and 129 (39.8%) were male. This ratio is relatively consistent with that of the University of Lethbridge student population in general, where approximately 58% of students enrolled in the Fall 2003 semester were female and 42% male.

Table 2. Participants by Gender

Gender	n	% Responses
Female	195	60.2
Male	129	39.8
	324	100

Question 3 asked, "What program are you currently enrolled in?" Responses to this question, summarized in Table 3, were used to group students into the five Faculties and Schools represented at the University of Lethbridge: Arts and Science, Management, Education, Fine Arts and Health Sciences. Due to the preliminary nature of this investigation, the researcher chose to conduct a broad level of analysis. This reason, in addition to several programs not being represented in the sample, led to the decision to group students by Faculty or School rather than by program.

Programs were grouped as follows: the Faculty of Arts and Science included the B.A., B.Sc., B.A.Sc., and B.A./B.Mgt. programs; the Faculty of Fine Arts included the B.F.A. program; the B.A./B.Ed., B.Sc./B.Ed., B.Mgt./B.Ed., and B.F.A./B.Ed. programs were grouped as Faculty of Education; the B.H.Sc. program was in the School of Health Sciences; and the B.Mgt. was in the Faculty of Management. No responses were recorded for the B.Sc./B.Mgt., B.Mus., B.Mus./B.Ed., and B.N. programs. Students who indicated a program not included on the list were not grouped into a Faculty or School.

Table 3. Participants by Program of Enrolment

Program	n	% Responses	Faculty
BA	42	13	Arts & Science
BASc	8	2.5	Arts & Science
BA/BMgt	19	5.9	Arts & Science
BSc	46	14.3	Arts & Science
BA/BEd	49	15.2	Education
BMgt/BEd	3	0.9	Education
BSc/BEd	16	5	Education
BFA/BEd	6	1.9	Education
BFA	14	4.3	Fine Arts
BHSc	23	7.1	Health Sciences
BMgt	90	28	Management
Other	6	1.9	n/a
	322	100	

Once grouped, 115 students (36.4%) were enrolled in the Faculty of Arts and Science, 90 students (28.5%) in the Faculty of Management, 14 students (4.4%) in the Faculty of Fine Arts, 74 students (23.4%) in the Faculty of Education, and 23 students (7.3%) in the School of Health Sciences (see Table 4).

Table 4. Faculty or School of Enrolment

Faculty or School	n	% Responses
Arts and Science	115	36.4
Management	90	28.5
Fine Arts	14	4.4
Education	74	23.4
Health Sciences	23	7.3
	316	100

Question 4 asked, "Does your program of study include any practical experience (e.g. practicum placement, internship, technical semesters, co-op placement)?" Question 5 asked further, "If yes, how many weeks of practical experience does it provide?" As Table 5 indicates, 150 students (46.7%) indicated that their program included practical experience of some type.

Table 5. Inclusion of Practical Experience in Program of Study

Practical Experience Included	n	% Responses
Yes	150	46.7
No	171	53.3
	321	100

As data entry progressed, it became apparent that Question 5 was invalid. Most students were not able to answer with any certainty how many weeks of practical experience were included in their program, and several did not respond. As a result, the data related to Question 5 has been excluded from this chapter.

The final demographic question (Question 6) asked, "What term do you expect to complete your program?" Forty-two students (13.2%) reported expecting to finish their program in Fall 2003, 111 students (34.8%) in Spring 2004, 26 students (8.2%) in Summer 2004, 39 students (12.2%) in Fall 2004, 66 students (20.6%) in Spring 2005, 12 students (3.8%) in Summer 2005, and 23 students later than Summer 2005 (see Table 6). As the researcher had hoped, almost 90% of the sample indicated that they would finish their program within the two years following administration of the survey (expected program completion date of Spring 2005 or sooner). The high proportion of senior students in the sample allows the researcher to be more confident that the results of this study will be generalizable to senior undergraduate students at other institutions.

Table 6. Expected Program Completion Date

Program Completion	n	% Responses
Fall 2003	42	13.2
Spring 2004	111	34.8
Summer 2004	26	8.2
Fall 2004	39	12.2
Spring 2005	66	20.6
Summer 2005	12	3.8
Later than Summer 2005	23	7.2
	319	100

Resources Considered Helpful for Transition to Work Force

Question 10 asked, "What resources do you feel would aid you in making a smooth transition into the work force?" A variety of resources were listed for

consideration, including career counselling, a local/regional library, community agencies, cooperative education work terms, career fairs, internet sites, academic advising, job search workshops, job shadowing/internships/practicum experience, Career Resource Service Centre, career library outside of the University, written materials (magazines, workbooks, etc.), interest inventory (e.g., Strong Interest Inventory), career planning workshops, videos, CD-ROMS (e.g., Career Quest), and the University of Lethbridge Career Resource Library. Students were also given the opportunity to list additional resources if necessary. Their responses are summarized in Table 7.

Table 7. Resources Considered Helpful for Transition to Work Force

Resource	n	% Responses
Academic advising	107	33
Career counselling	160	49.4
CD-ROMS	11	3.4
Career fairs	145	44.8
Career library outside of U of L	28	8.6
Community agencies	46	14.2
Cooperative Education Work Terms	152	46.9
Career Planning workshops	106	32.7
Career Resource Service Centre	104	32.1
Interest Inventory	19	5.9
Internet Sites	90	27.8
Job Search Workshops	131	40.4
Job Shadow/ Internship/Practica	206	63.6

Resource	n	% Responses
Local/Regional Library	18	5.6
Other	81	25
U of L Career Library	45	13.9
Videos	13	4.0
Written Materials	48	14.8

The responses to Question 10 indicated that 63.6% (n=206) of students believed

that job shadow/internship/practicum experience would be helpful to them in making a

smooth transition to the work force. Another 49.4% (n=160) responded in the same way

regarding career counselling. In addition, 46.9% (n=152) believed that cooperative

education work terms would be helpful, and 44.8% (n=145) indicated that career fairs

would be useful sources of information.

Job search workshops and academic advising were among the next group of

resources to be considered helpful, with response rates of 40.4% (n=131) and 33%

(n=107) respectively. Career planning workshops and the Career Resource Service

Centre were viewed as being almost equally helpful, with 32.7% (n=106) of students

mentioning career planning workshops and 32.1% (n=104) of students mentioning the

Career Resource Service Centre. Students also rated Internet sites (27.8%, n=90), written

materials (14.8%, n=48), community agencies (14.2%, n=46), and the University of

Lethbridge Career Library (13.9%, n=45) as resources that they believed would assist in

their transition. Resources least likely to be considered helpful included a career library

outside of the University (8.6%, n=28), interest inventories (5.9%, n=19), a local/regional

library (5.6%, n=18), videos (4%, n=13), and CD-ROMS (3.4%, n=11).

Twenty-five percent (n=81) of respondents listed at least one additional resource that they believed would be helpful. These responses were grouped into several themes, including more contact with people currently working in their field, a job bank/job placement service, word of mouth/contacts, practical experience (including volunteer work), career-related seminars and workshops, advice from friends and family, information on international opportunities, and personal exploration. The responses to this question may indicate the sorts of career-related interventions students favour as they make the transition to the work force. In addition, the fact that 25% of students added a resource to those listed means that services and resources available to students may not be as comprehensive as career-related service providers would hope.

Information, Advice and Guidance

An important component of this investigation was to determine student perceptions of the potential helpfulness of available career planning resources. To determine these perceptions, Question 14 asked, "There are a number of things that people find useful for career planning. What would you find helpful at this time in your life?" Several options were suggested to respondents (see Table 8), who also had the opportunity to list additional ideas.

Table 8. Perceived Potential Helpfulness of Career Planning Resources

Information	Not at all Helpful		Somewhat Helpful		Quite Helpful		Very Helpful		Total
	n	%	n	%	n	%	n	%	n
Someone or something to convince me that career planning is important right now in my life	97	30.1	104	32.3	87	27	34	10.6	322
Understanding my interests and abilities	15	4.6	44	13.6	116	35.8	149	46	324
Finding ways to pursue the things I am really passionate about	6	1.9	18	5.6	86	26.6	213	65.9	323
Information about the world of work	11	3.4	56	17.5	135	42.2	118	36.9	320
Information about different kinds of occupations	22	6.9	59	18.6	101	31.8	136	42.8	318
Information about opportunities in my community	38	11.8	71	22.1	85	26.5	127	39.6	321
Help with choosing between two or more occupational options.	50	15.6	96	30	110	34.4	64	20	320
Help with planning the next steps in my career.	14	4.3	79	24.5	118	36.6	111	34.5	322
Getting support for my career plan.	17	5.3	73	22.7	136	42.2	96	29.8	322
Other	14	53.8	0	0	4	15.4	8	30.8	26

The listed option that students believed would be most helpful was "Finding ways to pursue the things I am really passionate about." The majority of students (65.9%, n=213) responded that they believed this would be "Very helpful" at this time in their lives. Other options that students indicated would be most helpful included "Understanding my interests and abilities," "Information about different kinds of occupations," and "Information about opportunities in my community." More students indicated that these would be "Very helpful" than for the remaining options, with frequencies of 46% (n=149) for gaining an understanding of where their interests and abilities lie, 42.8% (n=136) for receiving information about occupational options, and 39.6% (n=127) for information about opportunities available within their community.

"Information about the world of work," "Help with planning the next steps in my career," "Getting support for my career plan," and "Help with choosing between two or more occupational options" were reported as important to students at this time in their lives, but less so than those options mentioned above. Students were more likely to rate these options as being "Quite helpful," with frequencies of 42.2% (n=136) for getting support for their career plan, 42.2% (n=135) for world of work information, 36.6% (n=118) for help with planning their next career steps, and 34.4% (n=110) for help with choosing between occupational options.

Few students (10.6%, n=34) indicated that "Someone or something to convince me that career planning is important right now in my life" was "Very important." Twenty-six students indicated that "Other" options would also be helpful. This group of "Other" options included job placement services, having a career role model, practical

experience, employment opportunity ads, and information on occupations related to individual degree programs.

Perceived Helpfulness of People in the Career Planning Process

As a follow-up to the information, advice and guidance question asked above, students were requested to answer Question 15: "You may have received help with your career planning from a number of people. Please circle how helpful each of the following people have been with your career planning so far."

It is possible that many students circled "0-Not at all helpful" in lieu of indicating that they had not had contact with a particular type of person or group for career-related assistance. For example, many students circled "0" for all options, excluding "Parents" and "Friends," leading the researcher to believe that they most likely had not accessed all of the options, rather than considering the majority of the options to be "Not at all helpful." As a result, responses of "Not at all helpful" should be considered to reflect both student use and perceived helpfulness as part of the career planning process, rather than helpfulness alone. Responses are summarized in Table 9.

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Table 9. Perceived Helpfulness of People in the Career Planning Process

People	Not at all Helpful		Somewhat Helpful		Quite Helpful		Very Helpful		Total Responses
	n	%	n	%	n	%	n	%	n
Professor	89	28.5	97	31.1	71	22.8	55	17.6	312
Academic Advisor	122	39.6	102	33.1	53	17.2	31	10.1	308
Personal or Career Counsellor	160	54.9	68	23.4	41	14.1	22	7.6	291
Career Resource Centre Staff	153	54.5	69	24.6	44	15.7	15	5.3	281
University Administrator	201	70.8	59	20.8	15	5.3	9	3.2	284
Parents	23	7.3	68	21.6	124	39.4	100	31.7	315
Other Relatives	73	23.8	79	25.7	100	32.6	55	17.9	307
Friends	33	10.5	84	26.8	127	40.6	69	22	313
Someone in the Field	32	10.3	42	13.5	117	37.5	121	38.8	312
Spiritual or Religious Groups	210	72.2	38	13.1	27	9.3	16	5.5	291
Youth Groups or Associations	215	76	44	15.5	15	5.3	9	3.2	283
Other	48	82.8	0	0	0	0	10	17.2	58

Students were most likely to indicate that someone in the field had been the largest source of helpful information as they progressed through the career planning process, with response rates of 38.8% (n=121) for "Very helpful," and 37.5% (n=117) for "Quite helpful." Parents were rated next in helpfulness, with response rates of 31.7% (n=100) for "Very helpful," and 39.4% (n=124) for "Quite helpful." Friends and other relatives were also included in the group of people that students believed were most helpful: 22% (n=69) of students responded that friends were "Very helpful," with an additional 40.6% (n=127) indicating that they had been "Quite helpful." Fewer students

indicated that other relatives were "Very helpful" (17.9%, n=55), but a fairly large number (32.6%, n=100) specified that they were "Quite helpful" as part of the career planning process. Individuals or groups least likely to be considered "Very helpful" included University administrators (3.2%, n=9), youth groups or associations (3.2%, n=9), Career Resource Centre staff (5.3%, n=15), and spiritual or religious groups (5.5%, n=15).

People typically associated with the University, including professors, academic advisors, career counsellors, Career Resource Centre staff and University administrators, were most likely to be rated as "Somewhat helpful." Approximately 33% (n=102) of students thought that an academic advisor had been "Somewhat helpful" as they worked through planning their career. In addition, 31.1% (n=97) of students rated professors in the same way, 24.6% (n=69) included Career Resource Centre staff in this category, 23.4% (n=68) indicated that a personal or career counsellor could be rated in this manner, and 20.8% (n=59) specified that a University administrator had been "Somewhat helpful" as part of the career planning process.

Individuals or groups least likely to be considered helpful as students begin to plan for their career after university included spiritual or religious groups, youth groups or associations, University administrators, personal or career counsellors, and Career Resource Centre staff. However, these responses may indicate lack of use of these individuals or groups rather than their perceived helpfulness. The majority of students (76%, n=215) indicated that youth groups or organizations were "Not at all helpful" as part of the career planning process. Spiritual or religious groups were next most likely to be rated "Not at all helpful" (72.2%, n=210), followed by University administrators

(70.8%, n=201), personal or career counsellors (54.9%, n=160), and Career Resource

Centre staff (54.5%, n=153). Individuals least likely to be considered "Not at all helpful"

included parents (7.3%, n=23), someone working in the field (10.3%, n=32), and friends

(10.5%, n=33).

Ten students indicated that an individual or group other than those listed was

"Very helpful" to them as part of the career planning process. "Other" responses included

a spouse, twelve-step program, co-workers, high school teacher, friend or relative who

might hire the student in his/her field, and students further along in their programs.

Perceived Availability and Usefulness of Career-Related Resources

Question 16 focused specifically on whether students were aware of the resources

available to them to aid in the process of planning their career, whether they accessed

those resources if they believed they were available, and if so, whether they perceived the

resources to be useful. Question 16 asked respondents to "Please rate how helpful the

following services or resources have been with your career planning."

The first part of this question asked students to indicate whether a resource was

available to them, by circling "Don't Know," "Not Available," or "Yes, Available to

Me." The purpose of this question was to determine how many students are unaware of

the resources available to them, both on their campus and in their community, which may

be of significant assistance in their career planning (see Table 10).

Table 10. Perceived Availability of Career Related Resources

Resource	Don't Know If Available		Not Available		Yes, Available		Total Responses
	n	%	n	%	n	%	n
Career Counselling	150	46.7	20	6.2	151	47	321
Career Resource Centre	135	42.3	10	3.1	174	54.5	319
U of L Career Resource Library	181	57.8	11	3.5	121	38.7	313
Career Library Outside of the U of L	234	73.4	21	6.6	64	20.1	319
Local/Regional Library	166	52	7	2.2	146	45.8	319
Community Agencies	200	63.3	8	2.5	108	34.2	316
Written Materials	113	35.4	11	3.4	195	61.1	319
Cooperative Education Work Terms	122	38.1	34	10.6	164	51.2	320
Computer Programs	210	67.7	23	7.4	77	24.8	310
Interest Inventories	206	65	25	7.9	86	27.1	317
Career Planning Workshops	191	60.1	18	5.7	109	34.3	318
Career Fairs	47	14.8	13	4.1	258	81.1	318
Internet Sites	71	22.5	7	2.2	238	75.3	316
Videos	223	70.6	20	6.3	73	23.1	316
CD-ROMS	240	75.7	23	7.3	54	17	317
Job Shadowing/ Internship/Practica	102	32.1	37	11.6	179	56.3	318
Applied Studies	167	52.7	31	9.8	119	37.5	317
Scholarship and Financial Information	114	36	20	6.3	183	57.7	317

Resource	Don't Know If Available		Not Available		Yes, Available		Total Responses
	n	%	n	%	n	%	n
Academic Advising	54	17.1	11	3.5	251	79.4	316
Other	24	75	1	3.1	7	21.9	32

Interestingly, the majority of students did not realize that many of the resources listed were available for their use. Most (75.7%, n=240) students were not aware that CD-ROMS related to career planning are available; 73.4% (n=234) of students were not familiar with a career library outside the University of Lethbridge; 70.6% (n=223) of students weren't aware of any career related videos; and 67.7% (n=210) did not know about any available career-related computer programs. In addition, 65% (n=206) of the students surveyed did not realize that interest inventories were available, 63.3% (n=200) were unaware of any community agencies that could assist in their career planning, 60.1% (n=191) did not know about any career planning workshops which may have been offered, 57.8% (n=181) of respondents were not aware that the University of Lethbridge has a Career Resource Library, 52.7% (n=167) were not familiar with applied studies, and 52% (n=166) did not know whether a local or regional library was available to them.

The majority of students were, however, aware that career fairs (81.1%, n=258), academic advising (79.4%, n=251), Internet sites (75.3%, n=238), and written materials (61.1%, n=195) were available to them for assistance in the career planning process. In addition, 57.7% (n=183) of students were aware of scholarship and financial information; 56.3% (n=179) were aware of job shadowing, internship and practicum opportunities; 54.5% (n=174) of students knew that the Career Resource Centre was available; 51.2%

(n=164) were aware of cooperative education work terms; and 47% (n=151) knew that career counselling was accessible.

Very few students indicated that they believed that a resource was "Not available." The most frequent responses in this category came in the areas of job shadowing, internship and practicum opportunities (11.6%, n=37), and cooperative education work terms (10.6%, n=34). Interestingly, several students did not believe they had access to resources that actually exist, function, and are available to all students on the University of Lethbridge campus. For example, 6.3% (n=20) of students indicated that scholarship and financial information was not available to them, along with 6.2% (n=20) who did not believe they had access to career counselling, and 3.5% (n=11) who did not know that academic advising was available. Seven students indicated that they knew of "Other" resources available to them. "Other" resources listed included mentors, information evenings, and the career section found in most newspapers.

Students who indicated that they believed a resource was available were then asked to indicate if they had in fact used that particular resource. Table 11 outlines student responses to this question. Results from this question may provide insight into what resources students are actually accessing, and therefore, which resources should be used to promote career-related material.

Most (83.6%, n=199) students who indicated that they knew career related Internet sites were available reported using them. Other resources used by a high proportion of students included interest inventories (81.2%, n=69), academic advising (80.2%, n=202), career fairs (75.6%, n=195), scholarship and financial information (74.5%, n=137), and written materials (69.6%, n=135). Resources least likely to be used

by students included CD-ROMS (3.6%, n=2), the University of Lethbridge Career

Resource Library (20.2%, n=24), a career library outside of the University (20.3%,

n=13), videos (24.3%, n=18), and a local or regional library (27.6%, n=40).

Table 11. Student Use of Career Related Resources

Resource	Aware of Resource	Did Not Use Resource		Used Resource	
	n	n	%	n	%
Career Counselling	151	96	63.6	55	36.4
Career Resource Centre	174	110	63.6	63	36.4
U of L Career Resource Library	121	95	79.8	24	20.2
Career Library Outside of U of L	64	51	79.7	13	20.3
Local/Regional Library	146	105	72.4	40	27.6
Community Agencies	108	61	57.5	45	52.5
Written Materials	195	59	30.4	135	69.6
Cooperative Education Work Terms	164	106	65	57	35
Computer Programs	77	45	58.4	32	41.6
Interest Inventories	86	16	18.8	69	81.2
Career Planning Workshops	109	59	53.6	51	46.4
Career Fairs	258	63	24.4	195	75.6
Internet Sites	238	39	16.4	199	83.6
Videos	73	56	75.7	18	24.3
CD-ROMS	54	53	96.4	2	3.6
Job Shadowing/Internship/Practica	179	55	30.4	126	69.6
Applied Studies	119	78	65.5	40	33.6

	Aware of Resource	Did Not Use Resource		Used Resource	
Resource	n	n	%	n	%
Scholarship and Financial Information	183	47	25.5	137	74.5
Academic Advising	251	50	19.8	202	80.2
Other	7	1	20	4	80

After declaring whether they had accessed the resource, students were asked to rate how helpful the resource was to them on a scale of 0 to 3 (0=Not at all, 3=Very). Resources most likely to be ranked as "Very helpful" included job shadowing, internship and practicum experiences (77.6%, n=97); cooperative education work terms (66.7%, n=38); and, applied studies (55%, n=22). Under the "Other" category, two students indicated that the involvement of a career mentor had been "Very helpful" to them. Students considered several resources to be "Quite helpful." The majority (60.8%, n=31) of students who had attended a career-planning workshop rated it as being "Quite helpful." In addition, 46.2% (n=6) of students who accessed a career library outside of the University of Lethbridge ranked that resource in the same way. Other resources that students believed were "Quite helpful" included written materials (45.9%, n=61), the Career Resource Centre (44.4%, n=28), community agencies (43.2%, n=19), and the University of Lethbridge Career Resource Library (41.7%, n=10). Table 12 provides a detailed summary of student responses.

Table 12. Perceived Helpfulness of Accessed Career Related Resources

Resource	Used	Not at all Helpful		Somewhat Helpful		Quite Helpful		Very Helpful	
	n	n	%	n	%	n	%	n	%
Career Counselling	55	2	3.6	25	45.5	15	27.3	13	23.6
Career Resource Service Centre	63	2	3.2	20	31.7	28	44.4	13	20.6
U of L Career Resource Library	24	0	0	8	33.3	10	41.7	6	25
Career Library Outside of University	13	0	0	2	15.4	6	46.2	5	38.5
Local/Regional Library	40	3	8.3	19	52.8	13	36.1	1	2.8
Community Agencies	45	1	2.3	13	29.5	19	43.2	11	25
Written Materials	135	3	2.3	54	40.6	61	45.9	15	11.3
Cooperative Education Work Terms	57	3	5.3	7	12.3	9	15.8	38	66.7
Computer Programs	32	5	15.6	11	34.4	12	37.5	4	12.5
Interest Inventories	69	8	11.8	27	39.7	24	35.3	9	13.2
Career Planning Workshops	51	2	3.9	13	25.5	31	60.8	5	9.8
Career Fairs	195	31	16.1	77	39.9	56	29	29	15
Internet Sites	199	8	4	67	33.8	76	38.4	47	23.7
Videos	18	0	0	14	77.8	3	16.7	1	5.6
CD-ROMS	2	1	50	0	0	1	50	0	0
Job Shadowing/ Internship/Practica	126	1	0.8	7	5.6	20	16	97	77.6
Applied Studies	40	1	2.5	7	17.5	10	25	22	55

Resource	Used	Not at all Helpful		Somewhat Helpful		Quite Helpful		Very Helpful	
	n	n	%	n	%	n	%	n	%
Scholarship and Financial Information	137	17	12.4	40	29.2	37	27	43	31.4
Academic Advising	202	38	19	66	33	68	34	28	14
Other	4	0	0	1	25	1	25	2	50

The majority of the resources listed were ranked as "Somewhat helpful." Resources most likely to be grouped in this category included videos (77.8%, n=14), a local or regional library (52.8%, n=19), career counselling (45.5%, n=25), career fairs (39.9%, n=77), interest inventories (39.7%, n=27), computer programs (34.4%, n=11), Internet sites (33.8%, n=67), and academic advising (33%, n=66). Very few students ranked resources as being "Not at all helpful." However, resources more frequently rated in this manner included academic advising (19%, n=38), career fairs (16.1%, n=31), computer programs (15.6%, n=5), and scholarship and financial information (12.4%, n=17). Interestingly, many of the most widely used resources (i.e., Internet sites, interest inventories, academic advising, career fairs, and scholarship and financial information) were rated as least helpful to students' career preparation. Three of the most widely accessible resources on campus -- academic advising, career fairs, and scholarship and financial information -- were among those most likely to be ranked "Not at all helpful."

Plans for Year Following Program Completion

Question 12 asked, "Which of the following describes what you think you will most likely be doing in the year after you leave university?" As reported in Table 13, 74.7% (n=242) of students indicated that they would be working full time in the year

following university, and 13.9% (n=45) indicated that part-time work was in their future. Additionally, 17.3% (n=56) of respondents intended to continue to pursue full-time studies in the year after graduation, 6.8% (n=22) intended to pursue studies on a part-time basis, and 8.3% (n=27) planned to take other forms of additional training. Travel was an activity of interest for 27.2% (n=88) of students surveyed, and 9% (n=29) indicated that they would like to work as a volunteer in some capacity. Four percent (n=13) of respondents indicated that they would be doing something other than the options presented to them in the question. Other activities included getting married, becoming a military pilot, doing contract work, and raising capital through private lenders.

Table 13. Plans for Year Following Program Completion

Year After Program Completion	n	% Responses
Full-time studies	56	17.3
Full-time work	242	74.7
Other	13	4
Other training	27	8.3
Part-time studies	22	6.8
Part-time work	45	13.9
Traveling	88	27.2
Volunteering	29	9

Confidence in Occupational Choice

Question 18 asked students to evaluate their confidence in their occupational choices. Specifically, students were asked. "When you think about the next few years of your life, how confident are you about the following: a) I will be able to find work in the

occupation I have chosen, b) I will be able to get the additional training or education that
I need, c) I will be able to find an occupation that I love to do." Almost half (45.6%,
n=103) of students believed that it was "Quite likely" that they would find work in their
chosen occupation, in contrast with only 28.8% (n=65) who believed that it was "Very
likely." Students were much more likely to express confidence in their ability to get the
additional training or education that they might need, with 44.7% (n=96) indicating that it
is "Very likely" that they will be able to do so. Participants were somewhat less sure
about their ability to find an occupation that they will love, with only 30.6% (n=79)
responding that it was "Very likely" that this would happen. Interestingly, seven students
(2.7%) indicated that it is "Not at all likely" that they will find an occupation that they
love. Table 14 provides a detailed summary of student responses.

Table 14. Confidence in Occupational Choice

Occupational Choice Information	Not at all Likely		Somewhat Likely		Quite Likely		Very Likely		Total
	n	%	n	%	n	%	n	%	n
I will be able to find work in the occupation I have chosen.	4	1.8	54	23.9	103	45.6	65	28.8	226
I will be able to get the additional training or education that I need.	1	0.5	36	16.7	82	38.1	96	44.7	215
I will be able to find an occupation that I love to do.	7	2.7	62	24	110	42.6	79	30.6	258

Occupational Location

Questions 19 and 20 focused on where students believed their occupation was likely to be located, and in contrast, where they would like it to be located. Question 19 asked students, "If you find work in your chosen occupation, where will it likely be?" Most (65.9%, n=191) students reported expecting that, if they find work in their chosen occupation, it is "Very likely" to be within their country. Only 34.3% (n=97) believed it was "Very likely" to be within their province, and only 19.2% (n=55) believed it was "Very likely" to be within their community (see Table 15). In contrast, 27.9% (n=80) responded that it is "Not at all likely" that they will find work within their community, while only 2.8% (n=8) considered it to be "Not at all likely" that they will find work in their chosen occupation within their country. Seventy-seven students (27.2%) indicated that it is "Very likely" that the work that they find in their chosen occupation will be in an international location. Interestingly, an almost equal number of students (n=69, 24.4%) indicated that is "Not at all likely" that they will be working in their occupation in a country other than their own.

Table 15. Likely Location of Occupation

Likely Occupational Location	Not at all Likely		Somewhat Likely		Quite Likely		Very Likely		Total Responses
	n	%	n	%	n	%	n	%	n
In my community	80	27.9	91	31.7	61	21.3	55	19.2	287
In my province	16	5.7	62	21.9	108	38.2	97	34.3	283
In my country	8	2.8	14	4.8	77	26.6	191	65.9	290
Internationally	69	24.4	81	28.6	56	19.8	77	27.2	283

As a follow up to Question 19, Question 20 asked students. "If you find work in your chosen occupation, where would you like it to be?" A higher proportion of student responses were recorded indicating that students would prefer to stay within their community or in their province, regardless of where they believed their job was likely to be located (see Table 16).

Table 16. Preferred Location of Occupation

Preferred Occupational Location	Not at all Likely		Somewhat Likely		Quite Likely		Very Likely		Total Responses
	n	%	n	%	n	%	n	%	n
In my community	80	28	50	17.5	49	17.1	107	37.4	286
In my province	21	7.6	40	14.4	92	33.2	124	44.8	277
In my country	15	5.3	22	7.8	74	26.1	172	60.8	283
Internationally	72	25.5	67	23.8	57	20.2	86	30.5	282

Only 37.4% (n=107) responded that it was "Very likely" that they would prefer work in their chosen occupation to be located within their community, compared to 28% (n=80) who believed that it was "Not at all likely." Many respondents would prefer their work to be within their province; 44.8% (n=124) indicated that this was "Very likely." Most students responded that they would prefer work within their country, with 60.8% (n=172) indicating that it was "Very likely" that they would like to find work within their chosen occupation without moving to an international location. Interestingly, only 5.3% (n=15) of students ranked finding work in their country as "Not at all likely" to be their preference, while 30.5% (n=86) of students indicated that it was "Very likely" that their work location of choice would be international.

Inferential Results

Perceived Importance of Career Planning

The first question that asked students about their general perceptions of career planning (Question 7) read, "How important is career planning to you at this time in your life?" As summarized in Table 17, eight students (2.5%) indicated that career planning was "Not at all important," 104 students (32.2%) indicated that it was "Somewhat important," and 211 students (65.3%) indicated that it was "Very important" at this time in their lives.

Table 17. Perceived Importance of Career Planning

Career Planning Importance	n	% Responses
Not at all	8	2.5
Somewhat	104	32.2
Very	211	65.3
	323	100

This data was then cross tabulated with age group, gender, Faculty or School, practical experience, and expected program completion date using Chi-square analyses to determine whether the variables are independent of one another (see Table 18).

Table 18. Chi-square Analyses of Perceived Importance of Career Planning

Variable	n	df	X2	p
Age Group	321	4	5.663	0.226
Gender	323	2	1.079	0.583
Faculty or School	315	8	19.278	0.013*
Practical Experience	320	2	0.707	0.702
Program Completion	318	12	22.950	0.028*

* p < .05.

Significant findings were observed between career planning importance and Faculty or School in which the student is enrolled, as well as the student's expected program completion date. No significant findings were observed regarding the interaction between career planning importance and age group, gender or practical experience.

Career planning importance and Faculty or School of Enrolment. A significant result $(X2 (8, n = 315) = 19.278, p = .013)$ was reported for the relationship between career planning importance and Faculty or School, suggesting that these two variables are not independent of one another.

As outlined in Table 19, 74.5% (n=67) of the students enrolled in the Faculty of Management considered career planning to be "Very important" at this time in their lives, in contrast with 63.6% (n=73) of Arts and Science students, 64.4% (n=47) of Education students, 69.6% (n=16) of Health Sciences students, and only 21.4% (n=3) of Fine Arts students. Most (78.6%, n=11) students enrolled in the Faculty of Fine Arts believed that career planning was "Somewhat important," followed by 34.7% (n=40) of Arts and Science students, 32.9% (n=24) of Education students, 26.1% (n=6) of Health Sciences

students, and 22.2% (n=20) of Management students. Few considered career planning to

be "Not at all important" at this time in their lives.

Table 19. Perceived Importance of Career Planning as Related to Faculty or School of

Enrolment

Faculty or School	Not at all Important		Somewhat Important		Very Important		Total Responses
	n	%	n	%	n	%	n
Arts & Science	2	1.7	40	34.7	73	63.6	115
Management	3	3.3	20	22.2	67	74.5	90
Fine Arts	0	0	11	78.6	3	21.4	14
Education	2	2.7	24	32.9	47	64.4	73
Health Sciences	1	4.3	6	26.1	16	69.6	23
	8	2.5	101	32.1	206	65.4	315

From this data the researcher concluded that, for most university students, career

planning is an important part of their lives. Students in the Faculty of Management are

most likely to consider career planning important, while students enrolled in the Faculty

of Fine Arts are least likely to consider it important. When asked, "If career planning is

NOT very important to you now, when might it become important to you?" Fine Arts

students' responses were categorized into two main themes: those related to feeling as

though a career was still a few years off (e.g., "After graduation" and "I am not too

worried as I am still young."); and those related to career indecision (e.g., "I'm not sure

what career I'm going for" and "As an actor I need to prepare myself, but I also must be

prepared to not get work.").

Perceived importance of career planning and expected program completion date.

A significant result (X2 (12, n = 318) = 22.950, p = .028) was also recorded for the

relationship between career planning importance and expected program completion date,

suggesting that these two variables are in some way related (see Table 20).

Table 20. Perceived Importance of Career Planning as Related to Expected Program

Completion Date

Expected Program Completion	Not at all Important		Somewhat Important		Very Important		Total Responses
	n	%	n	%	n	%	n
Fall 2003	0	0	11	26.2	31	73.8	42
Spring 2004	4	3.6	27	24.3	80	72.1	111
Summer 2004	2	7.6	6	23.1	18	69.3	26
Fall 2004	1	2.5	21	53.8	17	43.7	39
Spring 2005	1	1.5	22	33.3	43	65.2	66
Summer 2005	0	0	6	50	6	50	12
Later than Summer 2005	0	0	11	50	11	50	22
	8	2.5	104	32.7	206	64.8	318

The importance of career planning increased the closer the students were to

completing their programs, with the exception of those students graduating in Fall 2004.

Most (73.8%, n=31) students finishing their program in Fall 2003, 72.1% (n=80) of those

finishing in Spring 2004, 69.3% (n=18) of those finishing in Summer 2004, 65.2%

(n=43) of those finishing in Spring 2005, 50% (n=6) of those finishing in Summer 2005,

50% (n=11) of those finishing later than Summer 2005, and 43.7% (n=17) of those

finishing in Fall 2004 considered career planning "Very important" at this time in their

lives. Interestingly, the majority (53.8%, n=21) of students completing their program in

Fall 2004 considered career planning to be only "Somewhat important" at this juncture in

their lives.

Readiness to Enter the Work World

Students were asked in Question 8, "How would you describe your readiness

upon graduation to enter the world of work?" As outlined in Table 21, 23 students (7.1%)

indicated that they were "Not at all ready," 189 students (58.5%) indicated they were

"Somewhat ready," and 111 students (34.4%) indicated that they were "Very ready" to

enter the world of work upon graduation from their program of studies.

Table 21. Readiness to Enter the Work World

Readiness	n	% Responses
Not at all	23	7.1
Somewhat	189	58.5
Very	111	34.4
	323	100

This data was then cross tabulated with age group, gender, Faculty or School,

practical experience, and program completion, using Chi-square analyses to determine

whether the variables can be considered independent of one another (see Table 22).

Table 22. Chi-square Analyses of Readiness to Enter the Work World

Variable	n	df	X2	p
Age Group	321	4	7.929	0.094
Gender	323	2	1.268	0.530
Faculty or School	315	8	27.595	0.001**
Practical Experience	320	2	16.454	0.000**
Program Completion	318	12	13.374	0.342

** $p < .01$

Significant findings were observed between readiness to enter the world of work and Faculty or School, as well as inclusion in the student's program of some form of practical experience. No significant findings were observed between readiness to enter the world of work and age group, gender or program completion.

Readiness to enter the work world and Faculty or School of enrolment. A significant result ($X2$ (8, n = 315) = 27.595, p = .001) was reported for the relationship between readiness to enter the world of work and Faculty or School, suggesting that these two variables are not independent of one another.

Table 23. Readiness to Enter the Work World as Related to Faculty or School of

Enrolment

Faculty or School	Not at all Ready		Somewhat Ready		Very Ready		Total Responses
	n	%	n	%	n	%	n
Arts and Science	11	9.6	77	66.9	27	23.5	115
Management	8	8.9	55	61.1	27	30	90
Fine Arts	2	14.4	10	71.4	2	14.4	14
Education	2	2.7	34	46.6	37	50.7	73
Health Science	0	0	9	39.1	14	60.9 ·	23
	23	7.3	185	58.7	107	34	315

As indicated in Table 23, students enrolled in the School of Health Sciences were most likely to say that they were "Very ready" to enter the world of work following graduation; in fact, 60.9% (n=14) responded in this manner. In addition, 50.7% (n=37) of students enrolled in the Faculty of Education responded in the same manner, followed by 30% (n=27) of students in the Faculty of Management, 23.5% (n=27) of students in the Faculty of Arts and Science, and 14.4% (n=2) of students enrolled in the Faculty of Fine Arts.

Distinct differences can also be seen in the "Somewhat ready" and "Not at all ready" responses, with Fine Arts students being most likely to indicate that they feel only "Somewhat ready" (71.4%, n=10), or "Not at all ready" (14.4%, n=2) to enter the world of work upon graduation. Health Sciences students were least likely to indicate that they were "Not at all ready." Few Education students believed that they were "Not at all

ready" to enter the workforce upon graduation, with only 2.7% (n=2) choosing this as their response.

Readiness to enter the work world and inclusion of practical experience in program. A significant result (X2 (2, n = 320) = 16.454, p = .000) was also recorded for the interaction between readiness to enter the world of work and inclusion in the students' programs of some form of practical experience (see Table 24).

Table 24. Readiness to Enter the Work World as Related to Inclusion of Practical Experience in Program

	Not at all Ready		Somewhat Ready		Very Ready		Total Responses
Practical Experience	n	%	n	%	n	%	n
Yes	6	4	76	51	67	45	149
No	17	9.9	112	65	42	25.1	171
	23	7.2	188	58.8	109	34	320

Forty-five percent (n=67) of students whose programs included practical experience in some form indicated that they were "Very ready" to enter the world of work, compared to only 25.1% (n=42) of students whose programs did not include any practical experience.

Degree Satisfaction

Question 9 asked students, "How satisfied are you with the extent to which your degree has prepared you to enter the work force?" Results as shown in Table 25 indicate that 34 students (10.7%) felt "Not at all satisfied," 200 students (62.7%) felt "Somewhat satisfied," and 85 students (26.6%) felt "Very satisfied" with the extent to which their degree had prepared them for future entrance to the work force.

Table 25. Degree Satisfaction as a Measure of Preparation for Work Force Entry

Degree Satisfaction	n	%·Responses
Not at all	34	10.7
Somewhat	200	62.7
Very	85	26.6
	319	100

This data was then cross tabulated with age group, gender, Faculty or School, practical experience and program completion using Chi-square analyses to determine whether the variables can be considered independent of one another (see Table 26).

Table 26. Chi-square Analyses of Degree Satisfaction

Variable	n	df	X2	p
Age Group	318	4	5.433	0.246
Gender	319	2	3.613	0.164
Faculty or School	312	8	88.073	0.000**
Practical Experience	317	2	35.439	0.000**
Program Completion	314	12	12.351	0.418

** $p < .01$

Significant results were observed between level of degree satisfaction and Faculty or School in which the students were enrolled, as well as the inclusion in their program of some form of practical experience. No significant findings were observed between level of degree satisfaction and age group, gender or program completion.

Degree satisfaction and Faculty or School. A significant result (X2 (8, n = 312) =

88.073, p = .000) was recorded for the interaction between the Faculty or School the

student was enrolled in and the student's level of degree satisfaction.

Table 27. Degree Satisfaction as Related to Faculty or School of Enrolment

Faculty or School	Not at all Satisfied		Somewhat Satisfied		Very Satisfied		Total Responses
	n	%	n	%	n	%	n
Arts & Science	19	16.6	87	76.3	8	7.1	114
Management	10	11.1	61	67.8	19	21.1	90
Fine Arts	2	15.4	10	76.9	1	7.7	13
Education	2	2.8	33	45.8	37	51.4	72
Health Sciences	0	0	4	17.4	19	82.6	23
	33	10.6	195	62.5	84	26.9	312

As indicated in Table 27, students enrolled in the School of Health Sciences were

most likely to indicate that they were "Very satisfied" with the extent to which their

degree has prepared them for entry into the world of work. Most (82.6%, n=19) Health

Sciences students responded in this manner, followed by 51.4% (n=37) of Education

students, 21.1% (n=19) of Management students, only 7.7% (n=1) of Fine Arts students,

and 7.1% (n=8) of Arts and Science students. Fine Arts students recorded the most

"Somewhat satisfied" responses (76.9%, n=10), followed by 76.3% (n=87) of Arts and

Science students, 67.8% (n=61) of Management students, 45.8% (n=33) of Education

students, and 17.4% (n=4) of Health Sciences students. Arts and Science and Fine Arts

students were also most likely to indicate that they were "Not at all satisfied," with

response rates of 16.6% (n=19) and 15.4% (n=2) respectively. None of the Health
Sciences students surveyed indicated that they were "Not at all satisfied" with the
preparation their degree has afforded them.

Degree satisfaction and inclusion of practical experience in program. A
significant result ($X2$ (2, n = 317) = 35.439, p = .000) was observed between level of
degree satisfaction and whether the student's program included any form of practical
experience (see Table 28).

Table 28. Degree Satisfaction as Related to Inclusion of Practical Experience in Program

Practical Experience	Not at all Satisfied		Somewhat Satisfied		Very Satisfied		Total Responses
	n	%	n	%	n	%	n
Yes	12	8.2	72	49.3	62	42.5	146
No	22	12.8	127	74.3	22	12.9	171
	34	10.7	199	62.7	84	26.6	317

Many (42.5%, n=62) students whose program contained some form of practical
experience indicated that they were "Very satisfied" with the extent to which their degree
has prepared them for the world of work, in contrast with only 12.9% (n=22) of those
students whose degrees did not afford them any 'hands-on' training. Furthermore, 74.3%
(n=127) of students who did not get any practical experience felt "Somewhat satisfied,"
compared with only 49.3% (n=72) of those who did get practical experience. Students
who indicated they had received practical experience were also less likely to indicate that
they felt "Not at all satisfied" (8.2%, n=12) when compared to students who did not
receive similar experience (12.8%, n=22).

Plans for Year Following Program Completion

Question 11 asked students, "Which of the following best describes your plans for

what you will be doing after you have completed university?" Listed responses included

"I have a specific plan for what I will be doing," "I am trying to decide between a couple

of different plans," "I am not sure what I will be doing, but have started working on it,"

and, "I don't know what I will be doing, and I am not worrying about it now." Table 29

outlines the frequency of these responses.

Table 29. Plans for Year Following Program Completion

Plan Following Program Completion	n	% Responses
I have a specific plan for what I will be doing.	103	31.9
I am trying to decide between a couple of different plans/	146	45.2
I am not sure what I will be doing, but I have started working on it.	60	18.6
I don't know what I will be doing, and I am not worrying about it now.	14	4.3
	323	100

This data was then cross tabulated with age group, gender, Faculty or School,

practical experience and program completion using Chi-square analyses to determine

whether the variables can be considered independent of one another (see Table 30).

Table 30. Chi-square Analysis of Plans for Year Following Program Completion

Variable	n	df	X2	p
Age group	322	6	2.455	0.873
Gender	323	3	1.675	0.642
Faculty or School	315	12	34.151	0.001**
Practical experience	320	3	27.224	0.000**
Program completion	318	18	21.957	0.234

** p < .01

Significant results were observed between students' plans following completion of university and Faculty or School in which the students were enrolled, as well as the inclusion in their program of some form of practical experience. No significant findings were observed between plans following university completion and age group, gender or program completion.

Plans for year following program completion and Faculty or School. A significant result (X2 (12, n = 315) = 34.151, p = .001) was recorded for the interaction between the Faculty or School in which students were enrolled and their plans following completion of university.

As Table 31 shows, students enrolled in the Faculty of Education were most likely to indicate that they had a specific plan for what they would be doing (52.7%, n=39), followed by students enrolled in the School of Health Sciences (43.5%, n=10), Management students (26.6%, n=24), Fine Arts students (21.4%, n=3), and Arts and Science students (21.1%, n=24). Education students were also least likely to indicate that they were unsure about what they would be doing, but that they had started working on a

plan (5.4%, n=4%). Conversely, Fine Arts students were most likely to indicate that they

were unsure about what they would be doing, but had started working on it (28.6%, n=4),

or that they didn't know what they would be doing, and weren't worried about it now

(14.3%, n=2). It is interesting to note that none of the students enrolled in the School of

Health Sciences indicated that they didn't know what they would be doing and weren't

worried about it.

Table 31. Plans for Year Following Program Completion as Related to Faculty or School

of Enrolment

Faculty or School	Specific plan		Couple of plans		Not sure		Don't know		Total Responses
	n	%	n	%	n	%	n	%	n
Arts and Science	24	21.1	57	50	29	25.4	4	3.5	114
Management	24	26.6	43	47.7	19	21.1	4	4.6	90
Fine Arts	3	21.4	5	35.7	4	28.6	2	14.3	14
Education	39	52.7	28	37.8	4	5.4	3	4.1	74
Health Sciences	10	43.5	10	43.5	3	13	0	0	23
	100	31.7	143	45.4	59	18.7	13	4.2	315

Plans for year following program completion and inclusion of practical

experience in program. A significant result (X2 (3, n = 320) = 27.224, p = .000) was also

observed for the interaction between students' plans for the year following university

completion and the inclusion in their program of some aspect of practical experience (see

Table 32).

Table 32. Plans for Year Following Program Completion as Related to Inclusion of

Practical Experience in Program

Practical Experience	Specific plan		Couple of plans		Not sure		Don't know		Total Responses
	n	%	n	%	n	%	n	%	n
Yes	65	43.6	67	44.9	14	9.4	3	2.1	149
No	38	22.2	77	45	46	26.9	10	5.9	171
	103	32.2	144	45	60	18.8	13	4	320

Students whose program contained some sort of practical experience were much

more likely to indicate that they had a specific plan following university completion

(43.6%, n=65) when compared to students who did not have similar experience (22.2%,

n=38). Practical experience also impacted the number of students who weren't sure what

they would be doing, but had started working on it. Only 9.4% (n=14) of students with

practical experience indicated that they weren't sure what they would be doing,

contrasted by 26.9% (n=46) of students whose programs did not include some kind of

practical experience.

Importance of Finding Work in Student's Community

Question 13 focused on the importance of staying in the student's community,

asking, "How important is it to you to be able to find work that allows you to stay in your

community?" Results as shown in Table 33 indicate that 124 students (39.5%) thought

that it was "Not at all important" for them to stay in their community, 110 students (35%)

thought that it was "Somewhat important," and 80 students (25.5%) thought that it was

"Very important."

Table 33. Importance of Finding Work in Student's Community

Finding Work in Community	n	% Responses
Not at all	124	39.5
Somewhat	110	35
Very	80	25.5
	314	100

This data was then cross tabulated with age group, gender, Faculty or School, practical experience and program completion using Chi-square analyses to determine whether the variables can be considered independent of one another (see Table 34).

Table 34. Chi-square Analysis of Importance of Finding Work in Student's Community

Variable	n	df	X2	p
Age Group	312	4	12.492	0.014*
Gender	314	2	14.828	0.001**
Faculty or School	307	8	19.3131	0.013*
Practical Experience	311	2	9.067	0.011*
Program Completion	310	12	10.68	0.557

* $p < .05$. ** $p < .01$.

Significant results were recorded between students' ranking of the importance of finding work that allows them to stay in their community and age group, Faculty or School, gender and practical experience. No significant findings were observed between the importance of finding work that allows students to stay in their community and expected program completion date.

Importance of finding work in student's community and age group. A significant

result (X2 (4, n = 312) = 12.492, p = .014) was observed for the interaction between the

importance of staying in the student's community and age group, indicating that these

variables are not independent of one another (see Table 35).

Table 35. Importance of Finding Work in Student's Community as Related to Age Group

Age Group	Not at all Important		Somewhat Important		Very Important		Total Responses
	n	%	n	%	n	%	n
18 - 21	52	46.4	38	33.9	22	19.7	112
22 - 25	52	34.9	60	40.3	37	24.8	149
26 +	19	37.3	11	21.6	21	41.1	51
	123	39.4	109	34.9	80	25.7	312

Older students (age 26 plus) were most likely to indicate that it was "Very

important" for them to stay in their community (41.1%, n=21), while the youngest group

of students (ages 18-21) were least likely to respond this way (19.7%, n=22). Students in

the mid-range age group (ages 22-25) were most likely to describe the importance of

staying in their community as being "Somewhat important" (40.3%, n=60), followed by

the 18-21 age group (33.9%, n=38), and the 26 plus age group (21.6%, n=11).

Interestingly, the oldest students (age 26 plus) were not the least likely to indicate that

staying in their community was "Not at all important." The lowest frequency of responses

in this category came from the mid-range group (ages 22-25) (34.9%, n=52), while the

highest came from the youngest students (ages 18-21) (46.4%, n=52).

Importance of finding work in student's community and Faculty or School. Data analysis also indicated a significant result (X2 (8, n = 307) = 19.313, p = .013) for the interaction between the importance of staying in the student's own community and the Faculty or School in which the student is enrolled.

As Table 36 shows, students in the School of Health Sciences were most likely to indicate that it is "Very important" that they find work that allows them to stay in their community (48%, n=11), followed by students enrolled in the Faculty of Education (31.5%, n=23), students in the Faculty of Management (28.7%, n=25), students in the Faculty of Arts and Science (15.5%, n=17) and students enrolled in the Faculty of Fine Arts (7.3%, n=1). In contrast, Fine Arts students were most likely to describe the importance of staying in their community as "Not at all important" (57%, n=8), followed by Arts and Science students (44.5%, n=49), Management students (43.7%, n=38), Education students (31.5%, n=23) and Health Sciences students (26%, n=6).

Table 36. Importance of Finding Work in Student's Community as Related to Faculty or

School of Enrolment

Faculty or School	Not at all Important		Somewhat Important		Very Important		Total Responses
	n	%	n	%	n	%	n
Arts and Science	49	44.5	44	40	17	15.5	110
Management	38	43.7	24	27.6	25	28.7	87
Fine Arts	8	57	5	35.7	1	7.3	14
Education	23	31.5	27	37	23	31.5	73
Health Sciences	6	26	6	26	11	48	23
	124	40.4	106	34.5	77	25.1	307

Importance of finding work in student's community and gender. A significant

result (X2 (2, n = 314) = 14.828, p = .001) was also observed for the interaction between

students' gender and their rating of the importance of finding work that allows them to

stay in their community. Results are summarized in Table 37.

Table 37. Importance of Finding Work in Student's Community as Related to Gender

Gender	Not at all Important		Somewhat Important		Very Important		Total Responses
	n	%	n	%	n	%	n
Female	60	31.7	69	36.6	60	31.7	189
Male	64	51.2	41	32.8	20	16	125
	124	39.5	110	35	80	25.5	314

Males were significantly more likely to indicate that staying in their community was "Not

at all important" (51.2%, n=64), compared to 31.7% (n=60) of females who responded

the same way. Females were much more likely to describe the importance of finding

work that allows them to stay in their community as "Very important" (31.7%, n=60), in

contrast with only 16% (n=20) of male respondents.

Importance of finding work in student's community and inclusion of practical

experience in program. The final significant result to be reported regarding finding work

that allows the student to stay in his or her community is related to the interaction

between the importance of staying in the community and practical experience (X2 (2, n =

311) = 9.067, p = .011). Table 38 shows that students with some form of practical

experience were more likely to indicate (33.1%, n=48) that it is "Very important" for

them to find work that allows them to stay in their community, compared to only 18.7%

(n=31) of students who did not participate in any type of practical experience as part of

their university program. These same students were also less likely (33.8%, n=49) than

their counterparts with no practical experience (45.2%, n=75) to indicate that finding

work allowing them to stay in their community is "Not at all important."

Table 38. Importance of Finding Work in Student's Community as Related to Inclusion

of Practical Experience in Program

Practical Experience	Not at all Important		Somewhat Important		Very Important		Total Responses
	n	%	n	%	n	%	n
Yes	49	33.8	48	33.1	48	33.1	145
No	75	45.2	60	36.1	31	18.7	166
	124	39.9	108	34.7	79	25.4	311

One might hypothesize from this data that most students would likely choose

work experience that would allow them to make contacts and gain relevant job skills

within the community in which they intend to work. Therefore, students who have gained

practical experience within their community would have more of a vested interest in

staying in that community to work in their chosen occupation.

Occupational Plans and Information

Question 17 asked students, "Do you have a specific occupation in mind after

graduating?" It continued, "If yes, will you require additional training?" Most (81.3%,

n=260) students indicated that they had a specific occupation in mind. Of those who

indicated that they had a specific job in mind following university, 61.4% (n=153) stated

that they would require additional training. The data regarding whether or not students

had a specific occupation in mind was then cross tabulated with age group, gender,

Faculty or School, practical experience and program completion using Chi-square

analyses to determine whether the variables are to be considered independent of one

another (see Table 39).

Table 39. Chi-square Analysis of Thinking of a Specific Occupation

Variable	n	df	X2	p
Age Group	318	2	1.089	0.580
Gender	320	1	3.281	0.070
Faculty or School	312	4	22.631	0.000**
Practical Experience	317	1	17.702	0.000**
Program Completion	315	6	13.443	0.037*

* p <.05. ** p < .01.

Significant results were recorded for the interaction between whether the student

had a specific occupation in mind after graduating and the Faculty or School in which

they were enrolled, the inclusion in their program of practical experience, and expected program completion date. No significant results were observed between whether the student had a specific occupation in mind and age group or gender.

Thinking of a specific occupation and Faculty or School. A significant result $(X2 (4, n = 312) = 22.631, p = .000)$ was observed for the interaction between whether the student had a specific occupation in mind and the Faculty or School in which the student was enrolled, indicating that these variables are not independent of one another (see Table 40).

Students enrolled in the School of Health Sciences and Faculty of Education were most likely to indicate that they had a specific occupation in mind after graduating from university, with frequencies of 100% (n=23) and 95.9% (n=71) respectively. In contrast, Fine Arts students were most likely to indicate that they did not have a specific occupation in mind (28.6%, n=4).

Table 40. Thinking of a Specific Occupation as Related to Faculty or School of Enrolment

Faculty or School	Yes		No		Total Responses
	n	%	n	%	n
Arts and Science	84	74.3	29	25.7	113
Management	66	75	22	25	88
Fine Arts	10	71.4	4	28.6	14
Education	71	95.9	3	4.1	74
Health Sciences	23	100	0	0	23
	254	81.4	58	18.6	312

Thinking of a specific occupation and practical experience. A significant result

(X2 (1, n = 317) = 17.702, p = .000) was also observed for the interaction between

whether the student had a specific occupation in mind and whether the student's program

included some form of practical experience.

Table 41. Thinking of a Specific Occupation as Related to Inclusion of Practical

Experience in Program

	Yes		No		Total Responses
Practical Experience	n	%	n	%	n
Yes	135	91.2	13	8.8	148
No	123	72.8	46	27.2	169
	258	81.4	59	18.6	317

As outlined in Table 41, the majority (91.2%, n=135) of students who had

received some form of practical experience as part of their program indicated that they

had a specific occupation in mind after graduating, compared to only 72.8% (n=123) of

those who had not received similar experience.

Thinking of a specific occupation and program completion. A significant result

(X2 (6, n = 315) = 13.443, p = .037) was observed for the interaction between whether

the student had a specific occupation in mind and the student's expected program

completion date (see Table 42).

Table 42. Thinking of a Specific Occupation as Related to Expected Program Completion

Date

Expected Completion Date	Yes		No		Total Responses
	n	%	n	%	n
Fall 2003	29	70.7	12	29.3	41
Spring 2004	88	80	22	20	110
Summer 2004	23	88.5	3	11.5	26
Fall 2004	29	76.3	9	23.7	38
Spring 2005	57	87.7	8	12.3	65
Summer 2005	7	58.3	5	41.7	12
Later than Summer 2005	22	95.7	1	4.3	23
	255	81	60	19	315

Interestingly, students graduating in the semester in which they participated in the

survey were, with the exception of students completing their programs in Summer 2005,

least likely to have a specific occupation in mind (70.7%, n=29). Students most likely to

indicate that they had a specific occupation in mind were those completing their

programs later than Summer 2005 (95.7%, n=22), followed by those completing in

Summer 2004 (88.5%, n=23), Spring 2005 (87.7%, n=57), Spring 2004 (80%, n=88), and

Fall 2004 (76.3%, n=29). It is apparent that a linear relationship does not exist between

program completion date and percentage of students who have a specific occupation in

mind following graduation.

This concludes the discussion of the results from administration of the

Comprehensive Career Needs Survey Post-Secondary Form in this study. The following

chapter will discuss the interpretation of these results, suggest implications for practice, and make recommendations for future research.

Chapter 5. Discussion

The purpose of this study was to explore and gain a greater understanding of senior university students' perceptions of their readiness to enter the work force following the completion of their program, as well as their perceptions of the availability and helpfulness of career-related resources and services. Due to the exploratory nature of this research, no *a priori* hypotheses were generated. A sample of 324 undergraduate students attending the University of Lethbridge in Lethbridge, Alberta, Canada was surveyed through the use of the Comprehensive Career Needs Survey Post-Secondary Form, a revision of the Comprehensive Career Needs Survey developed by Magnusson and Bernes (2001).

The resulting data analysis provided an overview of student perceptions of readiness to enter the work force, the availability and usefulness of career-related services and resources, as well as students' actual use of those services and resources. Additional information gathered included students' perceptions of the importance of career planning at this point in their lives, level of satisfaction with their degree program, and confidence in their occupational choice.

This chapter discusses the results presented in Chapter 4 and relates the current research to previous work in this area. The first of four sections discusses the findings from the survey and compares them with findings reported in the literature. The second section focuses on implications for practice, specifically for career-related service providers in post-secondary settings. Limitations of the current study are noted in the third section. The fourth section includes suggestions for further research regarding student perceptions of career readiness and career-related services and resources.

Discussion of Survey Results

This section describes the results that were analyzed by descriptive means, as well as the variables that were cross tabulated using Chi-square analysis. Information to be discussed includes students' perceptions about the importance of career planning, readiness to enter the work force, and level of degree satisfaction, as well as occupational information including the students' thinking about a specific occupation, level of confidence in their occupational choice, and preferred occupational location. The discussion includes student perceptions of what resources might aid in the transition to the world of work, perceived helpfulness of information and people typically associated with career planning, perceptions of availability and usefulness of career-related services and resources, and actual use of those services and resources.

Perceived Importance of Career Planning

The idea that students may perceive career planning as being important but fail to take the steps necessary to formulate a well developed plan is central to the current research. While the majority of students reported feeling that career planning was "Very important" to them at this time in their lives, their level of actual use of available career-related services and resources does not reflect this level of importance. Work by Sepich (1987) further discusses this lack of a sense of urgency, often characteristic of the career-planning process of many university students. It is also interesting to note that perceptions of the importance of career planning, as described in Magnusson and Bernes' (2001) initial study of junior and senior high students, did not significantly increase at the post-secondary level.

Significant results were reported as a result of the cross tabulation of perceived importance of career planning and the Faculty or School in which the student was enrolled and expected program completion date. Significant differences between responses recorded from students enrolled in the Faculty of Fine Arts and students in another Faculty or School may indicate that respondents enrolled in the Faculty of Fine Arts have a more external locus of control than do students in the other Faculties and School, contributing to both their lack of sense of urgency and their level of career indecision (Dollinger, 2000; Gaffner & Hazler, 2002; Sepich, 1987). It may also be the case that Fine Arts students define 'career' differently than students enrolled in other programs. It could be possible that Fine Arts students' definition of career is more occupational in nature. Perhaps they believe that their career is what allows them to pursue their passion; that is, their job gives them the flexibility to pursue their passion in their free time. This dissociation of passion and career may lead Fine Arts students to feel less sure about their future and therefore less motivated to take the steps necessary for successful career planning. A targeted effort to redefine 'career' for these students, demonstrating the possibility of including passion in their career choices and plans, may be of benefit in this instance.

Expected program completion date also was found to influence students' perceptions of the importance of career planning. Students with completion dates closer to the administration of the survey (October, 2003), with the exception of students expecting to complete their studies in Fall 2004, were more likely to rate career planning as "Very important" at this time in their lives. An interesting anomaly is that the majority (53.8%) of students graduating in Fall 2004 felt that career planning was only "Somewhat

important" at this point in their university experience. Additional work could be done to determine these students' Faculty or School of enrolment, or other factors and personal attributes that may have contributed to the lack of sense of urgency that they expressed.

Perceived Readiness to Enter the Work World

The central research question for this study was "What are university students' perceptions of their readiness to enter the world of work?" Question 8 of the instrument (see Appendix A) addressed this question directly. A significant result was recorded between perceptions of readiness and both the Faculty or School in which the student was enrolled, and inclusion in the student's program of some form of practical experience.

The indications that students' perceptions of readiness are linked both to practical experience and to programs which include a considerable practical component correspond with research that has shown the potential benefit of experiential learning to students both in general, and in regard to self-efficacy beliefs (Arnold, Auburn & Ley, 1995; Arnold et al., 1999; Bandura, 1997; Betz, 2001; Borders & Archadel, 1987; Diegelman & Subich, 2001; Krumboltz, 1981; Lent et al., 1996; Werbel, 2000). One might assume, then, that the benefits gained from the practical components of the programs offered in both the School of Health Sciences and the Faculty of Education have a direct and positive effect on these students' perceptions of their readiness to enter the work force. Furthermore, successful completion of such practical experience may have an additional impact on students' development of a positive vision of the future and their perceptions of their ability to succeed in the world of work (Bandura, 1997; Betz & Hackett, 1986; Brown, 1999; Guay et al., 2003; Maatta et al., 2002).

While opportunities exist for students in the Faculties of Arts and Science,

Management, and Fine Arts to receive practical experience though participation in

cooperative education work terms and applied studies, fewer than half of the students

surveyed knew these options were available to them, and even fewer actually made use of

these resources. Therefore, it may be beneficial for those Faculties to explore the

possibility of including some sort of mandatory practical experience as part of their

degree programs, or at the very least, to increase promotional efforts for those resources

currently available to their students.

Degree Satisfaction

Responses to the question "How satisfied are you with the extent to which your

degree has prepared you to enter the work force?" indicate that most students are

"Somewhat satisfied." These findings corroborate those of Krahn and Sorensen (2000),

who found that 60% of students were satisfied with the relevance of their course work. In

this study, the variables significantly related to student perceptions of degree satisfaction

were the Faculty or School in which the student was enrolled, and whether or not the

program included any sort of practical experience. Finnie's (2002) finding that "[The]

highest approval ratings went to the disciplines most directly connected to labour market

skills sets and career paths" (p. 8) may add further evidence for the benefits of the

experiential nature of the programs offered in both the School of Health Sciences and the

Faculty of Education at the University of Lethbridge.

Students whose programs contained some form of practical experience were much

more likely to indicate that they were "Very satisfied" with the extent to which their

degree prepared them for work force entry. The idea that students may choose programs

with high perceived career utility in order to enhance future opportunities is also discussed by Alexitch and Page (2001), Arnold, Auburn and Ley, (1995), Arnold et al. (1999), Brown (2000), and Drew (2001).

Perceived Usefulness of Career-Related Services and Resources

Students were asked to indicate which resources they thought would be most useful as they make the transition to the work force, and how helpful different types of career-related information and/or advice would be at this time in their lives. The high demand for information on the world of work reported in the current survey aligns with Ware's (1986) findings that information about the world of work was used more frequently than any other type of information.

The findings concerning the individuals whom students find most helpful as they progress through the career-planning process concur with those of Alexitch (1994) and Alexitch and Page (1997), but do not completely substantiate those findings. Students in those studies rated advice from professors more positively than advice from any other source; however, this research indicates that information and advice from people working in the field are regarded most highly, followed by information and advice from parents, friends and other relatives. Professors and other individuals associated with the University (e.g., career counsellors, academic advisors, Career Resource Centre staff, and University administrators) were also ranked quite highly. Parents were ranked as the most important source of career-related information in Magnusson and Bernes' (2001) study, followed by friends, other relatives and experts in the field. The likelihood that parents are continuing to influence the career-related decisions of their children at the university level speaks to the importance of including parent-relevant career planning information in

post-secondary career centres. Research into ways in which parents can become a more active part of the career-planning process of their children who are attending university may indicate yet another method of delivery for career-related resources.

The longest question on the survey (Question 16) gathered an immense amount of information regarding the perceived availability, actual use, and perceived helpfulness of career-related resources available to students both on campus and in their community. One of the major findings of this research is that many students may simply be unaware of the services and resources that are available to them to assist in the career-planning process. This finding corresponds with Magnusson and Bernes' (2001) study in which the most common response reported by junior and senior high students when asked about the usefulness of existing career resources was "I don't know." The lack of knowledge regarding resources that could be of considerable assistance during their career planning process could influence students' level of career readiness, and therefore their readiness to make corresponding career-related decisions (Gaffner & Hazler, 2002). Evidence that students are unaware of available services and resources at the junior and senior high school level, and that this lack of awareness persists through to university, suggests that promotional activities need to be increased early in the career planning process, for example, in junior high school, to allow students to conceptualize all of the options available to them in the future, and in post-secondary education.

Many of the students who indicated that they knew that a service or resource was available also reported making use of it; however, many resources that could be of significant value to students as they make their career plans were least likely to be used, even when the students knew of their existence. Statistics gathered from the current data

indicate that fewer than 20% of the student population have made use of several potentially very helpful resources. These resources include the Career Resource Centre, the University of Lethbridge career resource library, career planning workshops, career counselling, and cooperative education work terms. Cross and Markus' (1991) work also reflects the idea that students may have a clear picture of their career path and the resources available to them, but do not take advantage of the available opportunities that would help to make their goals reality.

Students who reported using a service or resource were then asked to rate its level of helpfulness or usefulness. Many of the resources that students had actually accessed were perceived as being "Very helpful" or "Quite helpful." A major question that arises from the discussion of student perceptions of career-related resources and services is "How can we entice students to access those services and resources that could prove beneficial to their career planning process?" Research indicating that too little or too much information can be detrimental to the decision-making process (Gaffner & Hazler, 2002; Krumboltz, 1981) complicates the issue further. Other dimensions are added to the problem by considerations about accessibility and relevance for students' multitude of unique backgrounds and characteristics (Fuller et al., 1994; McAuliffe, 1992; Shivy & Koehly, 2002), as well as the reality that "Providing opportunities for career information does not guarantee that students will take advantage of available resources" (Ogletree, 1999, np). Finally, it is a reality that students' perceptions of themselves and of the resources and services provided (Bandura, 1997; Borders & Archadel, 1987; Lent et al., 1996; Shivy & Koehly, 2002) can have a considerable impact on their use of career-related resources.

The development of optimal career-related resources is a very complex and difficult undertaking. To make this task less daunting, research should explore delivery methods that would be most attractive to the diverse undergraduate university student population. Such research should take into consideration the perceptions students may already have regarding available resources and investigate whether these perceptions can be altered through targeted promotional activity.

Plans for the Year Following Program Completion

Students were asked to indicate what they thought they would be doing in the year after completion of their program of studies. It is interesting to note that responses to the current survey were quite similar to those recorded by Magnusson and Bernes (2001). In the current study, approximately 77% of students had a specific plan or were trying to decide between a couple of options, compared to 74% of high school and 68% of junior high school students in Magnusson and Bernes' work. Based on these findings, one could argue that confidence or the ability to make career-related decisions may be related to situational or personal characteristics rather than developmental stage. Some of Super's (1985) more recent work discusses the concept of "career adaptability" as opposed to "career maturity." As the student population continues to increase in age, it will be increasingly important to take into consideration "the greater experience and time perspective of adulthood" (p. 8) when developing career-related resources. This is also consistent with Schlossberg's (1986) emphasis on life events rather than age or stage when considering adult career development. In addition, the move away from the traditional developmentally based theories to a new model which stresses the value of "ascertaining the relative importance of work and the other major roles in the life scheme

of the client" (Super, 1985, p. 19), may make career interventions more applicable and appealing for students, regardless of the "stage" they are in.

In the current study, significant differences were recorded between students' plans for the year following graduation and the Faculty or School in which they were enrolled, and whether or not their program included a practical component. The majority of students in the Faculty of Education and almost half of the students enrolled in the School of Health Sciences indicated that they had a specific plan for what they would be doing in the year following program completion. In contrast, Fine Arts and Arts and Science students were least likely to indicate that they had a specific plan. Fine Arts students were most likely to respond that they didn't know what they would be doing and weren't worried about it at this point. It may be that the experience gained through the mandatory practical experience included in the programs in the Faculty of Education and School of Health Science builds the self-confidence students need to make effective career decisions, increasing their levels of career self-efficacy in the process.

Once again, the inclusion of some form of practical experience was significantly related to students' responses. Students whose programs included practical experience were much more likely to indicate that they had a specific plan for what they would be doing following graduation. The self-knowledge required to make relevant career decisions may be enhanced by experience gained through the experiential learning afforded to students through such things as cooperative education work terms, job shadowing, internship and practicum experiences (Arnold et al., 1995; Brown, 1999; Cantor, 1997; Lankard, 1996a; Super 1990).

Importance of Staying in Student's Community

Responses to the item regarding the importance of finding work that allows the student to stay in his or her community indicated that significant differences exist among four of the five variables cross tabulated with this ranking of importance: age group, gender, Faculty or School of enrolment, and inclusion in their program of some form of practical experience.

Students enrolled in the School of Health Sciences were most likely to indicate that it was "Very important" for them to stay in their community. Education and Health Sciences students were least likely to describe the ability to find work within their community as "Not at all important." A related finding indicates that students whose program of studies included some form of practical experience were much more likely to indicate that it was "Very important" that they find work that allows them to stay in their community. One might conclude, then, that these students may choose work experience that will allow them to make contacts and gain relevant job skills within the community in which they intend to work. Students who have gained practical experience within their community would then have a vested interest in staying in that community to work in their chosen occupation once their program of studies is complete.

Occupational Information

The final question that was cross tabulated using Chi-square analysis with the sub-groups of age, gender, Faculty or School enrolled in, practical experience and expected program completion date, asked students to indicate whether they had a specific occupation in mind following graduation. Results of the Chi-square analyses indicated significant differences in responses depending on the Faculty or School the students were

enrolled in, whether their program included practical experience, and their expected program completion date.

Students enrolled in the School of Health Sciences and Faculty of Education were most likely to indicate that they had a specific occupation in mind after graduating from university. Those students enrolled in the Faculty of Fine Arts were least likely to so indicate. This result could reflect the nature of the programs offered in the School of Health Sciences (Nursing and Addictions Counselling) and the Faculty of Education, which prepare individuals for fairly specific occupations, such as nurse, addictions counsellor, or teacher. Having chosen programs in the Faculty of Education or School of Health Sciences, students may already have a clear occupational sense of self due to the amount of job specific training involved in their programs (e.g., teaching internships, addictions counselling placements, and nursing practica). In contrast, students in other Faculties may find it more difficult to make the link between their program of interest and an occupational outcome. This may be especially true for Fine Arts students, since the current research suggests that a separation may exist between those students' passion and their conception of their future in the world of work.

In addition, over 90% of students whose program contained some form of practical experience indicated that they had a specific occupation in mind following graduation, in contrast with 72.8% of those students who did not receive similar experience. A possible conclusion is that direct work experience may play a significant role in increasing competence and self-efficacy and consequently students' ability to make informed career decisions. Work by Arnold, Auburn and Ley (1995), Arnold et al. (1995), Bandura (1997), Krumboltz (1981), and Lent et al. (2002) supports this claim.

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The percentage of students who indicated that they had a specific occupation in mind did not increase, the closer their expected program completion date was to the time when the survey was administered. In fact, students expecting to complete their program in the semester in which the survey was administered (Fall 2003) were least likely to indicate that they had a specific occupation in mind. In this study, a linear relationship did not exist between expected program completion date and percentage of students who had a specific occupation in mind following graduation.

Confidence in Occupational Choice.

When asked how likely it is that they will find a job in the occupation of their choice, get the additional training they need, or find work that they will love to do, students participating in this research were not as confident as one might expect. However, they reported more confidence than students at the junior and senior high levels reported in Magnusson and Bernes' (2001) study. Students' estimations of their ability to get the additional training they need were higher than their estimations of their ability to find a job in the occupation of their choice or to find work that they will love to do. Interestingly, seven students indicated that it was "Not at all likely" that they will find an occupation that they love. It may well be that this negative attitude towards the possibility of occupational fulfillment plays a role in those students' perceptions of their readiness to enter the work force.

Preferred Occupational Location.

Most of the students surveyed indicated that they felt it was "Very likely" that they would be able to find work within their country. However, the closer the potential location of their future occupation moved to their community, the less likely students

were to believe that it was "Very likely" that they would find a job in the field of their choice. When students were asked to indicate where they would prefer their occupation to be located, a higher proportion of student responses were recorded indicating that students would prefer to stay within their community or in their province, regardless of where they believed their job was likely to be located.

Summary

While much information was gathered as a result of this survey, perhaps the most significant finding is the extent to which the inclusion of practical experience in students' program of study impacts their perceptions of career readiness. Students indicating that their program included some form of practical experience, as well as students enrolled in those programs which have the most required practical components (those in the Faculty of Education and School of Health Sciences) consistently scored higher on their perceptions of their readiness to enter the work force, satisfaction with the extent to which their degree has prepared them for entry into the world of work, and having a specific plan and/or occupation in mind following program completion.

The success that many students experience as they participate in practical learning opportunities such as cooperative education work terms, practicum or internship placements, may lead to increased competence levels and career self-efficacy beliefs (Arnold, Auburn & Ley, 1995; Arnold et al., 1999; Lent et al. 2002). Practical experience may also have a positive effect on students' perceptions of their readiness to enter the work force, since outcome expectancies and self-perception are often influenced by success in other areas (Betz, 2001; DeWitz & Walsh, 2002). Therefore, it is highly likely that experiential learning plays a role in the development of career self-efficacy and

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subsequently self-perceptions regarding career. Further research into the strength of this interaction with the university population is suggested.

An interesting finding was that students enrolled in the Faculty of Management consistently scored in the mid-range on measures of degree satisfaction, perceptions of career readiness, and confidence in occupational choice when compared to those students enrolled in the other Faculties and School. Several explanations for this finding are possible. A wide range of programs are available in the Faculty of Management. Students may enroll in programs that afford them occupational training (e.g., Accounting), or programs that provide less specific instruction (e.g., Marketing). While programs such as Accounting may provide job specific training, the program itself may not be as occupation specific as programs in the School of Health Sciences or Faculty of Education. Students in the Faculty of Management are also regularly exposed to the potential for voluntary participation in practical experience through the promotion of cooperative education work terms and programs such as the Integrated Management Experience. Students enrolled in the Faculties of Arts and Science and Fine Arts may have comparatively limited exposure to these experiences. These results suggest that the further away students' program of study is from occupational specificity, the less clear is their occupational outlook.

Data regarding the resources that students feel would be helpful as they make the transition from school to work, as well as their future plans, confidence in their occupational choices, and preferred occupational location, provides insight into students' needs and wants as they move through the career-planning process. Information gathered about students' perceptions of the availability and usefulness of the career-related

services and resources that are available to them both on campus and in their community, and about their actual use of those services and resources, may contribute to the improvement and further development of career-related interventions. Specifically, the finding that many students are simply unaware of the resources available may impact the promotional strategies used by career service providers.

Implications and Recommendations for Practice

Previous research (Alexitch & Page, 1997; McAuliffe, 1992; Shivy & Koehly, 2002) supports the need for career-related service providers to take into consideration the unique characteristics of the student population when developing resources designed to meet students' needs. In particular, work by Shivy and Koehly (2002) indicates that student perceptions of these services and resources may have a direct impact on their use. The current study provides further evidence for this, since student perceptions of availability almost certainly affect actual student use of on-campus and community career-related resources. This study did not, however, provide support for the theory that developmental stages or personal attributes affect students' perceptions of readiness or use of career-related resources. Age was found to be a significant factor in only one instance in the current research: whether or not students preferred to find work that would allow them to stay in their community. This finding may suggest that factors related to perceptions of career readiness may be situational rather than developmental in nature. Further research is recommended to determine whether developmental theories such as Super's (1990) hold true with the current university population. In addition, a replication of the current study with a focus on the interaction between personal attributes (e.g., decision-making type) and career readiness may be of interest.

One of the tasks at hand for career-related service providers in post-secondary settings is to determine the most effective way to market available resources, in a manner that is sensitive to the diverse university student population and at the same time entices students to use those resources as they plan their careers. It is also important to consider those services and resources that students feel would be most helpful at this point in their career preparation. The highest-rated responses, including opportunities for job shadow, internship, practica, and cooperative education work terms, point to students' perceived need for experiential based learning experiences (Alexitch, 1994). Other highly rated responses included career counselling, career fairs, job search workshops, and academic advising, possibly indicating that students would appreciate a more 'hands-on' and interactive approach to receiving career-related information. Previous work by Shivy and Koehly (2002) supports this notion.

Career-related service providers should be mindful of the format in which the information is provided, as well as the individual who provides it. The current study indicates that people working in the field, professors, family members and friends are frequently used sources of information. While service providers may not have direct access to the family and friends of the students they are trying to reach, it may be possible to provide additional opportunities for students to speak with successful members of the work force, and to have professors provide more career-related information to their classes. Developing promotional materials that are targeted to individuals who seem to exert a high degree of influence on students' career-planning (such as parents) may also be of great benefit.

Timing of the presentation of career-related information may also be an issue. As Super (1990) indicates, once students have entered the post-secondary setting, they may not re-engage in the career-planning process until their final semester. Current methods of presenting materials, in the hope that students will take advantage of the resources available to them throughout their university experience, may be less effective than attracting students nearing completion of their program, or even at or prior to admission, when evidence of engagement in career planning is strongest. As indicated in the current research, with the exception of those students whose expected program completion date was Fall 2004, students' perceived importance of career planning increased significantly, the nearer their expected program completion date.

Targeting marketing efforts to those students whose program of studies does not include a large amount of experiential learning may also be of benefit. While students in the Faculty of Education and the School of Health Sciences seemed to have a clear picture of their future career and the confidence to make their goals a reality, in this study, students in the other Faculties did not share their conviction. One beneficial initiative might be to provide students in the Faculties of Arts and Science, Management and Fine Arts with more information and opportunity in the area of experiential learning. Lack of awareness of the opportunity to participate in applied studies, cooperative education work terms, or other experiential learning activities may contribute to the lower ratings of perceptions of readiness and degree satisfaction expressed by students enrolled in these Faculties.

Perhaps the most important recommendation is that career-related service providers continue to investigate exactly what information students would find most

helpful as they progress through the career-planning process, as well as which methods of

presentation the university population will respond to best. Support is required from post-

secondary institutions in the form of the infrastructure, resources, and tools that career-

related service providers need as they embark on the necessary research and subsequent

implementation of new and improved career-related programs. Increased promotional

activity, as well as a comparison of the efficacy of service delivery models (Magnusson

& Bernes, 2001), is also recommended at the post-secondary level. As little work has

been done in this area in the past, there is vast potential for post-secondary career-related

service providers to improve the services and resources they offer to their students.

Limitations of the Study

The non-random sampling method used to select participants in this study may

represent a limitation affecting its generalizability to the university population in general.

The decision to use a convenience method of sampling may have reduced the possibility

of the results reflecting the views of the overall student population at the University of

Lethbridge, and therefore of university students in general. Because entire classes were

surveyed at one time, rather than randomly chosen individual students, and due to the

liberal education requirements at the University of Lethbridge, the researcher was unable

to control for the potential overlap of students taking courses that one might assume

would belong to a particular Faculty or School, while enrolled in another Faculty or

School (e.g., Management students taking Fine Arts classes).

In addition, there is no guarantee that students taking third and fourth year classes

are actually nearing completion of their program. Because of the flexible nature of

programs at the University of Lethbridge, it is possible for students early in their program

(first or second year) to take courses designated as senior level. Consequently, while the researcher surveyed only third and fourth year courses, a significant portion of the sample (more than 10%) did not expect to complete their program of studies within the next two years.

An additional consideration is that the need to survey a second group of Fine Arts students later in the semester may have significantly impacted that group's responses. A one-month time lag between samplings is quite large; in addition, changes in the length of time to the end of the semester, assignment/exam demands, and changing personal issues and commitments may have caused the responses of this group of students to be significantly different than the responses of those surveyed earlier in the semester.

The final limitation to be discussed is the survey itself. While a small pilot study was completed prior to the administration of the instrument, the use of a larger pilot group would have been more appropriate. The three individuals used in the pilot study provided no feedback to the researcher regarding clarity or readability of the questions, and as a result, no changes were made to the original survey. If a larger pilot study had been done, the researcher is confident that questions that were difficult to understand or answer, such as Question 5, would have been identified and appropriate changes could have been made prior to administering the survey. An additional consideration in this area is the subjective nature of many of the survey questions. While the Likert scales used in many of the questions were categorical in nature, the categories were not clearly defined. For example, one student's definition of "Very important" may be quite different from another's interpretation of the same concept.

Recommendations for Future Research

As this study was exploratory in nature, many areas would benefit from further exploration. Future research could begin with a more comprehensive examination of the variables outlined in the current study, for example, an examination of whether the program of enrolment (as opposed to Faculty or School of enrolment) has an impact on perceived readiness to enter the work force. It may be useful to determine in which programs students who participate in voluntary practical experience are enrolled. Researchers could investigate which students are more likely to access the career-related resources and services available, and whether students' use of available services and resources is related to their perceptions of readiness.

An exploration of students' goals and purpose for attending university may shed additional light on the area of degree satisfaction. An investigation of decision-making style and anxiety level as related to career decision-making skills and perceptions of readiness may also be beneficial. As indicated in Chapter 2, the ability to make a smooth transition from school to work may have a direct impact on students' perceptions of readiness. Therefore, research is needed into the transition from high school to the post-secondary environment, and its subsequent impact on individuals' perceptions of their ability to make a transition from school to work. Additional research in this area could focus on the way in which self-perception (e.g., negative core beliefs and self-efficacy beliefs) interacts with perceptions of readiness to enter the work force. Future research could also examine students' ability to visualize a positive possible future self (e.g., Have they done it? When did it develop?) and the impact of this ability, or its lack, on their perceived readiness to take the next step in their career.

Finally, further research should be done into students' use of available career-related resources and perceptions of the helpfulness of these resources. Specifically, study of the correlation between students' academic success and their use of available resources and perceived readiness to enter the workforce may provide useful information for career service providers. A study of the relationship between cultural or ethnic background and actual use of career-related resources would be similarly useful to career resource service providers wishing to make career-related information accessible and relevant for all students. Finally, work needs to be done to determine the most effective way to present career-related information to students. Student-led focus groups may represent an efficient and relevant way of determining the attractiveness of current resources and gathering suggestions for improvement.

Summary

This study has explored the perceptions of university students regarding their readiness to enter the world of work following program completion, as well as their perceptions of the availability and helpfulness of career-related services and their actual use of those services and resources. This research supports previous findings regarding the benefit of experiential learning as part of the university experience. It contributes information regarding the resources that students feel would be most helpful as they make the transition from school to work, offers insight into the career-planning needs and perceptions of senior university students, and provides a stepping-stone for future research in this area.

The development of more efficacious career-related services and resources for the university population is a matter of great importance, as students continue to prepare to

enter the work force and become contributing members of our society. Any effort to

improve on the services and resources currently available to students, and to expand the

offerings to which students have access (perceived or real), will significantly benefit

students as they move towards the next phase of their career.

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Appendix A

Comprehensive Career Needs Survey: Post-Secondary Form

PART A: General Information

Please fill in the following information.

1) Age _____

2) Gender ☐ Female ☐ Male

3) What program are you currently enrolled in?

☐ B.A.	☐ B.Sc.
☐ B.A.Sc.	☐ B.F.A.
☐ B.Mus.	☐ B.H.Sc.
☐ B.N.	☐ B. Mgt.
☐ B.A./B.Mgt.	☐ B.Sc./B.Mgt.
☐ B.A./B.Ed.	☐ B.Sc./B.Ed.
☐ B.Mgt./B.Ed.	☐ B.F.A./B.Ed.
☐ B.Mus./B.Ed.	

4) Does your program of study include any practical experience (e.g. practicum placement, internship, technical semesters, co-op placement)? ☐ Yes ☐ No

5) If yes, how many weeks of practical experience does it provide? _____

6) In what term do you expect to complete your program?

☐ Fall 2003
☐ Spring 2004
☐ Summer 2004
☐ Fall 2004
☐ Spring 2005
☐ Summer 2005
☐ Later than Summer 2005

7) a) How important is career planning to you at this time in your life?

0 – Not at all important **1 – Somewhat** important **2 – Very** important

Please explain:

_____

_____

b) If career planning is NOT very important to you now, when might it become important to you?

_____

_____

8) How would you describe your readiness upon graduation to enter the world of work?

0 – Not at all ready **1 – Somewhat** ready **2 – Very** ready

9) How satisfied are you with the extent to which your degree has prepared you to enter the work force?

   0 – Not at all satisfied   **1 – Somewhat** satisfied   **2 – Very** satisfied

10) a) What resources do you feel would aid you in making smooth transition into the work force?

   - ☐ Career counselling
   - ☐ Local/Regional library
   - ☐ Community agencies
   - ☐ Co-op work terms
   - ☐ Career Fairs
   - ☐ Internet sites
   - ☐ Academic advising
   - ☐ Job Shadowing/Internships/Practicum experience
   - ☐ Career Resource Service Centre/career library
   - ☐ Career library outside of the University
   - ☐ Written materials (magazines, workbooks, etc.)
   - ☐ Interest Inventory (e.g., Strong Interest Inventory)
   - ☐ Career planning workshops
   - ☐ Videos
   - ☐ CD-ROMS (e.g., Career Quest)

   b) What other resources would you have found helpful?

   _____

   _____

PART B: Career Plans

11) Which of the following best describes your plans for what you will be doing after you have completed university (please check one answer only):
   a) I have a specific plan for what I will be doing _____
   b) I am trying to decide between a couple of different plans _____
   c) I am not sure what I will be doing, but I have started working on it _____
   d) I don't know what I will be doing, and I am not worrying about it now _____

12) Which of the following describes what you think you will most likely be doing in the year after you leave university (please check as many options as apply to you)
   a) Taking full-time studies at a university, college or technical institute _____
   b) Taking part-time studies at a university, college or technical institute _____
   c) Taking other types of training _____
   d) Working full-time _____
   e) Working part-time _____
   f) Working as a volunteer _____
   g) Travelling _____
   Other   Please Describe

   _____

   _____

13) How important is it to you to be able to find work that allows you to stay in your community?

   0 – Not at all important   **1 – Somewhat** important   **2 – Very** important

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PART C: Career Help

	0 = Not at All Helpful 1 = Somewhat Helpful 2 = Quite Helpful 3 = Very Helpful			
14) There are a number of things that people find useful for career planning. What would you find helpful at this time in your life?				
a) Someone or something to convince me that career planning is important right now in my life	0	1	2	3
b) Understanding my interests and abilities	0	1	2	3
c) Finding ways to pursue the things I am really passionate about	0	1	2	3
d) Information about the world of work (e.g., trends, etc.)	0	1	2	3
e) Information about different kinds of occupations	0	1	2	3
f) Information about opportunities within my community	0	1	2	3
g) Help with choosing between two or more occupational options	0	1	2	3
h) Help with planning the next steps in my career	0	1	2	3
i) Getting support for my career plan	0	1	2	3
j) Other (please specify)	0	1	2	3
15) You may have received help with your career planning from a number of people. Please circle how helpful each of the following people have been with your career planning so far:				
a) A professor	0	1	2	3
b) An academic advisor	0	1	2	3
c) A personal or career counsellor	0	1	2	3
d) A University administrator (e.g., Dean, Registrar's Staff)	0	1	2	3
e) Parents	0	1	2	3
f) Other relatives	0	1	2	3
g) Friends	0	1	2	3
h) Someone working in the field	0	1	2	3
i) Spiritual or religious groups	0	1	2	3
j) Youth groups or associations (non-religious)	0	1	2	3
k) Other (Please specify)	0	1	2	3

The next question has three parts.

In the first column, please rate how available each service or resource was. If you answer "Don't Know" or "Not Available", please proceed to the next item.

If you answer "Yes, Available to Me", please proceed to the second and third columns. In the second column, indicate whether or not you made use of the service or resource. In the third column, indicate how helpful it was to you.

16) Please rate how helpful the following services or resources have been with your career planning.	Was This Available?	Did You Use It?	How Helpful or Useful Was It?
	0 = Don't Know 1 = Not Available 2 = Yes, Available to Me	0 = No 1 = Yes	0 = Not at All 1 = Somewhat 2 = Quite 3 = Very
a) Career counselling	0 1 2	0 1	0 1 2 3
b) Career Resource Service Centre / career library	0 1 2	0 1	0 1 2 3
c) Career library outside of the University	0 1 2	0 1	0 1 2 3
d) Local/Regional library	0 1 2	0 1	0 1 2 3
e) Community agencies	0 1 2	0 1	0 1 2 3
f) Written materials (magazines, workbooks, etc.)	0 1 2	0 1	0 1 2 3
g) Cooperative education work terms	0 1 2	0 1	0 1 2 3
h) Computer programs (e.g., CHOICES)	0 1 2	0 1	0 1 2 3
i) Interest Inventories (e.g., Strong Interest Inventory, Self-Directed Search, etc.)	0 1 2	0 1	0 1 2 3
j) Career planning workshops	0 1 2	0 1	0 1 2 3
k) Career fairs	0 1 2	0 1	0 1 2 3
l) Internet sites	0 1 2	0 1	0 1 2 3
m) Videos	0 1 2	0 1	0 1 2 3
n) CD-ROMS (e.g., CareerQuest, etc.)	0 1 2	0 1	0 1 2 3
o) Job shadowing/Internship/Practica	0 1 2	0 1	0 1 2 3
p) Scholarship and Financial Information	0 1 2	0 1	0 1 2 3
q) Academic advising	0 1 2	0 1	0 1 2 3
r) Other (please specify)	0 1 2	0 1	0 1 2 3

17) Do you have a specific occupation in mind after graduating? □ Yes   □ No

If you answered "Yes" please answer the following question and then proceed to question 18 a).

Will you require additional training? □ Yes   □ No

If you answered "Yes" please also answer question 18 b).
If you aswered "No" please proceed to question 18 c) and then directly to question 19.

18) When you think about the next few years of your life, how confident are you about the following:	Not at All Likely	Somewhat Likely	Quite Likely	Very Likely
a) I will be able to find work in the occupation I have chosen	0	1	2	3
b) I will be able to get the additional training or education that I need	0	1	2	3
c) I will be able to find an occupation that I love to do	0	1	2	3

19) If you find work in your chosen occupation, where will it likely be?				
a) In my community	0	1	2	3
b) In my province	0	1	2	3
c) In my country	0	1	2	3
d) Internationally	0	1	2	3

20) If you find work in your chosen occupation, where would you like it to be?				
a) In my community	0	1	2	3
b) In my province	0	1	2	3
c) In my country	0	1	2	3
d) Internationally	0	1	2	3