

**ASSESSING STUDENT AND FACULTY SATISFACTION IN A MASTER OF
COUNSELLING DISTANCE EDUCATION PARADIGM**

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Abstract

This project proposal designs an empirical based study to assess student and faculty satisfaction in graduate distance education counselling programs. The proposed study includes two satisfaction surveys and associated administrative protocols. The surveys were developed based on the Sloan Consortium definition of satisfaction (Moore, 2002; 2005) and an extensive literature review. Student survey questions strived to uncover if links are present between student satisfaction with: (a) student enrolment, success, and retention; (b) faculty involvement in distance education; and (c) program development and quality. Subsequently, faculty survey questions endeavoured to explore any links between faculty satisfaction and: (a) faculty involvement and retention, (b) student success and satisfaction, and (c) program development and quality. This proposal also includes: (a) a methodology flow chart, (b) application for ethical review of human research, and (c) a project invitation letter and participant consent form. Finally, information from this proposal may be invaluable to administrators that create and host these programs; illuminating considerations for facilitating program policy, course design, and student and faculty selection and retention. Thus, this proposal has significant value for many educationally vested parties.

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Chapter 1: Introduction

This chapter provides insight into the personal and professional relevance of this project and outlines the need for this type of project. Further, this chapter includes a glossary of key terms used throughout the project. I conclude this chapter by outlining the structure of the entire project.

Project Rationale

This project includes a literature review, which identifies and discusses the factors that have been found to potentially contribute to student and faculty satisfaction in online and blended postsecondary level education programs. This extensive literature review was used to create a student survey and a faculty survey in order to assess the relationship between these factors and both student and faculty satisfaction respectively. The importance of completing the review and for developing the surveys stems from the need for a better understanding of the factors that contribute to satisfaction and the implications that knowing these factors can have for administration, faculties, and students involved in tertiary distance education programs.

Of interest, once the project has been completed and approved by the University of Lethbridge, it is my intention to work with my project supervisor to conduct field research to implement both survey tools and to identify and assess the relevant factors. The field research aspect of the project is beyond the intent and scope of the required project, hence it is not included as a task associated with this project.

Personal and Professional Relevance

Due to my educational experiences, this project holds significant relevance for me. Currently, I am a fourth-year Master of Counselling (M.C.) graduate student at the

University of Lethbridge. The M.C. program is offered in a blended format, with some courses offered only online and other courses being taught in a traditional face-to-face format with a brief online component. In being an online educated student, it has become evident to me that distance education, and especially online distance education, is still a very controversial form of tertiary education. Many of my professional colleagues, who are either not students themselves or are enrolled in entirely traditional face-to-face learning paradigms, have indicated that they would struggle with being a student in an online distance education program, citing that self-motivation and limited peer and instructor interactions would be insurmountable obstacles for them. Further, these colleagues wonder about the quality of the education that is delivered in an online modality and wonder how satisfied and successful students are in this type of learning paradigm. When enrolling in this program, I was told by some professionals that I would be choosing what some might believe to be a lesser quality education. Therefore, I may have difficulty competing equally for an occupational position upon graduation if I were to compete against an applicant from a face-to-face institution. I was told that online degree programs were frowned upon by employers and that the individuals who attended them were believed to have had little other choice, as these individuals must not have been able to gain acceptance to other institutions.

Based on my personal experiences in the M.C. program, in working closely with other students in the program, and through my work on the university Graduate Student Association (GSA) these assertions I received regarding online education have often not been validated. Throughout my years in the program, I have met those students who were satisfied with the M.C. program, experienced success in it, and carried positive

attitudes towards online education. At the same time, I have met, in my work on the GSA, students who have struggled with the program format and are not satisfied with distance learning.

Throughout my experiences there seems to be a relationship between specific faculty, program, and student variables and the satisfaction or dissatisfaction levels of students with regards to distance education programs. Further, because of my interest in instructing online programs upon graduation and my involvement in the GSA, I have learned that there are also factors that contribute to faculty satisfaction and dissatisfaction with regards to instructing in a this type of education paradigm. In this project, through the development of two surveys, which strived to identify the influences of various factors on student and faculty satisfaction, I hoped to gain a greater understanding of the nature of these factors and their relationship with students and instructors satisfaction levels in distance education programs.

Glossary

The following are key terms used throughout this project and within the surveys. In order to ensure clarity and understanding for the manner in which the terms are used in this project, this section provides a definition of each term. The list is alphabetized for convenience.

Blended Learning: Blended learning is regarded as describing a combination of e-learning and traditional face-to-face modalities (Mortera-Gutierrez, 2006). Lee, Owens, and Benson (2002) suggested that blended learning includes a significant amount of e-learning and face-to-face contact. However, Allen and Seaman (2003) stated that at least 30% of the teaching endeavour must be taught in an

e-learning format, including email, discussion threads, and online presentations, to be considered a blended learning paradigm.

Some researchers have indicated that there is no standardized delineation of what blended learning exactly defines, therefore, many different combinations of learning platforms could fall under this category (McFarland & Hamilton, 2005) and that, in the very least, understanding blended learning as a paradigm that describes a combination of elements (e.g., traditional classroom or laboratory engagements, reading tasks, discussion forums, chat rooms, videoconferencing, virtual classroom tools, email, and discussion boards) that are combined in a purposeful way to create an individualized and optimal educational experience which provides a limited amount of face-to-face activities and e-learning activities (Mortera-Gutierrez, 2006). Based on several definitions and descriptions in the research literature, blended learning is the learning paradigm seemingly most appropriate to describing the educational paradigms considered in this study. However, for the purposes of this project, due to the applicable literature, the varied ways blended learning is identified in the research, the participant pool, and the program that will be the focus of intended research, distance education will be the key descriptor utilized.

Distance Education: A learning paradigm often involving web-based, online, electronic, and/or minimal print resources in a synchronous or asynchronous manner and being characterized by a separation between the student and other members of the course, including the instructor and other students, in time and/or place for any portion of the course (Allen, Bourhis, Burrell, & Mabry, 2002; Gao & Lehman,

2003; Tabata & Johnsrud, 2008; Tallent-Runnels et al., 2006). The term distance education is often considered inclusive of both online and blended learning platforms. Thus, online learning is often regarded as describing entire e-learning experiences, such as online, web-based, and videoconferencing (Mortera-Gutierrez, 2006). Tang and Byrne (2007) advocated that distance education is descriptive of courses where at least 80% of the material is delivered via online platforms and is taught asynchronously. Tang and Byrne also stated that online courses commonly exclude face-to-face interactions.

Distributed Learning: This form of learning can be regarded as providing traditionally taught instructional events in a dispersed manner so that students can, but not necessarily must, access these events while separated by time or physical space from other students and the instructor (Khan, 2005). Therefore, the presentation format often utilizes technologies prevalent in distance education, including video and audio clips, the World Wide Web, or graphics which students can access anytime and anyplace (Fletcher, Tobias, & Wisher, 2007; Saltzberg & Polyson, 1995). Further, although distributed learning utilizes distributed resources in much the same way as distance education, unlike distance education, distributed learning is regarded as a way to supplement traditional learning environments and not designed to be the primary means of delivering educational content to learners (Havice, Foss, Davis, & Havice, 2010). Although distributed learning is not a term used in this project given that this project focuses on distance learning paradigms, understanding the similarities and differences of distributed paradigms

to traditional and distance learning provides an important orientation and frame of reference.

Faculty: Refers to the scholarly staff; those involved in the learning and research processes, including: sessional, term-appointed, tenure-track, and tenured individuals.

Master of Counselling Program: A graduate level program in Alberta, Canada accepting students from across North America, which fulfills the educational requirements of a professional counsellor or counselling psychologist designation (e.g., Athabasca University, n.d.; University of Calgary, n.d.; University of Lethbridge, 2011).

Satisfaction: The Sloan Consortium (Moore, 2002, 2005) characterized student satisfaction in distance education as a pleasurable and successful experience that meets one's desired learning outcomes, expectations about the educational experience, and includes adequate peer and instructor interaction; it is contentment with all facets of educational experience. Faculty satisfaction is similarly characterized. Sloan-C (n.d.) indicated that for faculty the experience must be both personally and professionally gratifying. Likewise, Moore (2002) stated that contentment, pleasure, and gratitude are a part of satisfaction in online education.

Students: Refers to the individuals who have enrolled in an institution to learn and are being taught by faculty.

Traditional Education: A learning paradigm that occurs when the student and other members of the course, including the instructor and the other students, are in the

same place at the same time and which can be understood to be in a face-to-face format (Lee & Nguyen, 2007; Tallent-Runnels et al., 2006).

Project Layout

The next chapter provides a literature review that explores how student and faculty satisfaction has been measured in distance education paradigms by other researchers. Chapter 2 also reveals the value in measuring satisfaction in distance education programs for students, faculty, and administration. Further, 22 key factors that have been identified in previous studies to contribute or influence student and faculty satisfaction are discussed.

Chapter 3 focuses on the proposed methodology and provides a description of how the satisfaction survey tools were developed, including identifying the structure of each tool. Chapter 3 also presents details regarding the administration protocol and the appropriate participant base for the surveys. Finally, Chapter 3 offers a review of ethical considerations for this project and includes a completed ethics application form for submission to the University of Lethbridge Human Subjects Research Committee.

Chapter 4 considers the strengths and limitations of the project, which includes identifying the benefit the surveys have for expanding existing literature. Chapter 4 also reflects on the limitations of project, including discussing the reliability and validity of the both survey tools. This chapter concludes with a discussion on future recommendations for the surveys and for investigating the merit of online learning.

Chapter 2: Review of the Literature

It is crucial to examine previously conducted core research to develop a better understanding of the concepts of student and faculty satisfaction within postsecondary studies, its importance for those involved in education programs, and the need for creating tools to examine this concept. In this chapter I examine the significance, concept, and definition of satisfaction in the literature. Next, I address the value in measuring satisfaction in distance education programs for students, faculty, and administration. Thereafter, a discussion is presented that outlines the factors which have been identified in previous studies to contribute to or influence student and faculty satisfaction within an online learning environment.

The Significance of Studying Distance Education

Program development and offerings of distance education courses by postsecondary institutions have been steadily increasing over the last two decades and are growing at a significantly higher rate than the traditional postsecondary industry (Cookson, 2002). S. Dunn (2000) predicted that by 2025 many postsecondary courses will be offered in a distance education format.

Amid this significant growth in distance education programs, the demand for faculty to teach online has also increased (Adams, 2008). Therefore, institutional growth, public and student interest, and faculty involvement necessitate a deeper investigation of distance education pursuits.

The importance of studying student satisfaction in distance education.

Distance education programs have received mixed reviews from students and faculty regarding attrition and success rates, satisfaction levels, and program quality. Some

researchers have stated that student dropout rates are higher in distance education programs than in traditional programs (Carr, 2000; Lee & Nguyen, 2007; Svetcov, 2000). Attrition might be due to characteristic features of distance education, including isolation, lack of technological skills, and competing life (Christensen, Anakwe, & Kessler, 2001; Herrmann, Fox, & Boyd, 2000; Lee & Nguyen, 2007).

However, some researchers found more favourable experiences for students in distance education programs. For example, Lee and Nguyen (2007) stated that the bulk of distance education students self-reported that they enjoyed their distance learning experiences because these experiences saved time (e.g., reduced commute), allowed the students flexibility in maintaining multiple life roles, was convenient, and was perceived by the students to provide more equal learning opportunities (e.g., regardless of demographic characteristics, computer skills, past academic credentials). In addition, Allen et al. (2002) reported empirical findings from their meta-analysis that there was slight difference between distance education and traditional learning students with regards to satisfaction with their learning experiences. Further, Kaleta and Garnham (2001) and Garnham and Kaleta (2002) reported in their summaries of a study conducted through the University of Wisconsin of 282 students that flexibility for students to determine their work pace and the convenience of distance education were a positive draw and contributed to their overall satisfaction with this learning paradigm. For example, in response to survey questions about the ability of students to control their learning pace and time organization, 69% and 77% respectively responded positively towards these statements (Kaleta & Garnham, 2001; Garnham & Kaleta, 2002). Further, 67% of students indicated that the time they spent engaged in e-learning would not have

been better served in-classroom (Kaleta & Garnham, 2001). These students also indicated that they would recommend e-courses to others (Garnham, & Kaleta, 2002). Thus, it seems that there is significant variance in the degree of success, satisfaction, and quality achieved and experienced by students in distance education programs.

The importance of studying faculty satisfaction in distance education.

Faculty satisfaction with distance education programs varied. Faculty concerns with distance education included the lack of quality of the programs, the student attrition rate, and the changing workload and skill demand, among other issues (Lee & Nguyen, 2007; Oomen-Early & Murphy, 2009; Tastle, White, & Shackleton, 2005; Vaughan, 2007). Further, researchers have reported program characteristics that mediate faculty participation in distance education. For example, factors that preclude faculty from wanting to engage in this educational form include: a greater time commitment; a lack of administrative and technical supports; a shortage of recognition, compensation, and appropriate advancement opportunities; and limited interaction with students (Belcheir & Cucek, 2002; Gannon Cook, Ley, Crawford, & Warner, 2009; Tabata & Johnsrud, 2008; Tastle et al., 2005).

Alternatively, there are aspects of distance education instruction that are advantageous and an incentive to teaching in these paradigms, including: engaging in a new and challenging experience, recognizing the role that technology can play in educational facilitation and pedagogical skill development, engaging in educational paradigms that are consistent with teaching style and lifestyle factors, and reaching new student groups (Belcheir & Cucek, 2002; Tabata & Johnsrud, 2008; Tastle et al., 2005). Further, Garnham and Kaleta (2002) reported that faculty experienced higher levels of

student–professor interactions and Fredericksen, Pickett, Shea, Pelz, and Swan (2000a) indicated that experience and interest in teaching distance education and in utilizing technology are motivators for faculty involved in these paradigms. As faculty play a significant role in offering these programs (Tabata & Johnsrud, 2008), their needs, motivations, and concerns must be examined when developing distance education programs and assessing satisfaction in these programs.

In order to ensure that quality programming in distance education is provided and that students and instructors want to participate in these learning paradigms, satisfaction must be assessed. Further, by determining what variables influence positive and negative attitudes towards distance education, researchers and administrators may become more informed regarding strategies to enhance student and faculty satisfaction levels and program quality.

Satisfaction Defined

Satisfaction has been characterized as an assessment measure of the quality of a product, service, or experience and has been linked with long-term loyalty to, or continuation with, that product, service, or experience (Donio, Massari, & Passiante, 2006; Fullerton & Taylor, 2002). Further, Lin, Lin, and Laffey (2008) stated that satisfaction is the result of engaging in an experience that allows the individual to experience gratification of their desires and affirmed that satisfaction is also closely connected with the quality of an experience. Other researchers have declared that satisfaction is the composite of a variety of cognitive, emotional, and behavioural factors (Sears & Williams, 1997) and that it influences the individual's behavioural intent

towards the product, service, or experience and similar future products, services, or experiences (Fullerton & Taylor, 2002).

Lin et al. (2008) suggested that satisfaction, within an educational environment, is a person holding a perception of contentment and accomplishment towards the educational experience itself after participating in it. These authors believe that satisfaction can be correlated with program effectiveness and value; therefore, satisfaction can be a measure of the success and quality of the educational endeavour. Wang (2006) and Zygouris-Coe, Swan, and Ireland (2009) further stated that the quality of a program reflects the program's efficacy, success, and attractiveness.

Definition of Satisfaction for this Project

In this project, I adopted the definition of student and faculty satisfaction for student and faculty participating in distance education as denoted by the Sloan Consortium (Moore, 2002, 2005; Sloan-C, n.d.). Further, the next section of this paper explores previous assessments of satisfaction in the empirical literature.

Previous Assessments of Satisfaction

A common theme in the reviewed literature is the need to investigate the factors that influence satisfaction in individuals that use distance education as well as to develop tools for assessing the level of satisfaction in these populations (Gallien & Oomen-Early, 2008; Lin et al., 2008; Tabata & Johnsrud, 2008; Tallent-Runnels et al., 2006; Yukselturk & Bulut, 2007). This section of the literature review explores previous research methods and tools of examining student satisfaction and faculty satisfaction in distance education paradigms.

Methods of examining student satisfaction. In their meta-analytic review of research conducted on online distance education courses, Tallent-Runnels et al. (2006) extensively identified that both quantitative and qualitative research methods are used to examine attitudes, behaviour patterns, and personal characteristics associated with online learners. Stemming from the meta-analysis, these researchers found that surveys, correlational, and experimental designs were all featured in the research.

Other studies reviewed for this project had used methodology that included:

(a) questionnaires and surveys measuring student satisfaction and attitudes (e.g., Bolliger & Martindale, 2004; Lin et al., 2008; Swan, 2001; Tabatabaei, Schrottner, & Reichgelt, 2006); (b) triangulation methods using questionnaires in combination with interviews, focus groups, and course evaluations (e.g., Atack & Rankin, 2002; Gallien & Oomen-Early, 2008; Kelsey & D'souza, 2004); (c) course evaluations (e.g., Kidney, Cummings, & Boehm, 2007; Tang & Byrne, 2007); (d) precourse and postcourse questionnaires (e.g., Liu, 2007) measuring student expectations and changes in learning styles and skills. Further, Yukselturk (2009) developed questionnaires to assess correlations between personal characteristics of distance education students with respect to student perceptions and satisfaction of the program, and utilized semi-structured interviews to assess instructors' judgments about factors that influence students' satisfaction. Thus, it appears that there has been a wide range of methods used to assess satisfaction in students of distance education programs.

Methods of examining faculty satisfaction. Assessing faculty satisfaction and attitudes in distance education is an underdeveloped area of study based on the eight research studies located. The main methodologies reported in the literature for assessing

faculty satisfaction were surveys or questionnaires, which measured a variety of constructs (Belcheir & Cucek, 2002; Fredericksen et al., 2000a; Gannon Cook et al., 2009; Mahdizadeh, Biemans, & Mulder, 2008; Tastle et al., 2005). Likert-style and open-ended surveys were also used (Bolliger & Wasilik, 2009; Oomen-Early & Murphy, 2009; Tabata & Johnsrud, 2008).

Implications for the project's methodology. Remaining consistent with former assessments measuring online satisfaction, the measures created for this project also use the survey method. The details associated with the project's methodology are presented in Chapter 3.

The Value in Measuring Satisfaction in Distance Education

There are multiple reasons that it is important to assess satisfaction in students and faculty of distance education paradigms. The student satisfaction section of this literature review identifies these reasons by linking student satisfaction levels with: (a) student enrolment and success, (b) student retention, (c) faculty involvement in distance education, and (d) program development and quality. The faculty satisfaction section also identifies the importance of studying faculty satisfaction by linking it with: (a) faculty involvement and retention, (b) student success and satisfaction, and (c) program development and quality. The faculty satisfaction section demonstrates the importance for studying satisfaction in distance education paradigms. To begin, student satisfaction is explored first.

Student satisfaction. Student satisfaction has been linked with a variety of student, faculty, and program factors in distance education. These links will be reviewed.

The link with student enrolment and success. Evaluating student satisfaction in distance education programs may have significant implications for enrolment and student success (Biner, Barone, Welsh, & Dean, 1997; Richards & Ridley, 1997). Chyung and Vachon (2005) asserted in their empirical study that, when satisfied, individuals are likely to continue with the behaviours that contribute to the satisfying outcome, and postulated that continued enrolment in distance learning programs is influenced by the degree of satisfaction or dissatisfaction the student experiences. Bolliger and Martindale (2004) and Yukselturk and Bulut (2007) found that student satisfaction is correlated with motivation and subsequently with success. Garnham and Kaleta (2002) confirmed in their empirical study that distance learning students who were satisfied with and valued their experience were likely to recommend this educational format to others. Further, Chyung, Winiiecki, and Fenner (1999) indicated that satisfaction and success in previous distance education courses influence students' decisions about continued enrolment.

The link with student retention. Chyung et al. (1999) stated that nearly half of the students who drop out of distance education programs cited that they were dissatisfied with the educational paradigm. Jun (2005) supported Chyung et al.'s findings as she reviewed numerous factors related to student dissatisfaction that are correlated with student drop out. For example, Jun noted when students were dissatisfied with distance education, they report negative emotionality and stress about their online experience. Overall, negative emotionality and stress have been correlated with physical health concerns, relationship difficulties, and a decrease in educational and professional performance (Gallo & Matthews, 2003; Kiecolt-Glaser & Newton, 2001; Suinn, 2001;

Wolf, 1994). Thus, it seems important to assess and prevent negative emotionality in students.

The link with faculty involvement in distance education. Student achievement and attitudes with the educational paradigm appear to be impacted by faculty: (a) attitudes towards their job, (b) motivation for and involvement in distance education, and (c) delivery of the program quality (Fredericksen et al., 2000a; Gannon Cook et al., 2009; Oomen-Early & Murphy, 2009; Tabata & Johnsrud, 2008). Further, these researchers have noted that faculty attitudes, through their empirical investigations and literature reviews, are impacted by various aspects of distance education programming and administrative support (e.g., training, incentives, release time, technical support).

Therefore, it seems that there may be a synergistic effect between distance education contributors and faculty factors which affect student satisfaction and success in distance education paradigms. By studying student satisfaction, insight into the effects of faculty factors can be gained.

The link with program development and quality. Student satisfaction is important to consider because of its link with program attractiveness, quality, and success (Donio et al., 2006; Fullerton & Taylor, 2002; Lin et al., 2008; Zygouris-Coe et al., 2009). Thus, student satisfaction would seemingly lead to increased student enrolments, both of which would reflect an attractive, valuable, and successful program. Further, since Vaughan (2007) found, in his empirical investigation, that distance learning programs could develop an institution's prominence, an opportunity to develop programming that left students successful and satisfied would likely increase student enrolment and allow the institution to expand its programming. Thus, it seems crucial for

developers and administrators of distance education programs to be aware of the factors that contribute to student satisfaction and, subsequently, program success (Fredericksen et al., 2000a; Swan, 2001).

Satisfaction indicators are also valuable in that they can assist administrators in making decisions about student admissions and in advising students about programming. For example, in two empirical studies, Cicco (2007) and Drennan, Kennedy, and Pisarski (2005) positively linked: (a) positive attitudes towards online learning with specific learning style preferences; and (b) student attitudes regarding locus of control, learning flexibility, and an innovative attitude in distance education paradigms, respectively, with educational success and learning preferences.

Another empirical study demonstrated that distance-educated students correlated student satisfaction with student perceptions of the value of the educational endeavour and their ability to be successful in the program. Lin et al. (2008) in their survey study of 110 graduate e-learners found that students who hold a higher regard for the distance learning task and learning content identified more positive experiences with the distance learning endeavour. Further, Lin et al. identified that social ability, intrinsic goal orientation, task value, and self-efficacy comprised approximately 63% of the variance of student satisfaction in distance education paradigms. Thus, nearly two-thirds of student satisfaction in distance education is influenced by these identified variables. Due to this finding, Lin et al. recommended that administrators of distance education programs be mindful of these influential factors when governing e-learning pursuits in order to develop and promote a positive learning experience for students.

One aspect of the proposed study for this project aimed to develop a clear understanding of the factors that influence student satisfaction; administrators and program advisors could provide better guidance to students regarding program enrolment and educational paradigms that may be optimal for student attitudes and learning styles preferences, creating more efficient enrolment and screening processes for distance education programs (Allen et al., 2002; Cicco, 2009; Yukselturk, 2009). By optimally matching students and programs, student attrition might decrease, which would result in a more successful and sustainable program for the institution and a more successful and positive experience for the student. In turn, researchers have found that faculty concerns with various aspects of distance education programming and administration directly impact faculty attitudes towards their job, motivation for and involvement in distance education, and the subsequent level of program quality.

Faculty satisfaction. Faculty satisfaction has been linked with a variety of faculty, student, and program factors in distance education. These links will be reviewed next.

The link with faculty involvement and retention. Several researchers have noted that faculties require different supports, incentives, and knowledge to participate in distance education programs than their traditional counterparts who teach in classrooms (Gallien & Oomen-Early, 2008; Knowles, 2001). As the factors which influence faculty satisfaction levels with distance education instruction are somewhat different than their classroom counterparts, these factors should be assessed separately as well.

The link with student success and satisfaction. Faculty may influence student achievement and attitudes within the educational paradigm (Fredericksen et al., 2000a;

Gannon Cook et al., 2009; Oomen-Early & Murphy, 2009; Tabata & Johnsrud, 2008).

For example, instructors that are overwhelmed with their workload and are not receiving adequate release time, incentives, or support, may negatively compensate in the course to alleviate the extra demands. This assertion was corroborated by faculty respondents in Oomen-Early and Murphy's (2009) survey research indicating that there was not enough time to complete email responses, course design and administration, complete grading of assignments, engage in research activities, and advise and support students. This negative compensation by faculty could potentially negatively impact students, affecting student attitudes towards the learning paradigm and their eventual success with it. Therefore, assessing factors related to faculty satisfaction is a part of the proposed methodology for this project, as they are connected with student satisfaction and assessing them in this project is crucial.

The link with program development and quality. Fredericksen et al. (2000a) and Oomen-Early and Murphy (2009) in their empirical research suggested that assessing factors associated with faculty satisfaction could inform administrators of areas for program improvement, which would provide a more satisfying experience for instructors and a better quality program. Further, these factors could assist with developing adequate training, creating policies, providing adequate faculty supports, and decreasing faculty burnout (Cicco, 2009; Oomen-Early & Murphy, 2009; Vaughan, 2007). Thus, Gannon Cook et al. (2009) recommended more research be conducted to assess satisfaction in faculty teaching distance education. Tabata and Johnsrud (2008) in their empirical study indicated administration and policymakers need to have a clear understanding of the factors that will help retain instructors in distance education paradigms, contribute to

quality programs, and, as noted by Vaughan (2007), enhance the reputation of the learning institution.

Summary of the value of assessing satisfaction in students and faculty. For the proposed study, the surveys will assess the factors that contribute to satisfaction in students and faculty in distance education programs. As noted, there is great value in developing a survey to assess satisfaction in students because of the links between: (a) student satisfaction and student enrolment and success, (b) student satisfaction and student retention, (c) student satisfaction and faculty involvement in distance education, and (d) student satisfaction and program development and quality. Similarly, development of a survey to assess the faculty's satisfaction of these programs is also important because of the links between: (a) faculty satisfaction and faculty involvement and retention, (b) faculty satisfaction and student success and satisfaction, and (c) faculty satisfaction and program development and quality. Thus, in order to provide a strong foundation for the development of these surveys in this project, it is important to identify key research that has already been done in terms of student and faculty satisfaction in distance education paradigms. The next section reviews these key pieces of research.

Factors Contributing to Student Satisfaction

This section addresses the numerous variables that have been investigated with respect to their influence on student satisfaction in distance education programs. These influential variables include those directly related to the student and those external to the student. Variables identified in the research as important include those relating to student factors, instructor factors, factors related to interactions between individuals in the course, support system factors, and factors related to the content and structure of the

course. Each of these variables are explained next, which also provides background for the rationale for the survey questions in the proposed study for this project.

Student factors influential to student satisfaction. Seven personal characteristics of learners, as noted in the literature, which may exert an effect on learner satisfaction with distance education include: age, gender, lifestyle commitments, learning style, motivations for learning, task value, and self-efficacy for aspects of the learning paradigm. These characteristics have been investigated in the research pertaining to how they influence student satisfaction, often with mixed results. A review of the seven personal characteristics are summarized next.

Age. Several researchers have found significant differences between the age of students enrolled in distance education programs and those of traditional programs. In a study of 80 undergraduate and graduate students, Yukselturk and Bulut (2007) found that distance education students had a greater age range than traditional students. When the online and traditional student groups were compared in a university survey study assessing 16 matched courses, 8 offered in an online format and 8 on-campus, Harris and Gibson (2006) found that distance education students tended to be older than traditional learners. Further, Fredericksen, Pickett, Shea, Pelz, and Swan (2000b) found, in their survey of 1,406 postsecondary students, that younger students (aged 16–25) reported learning less and were less satisfied with their online learning experience than older students (aged 36–45). However, Richardson (2006) found that age was not correlated with student outcomes or with student satisfaction in their two survey-based studies involving over 3,000 students from The Open University in the United Kingdom

At this point, the reviewed research suggests there may be a relationship between student age and satisfaction and student outcomes, but more research is required before confidence can be noted in the relationship. Thus, age will be a variable assessed in the proposed study. Further, this assertion regarding a potential correlation between student age and satisfaction is similar, as will be described, to the findings regarding the influence of gender on student satisfaction.

Gender. Student gender may influence the attitudes and experiences of students in distance education. Chen and Tsai (2007) concluded, based on their online survey conducted with 1866 university students, that male and female students in a distance education programs held different attitudes towards varying aspects of the web-based learning paradigm. Males appeared to hold more positive attitudes towards online learning than females; however, females displayed statistically significant greater positive attitudes towards the variety of content of the online learning environment (Chen & Tsai, 2007). Further, Durndell and Haag (2002) found in their survey of 150 university students that gender was significantly related to attitudes and self-efficacy towards computer and Internet use, with males reporting statistically greater self-efficacy and significantly more positive attitudes than females.

Other researchers have found further results regarding outcomes of gender and distance education. Hartsell (2005), based on the results of her descriptive study, suggested that women and men communicated differently in graduate distance education courses that seemed to foster different community interactions and could influence student satisfaction with distance education programming. Arbaugh (2000a), in his comparative study, found moderately significant differences between genders in their

interaction with others in the learning community, including women participating significantly more than men in the online forum discussions. Arbaugh (2000a) also found that men reportedly scored moderately higher than women on the interaction difficulty variable, which in turn may have influenced men's participation in the online course.

Alternatively, Lim (2001) and Richardson (2006), in their empirical studies, were unable to find significant effects on student satisfaction and distance education attitudes due to gender differences. Further, instructors interviewed about the impact of gender on student success felt that there was no correlation (Yukselturk & Bulut, 2007). Then again, Harris and Gibson (2006) found in their comparative survey study of 199 in class and distance educated students (i.e., 94 and 105 students each, respectively) that women preferred online courses and were more likely to enrol in them. Harris and Gibson attributed this finding to a potential decrease in gender differences in distance education and a potential increase in women's technological skill and self-efficacy. In summary, based on the studies reviewed for this chapter, there appears to be no clear conclusions regarding the relationships between gender and satisfaction in distance education programs. Thus, gender will also be one of the variables examined in this project's student survey.

Lifestyle commitments. Distance education students are known to enrol in such educational paradigms due to the time flexibility afforded them in these types of programs. Typically, researchers have found that these students juggle a myriad of responsibilities and life demands, including work, family, and other commitments, which they need to manage along with their educational pursuits (Vaughan, 2007; Yukselturk &

Bulut, 2007). Yukselturk and Bulut suggested that this is a student description that may be in contrast to traditional learners, as their priority has been to focus all or most of their energy on their education. Perez-Cereijo (2006) indicated, as a result of her study of 96 graduate students, that many more full-time employed students preferred and are enrolled in distance education programs than in traditional learning programs, and vice versa for part-time employed students. These findings may support the notion that distance education may be more appealing to full-time workers because there is more time flexibility and less time structure or commitments (e.g., travelling to school, attending class at a specific time) and traditional learning may be more appealing to part-time workers because they can devote the time and energy to attend class. Conversely, Tabatabaei et al. (2006) found from their survey results that part-time and full-time students were equally likely to enrol in distance education courses, which could suggest that lifestyle demands may not strongly influence involvement in distance learning. Further, Garnham and Kaleta (2002) and Perez-Cereijo stated that time flexibility is influential to student attitudes regarding distance education.

Learning styles. The fourth of seven variables to be examined with respect to student satisfaction in distance education programs is a student's learning style. Dunn and Dunn (1999) defined learning style as the manner in which an individual optimally retains and incorporates new information, which is often encompassed by innate (e.g., impulsive versus reflective inclinations, chronobiological energy levels), environmental (e.g., light, sound), and developmental determinants (e.g., mobility, motivation). For example, Drennan et al. (2005) found in their study of 244 students that postsecondary student course satisfaction was significantly positively correlated with: (a) a preference

for an autonomous learning style, (b) positive perceptions of technology, and (c) the learner's internal locus of control. The same study reported that student perceived usefulness of the distance learning endeavour was significantly positively influenced by the ease of using flexible learning and the student having an innovative attitude (Drennan et al., 2005). In other words, when students experience the educational information in a manner in which they are preferentially attuned, in terms of their learning style, then it appears students are more likely to incur a satisfactory learning experience. A more recent finding lends support to Drennan et al.'s conclusions. Haverila and Barkhi (2009) found in their study of 39 students from two e-learning courses that a student's suitability of learning style (e.g., active learner, self-starter) is significantly positively correlated with the student's attitudes towards the distance learning experience. Further, prior experience with distance education courses is positively correlated with the suitability of learning style, which is significantly linked with the perceived value of the learning experience.

Student motivation. Student motivation is one of the final two variables explored in this section regarding student factors that may be influential to student satisfaction in distance learning paradigms. Several studies have examined the effect of being an active, responsible, and involved learner, otherwise referred to as being a motivated learner with respect to student satisfaction in distance education. Haverila and Barkhi (2009) in their empirical study revealed that being an active learner is significantly related in a positive manner with a student's attitude towards distance education. Yukselturk (2009) indicated, based on his study of 103 postsecondary students, that the students who exhibited high motivation for the learning program were more likely to be satisfied and

successful with the program and were more likely to maintain this level of motivation through the completion of the course and the remainder of the program. This finding corroborates Fredericksen et al.'s (2000b) survey findings of 1,406 postsecondary students that student motivation for engaging in distance education is a key component of a satisfied and successful student. Further, Yukselturk (2009) and Yukselturk and Bulut (2007) also reported, as a result of qualitative interviews with online instructors from both studies, that faculty opinion was that student motivation was positively correlated with distance educated learners' satisfaction and success. Overall, it appears intrinsic motivation is related to students developing positive attitudes and having success in distance education programs.

Task value and self-efficacy. Research has not only examined the correlation between student motivation and student satisfaction in distance education, but also has examined the connections between task value and self-efficacy as well as satisfaction. Haverila and Barkhi (2009) noted a significant relationship between the preconceived notions that students held for distance education and the task value of the learning endeavour based on their survey of 39 postsecondary students in distance education paradigms. Likewise, Lin et al. (2008) found in their study of 110 undergraduate and graduate students that the importance of the experience or task directly and positively affects the level of satisfaction the student has for it. Further, Lim (2001) found in her research with 235 university students that computer self-efficacy is significantly positively related to the student's satisfaction for web-based distance education programs and the student's likelihood for future enrolment in distance education courses.

Gallien and Oomen-Early (2008) noted, as a result of their study with 84 postsecondary students, previous online learning experience moderately predicted performance and satisfaction in students for similar future learning endeavours. This result lends support to Bates and Khasawneh's (2007) assertion that increased self-efficacy with distance education mediums is the result of previous experience with the learning medium or program structure due to precourse training, orientation, or as a result of taking a previous course in a distance learning program. Also, Haverila and Barkhi (2009), in their empirical study, found that students who had a more favourable attitude toward the distance education endeavour were likely to have more appropriate personal qualities and skills for it (e.g., self-directed and disciplined, motivated, and appropriate time management skills). Conversely, a number of researchers have noted that students who do not exhibit self-efficacy and confidence for characteristics of distance education environments are more likely to have negative attitudes towards and experiences with the learning paradigm and may withdraw from it (Osborn, 2001; Shih, Munoz, & Sanchez, 2006).

Summary of the student factors influential to student satisfaction. Although the seven reviewed personal characteristics of distance education students may influence satisfaction levels and success in distance education environments, more research is needed to confirm the aforementioned findings. Thus, the project's survey includes questions assessing these variables.

These seven reviewed factors are only one set of variables that have been researched as influencing student satisfaction in distance learning paradigms. Several faculty variables have been thought to impact student satisfaction in these learning

endeavours (Jiang, Parent, & Eastmond, 2006; LaPointe & Reissetter, 2008; Wolsey, 2008). Four main categories of faculty variables with respect to student satisfaction levels are explored next.

Faculty factors influential to student satisfaction. Specific faculty characteristics and instructional styles may influence student satisfaction with the distance education experience. The following are the variables that are investigated in this section: (a) the impact of faculty knowledge and experience, (b) the instructor's feedback style, (c) the instructor's accessibility to the students, and (d) the instructor's interactions with students. All of these areas are explored as they are relevant to the construction of this project's faculty survey.

Faculty knowledge and experience level. Faculty knowledge and personal and professional experience with the subject matter was demonstrated to be important to student attitudes in distance education paradigms. LaPointe and Reissetter (2008) and Chyung and Vachon (2005) in their empirical studies of over 300 graduate students combined found that distance education students preferred and were more satisfied with very knowledgeable or expert faculty teaching them the course material. Further, LaPointe and Reissetter in their survey of 74 graduate students also found that distance learning students appreciated course relevant anecdotal information regarding the instructor's experiences with the subject material, including narrative stories and examples of application of the material.

Faculty feedback styles. Faculty feedback styles with relation to student educational satisfaction levels have demonstrated a strong connection (Gallien & Oomen-Early, 2008). Feedback in educational environments provide students with support and

facilitate scaffolding and has been connected with student motivation, self-efficacy, and achievement (Bolliger & Martindale, 2004; Finaly-Neumann, 1994; Gallien & Oomen-Early, 2008; Pintrich & Schunk, 2002; Wolsey, 2008), which subsequently influences student satisfaction and student attitudes. Further, Gallien and Oomen-Early (2008) in their comparative study of 84 postsecondary students suggested that feedback, and especially personalized feedback, provides a feeling of connection between the student and the instructor, which enhances the students experience and attitudes. Finally, Burke (2000) reflected on her teaching experiences and R. Dunn (2000) in his theoretical paper concluded that the instructor's ability to match individual educational preferences affected the student's satisfaction and success.

Faculty accessibility. The third factor which has been connected in the research literature with student satisfaction is faculty accessibility. LaPointe and Reisetter (2008) found in their qualitative and narrative survey study of 74 online educated students that students desired and valued interactions with their instructors, and communications between the two groups were consequential and meaningful. Further, the degree to which the instructor is accessible to the student has also been found to be positively related to student satisfaction (Bolliger & Martindale, 2004; LaPointe & Reisetter, 2008). Swan (2001) in her study of 1,406 postsecondary students discovered that distance education students who frequently interacted with their instructor were found to have more positive educational experiences in these learning paradigms. Thus, instructor accessibility appears to be an important factor tied to achieving student satisfaction in distance education programs.

Faculty to student interactions. Not only has faculty accessibility been linked with student satisfaction in distance education paradigms, but so has faculty to student interactions. Moore and Kearsley (2005) in their overview of research supported practices regarding distance education development and facilitation indicated that student–instructor interactions are a significant form of learner interaction in distance education environments. In support, Fredericksen et al. (2000b) in their survey study of 1,406 distance educated students found that distance education students who reported the highest levels of perceived learning also reported the highest levels of instructor–student interactions. Subsequently, an increase in perceived learning would seemingly increase the perceived value of the program for students. Further, LaPointe and Reisetter (2008) found that the 74 distance education students they surveyed valued interactions with their instructors more highly than they did with their peers and that these instructor interactions were more pleasing to them than interacting with their peers. These findings support Small and Lohrasbi’s (2003) suggestion that distance-educated students are not dependent on physical face-to-face interaction with their instructors to experience satisfactory student–instructor interaction.

Summary of the faculty factors influential to student satisfaction. As demonstrated in this section, there are several faculty factors that impact student satisfaction. These factors, which are included in this project’s student survey, include faculty knowledge and experience, instructor feedback style, instructor accessibility to the students, and the instructor interactions with students. However, there are also several other aspects of distance education paradigms which can be influential to student

satisfaction in these programs. The next section focuses on community interactions that impact student satisfaction.

Community interactions influential to student satisfaction. Instructor interactions are not the only type of relations that have been investigated with respect to student satisfaction. The role of peer interactions towards student satisfaction in distance education programs have also been examined (Lin et al., 2008). Peer interactions have been examined with respect to student satisfaction in at least two ways, including: (a) providing a social community of individuals whom the student can relate with, network with, develop friendships, and share successes and struggles; and (b) influencing the learning of the student.

Social networking and support. Lin et al. (2008) surmised through a review of research in their empirical study that the majority of research on online student–student interactions (e.g., exchanging information and personal perspectives, sharing experiences and resources, and working together) resulted in a noteworthy positive correlation between level and depth of interactions and student satisfaction levels. Subsequently, in their own study of 110 e-learning students, Lin et al. affirmed that social ability (e.g., which encompasses social presence, social navigation, and social connectedness), through interactions with peers and the instructor in the distance education environment, significantly positively contributed to a sense of connectivity or community for students. Gunawardena and Zittle (1997) in their study of 55 students from five universities and Tu and McIsaac (2002) in their study of 51 online graduate students found that social presence (i.e., social context, communications, and interactions) is significantly and positively influential to online student attitudes towards distance education paradigms.

Further, Gunawardena and Zittle in their empirical study found that technological communication tools such as emoticons are used by students to enhance the socioemotional aspects of social presence in the community.

A social community also provides students with support which is influential to student attitudes in distance education paradigms. Northrup (2002) stated in her empirical study of the effects of interaction on satisfaction in online learners that interaction is one of the most vital variables that influence student attitudes and satisfaction towards distance education programs. Palloff and Pratt (2005), in their literature review and theoretical paper on the importance of community in online learning paradigms, stated that cooperative and collaborative interactions provide support and contribute to a sense of belonging, staving off feelings of isolation, and contributing to positive student attitudes. Thus, Palloff and Pratt suggested that distance-educated students should be encouraged to engage socially and collaboratively with one another and support one another so that an interactive and communal environment is formed in distance education programs. Finally, Rovai (2002) postulated in his study of 375 graduate-level students that the development of a classroom community through connectedness and learning entices students to maintain their distance education status.

Several researchers, however, have concluded that the social networking and support in distance education environments may not be enough to positively impact student attitudes and enrolments in these learning paradigms. For example, Aragon, Shaik, Palma-Rivas, and Johnson (1999) found in their comparative study of 28 students that students in traditional programs had a significantly more positive regard for the amount and type of supportive and communal interactions than students in distance

education programs. Demirdjian (2002) concluded in his evaluative study of various facets of distance education that some students perceive distance education to involve limited types, amounts, and contexts of interaction with the classroom community. Demirdjian suggested that this limiting of group experiences in distance education endeavours can negatively impact student's personal growth and skill development (e.g., team-building skills and stress management skills), which are an integral part of postsecondary educational experiences. Further, according to Anderson (2005) in his theoretical proposal and Galusha (1997) in her literature review of distance education research, distance in time and space in distance education can make learning a lonely endeavour for some students due to the characteristic student self-motivation, schedule freedom, lack of personal involvement with others and the larger school community, and individual pacing features. Overall, the availability and impact of social networking and support on attitudes of distance education students seems important according to larger empirical studies on this topic.

Peer-influenced learning. Student–student interactions could also result in increased learning in distance education paradigms that influence student satisfaction. Numerous researchers suggested that positive student–student interactions not only increased students' sense of belonging and decreased the sense of isolation, but these peer interactions also enhanced scholarly outcomes and the value of the educational experience in distance education (Fredericksen et al., 2000b; Palloff & Pratt, 2005; Rovai, 2002; Zygouris-Coe et al., 2009). These researchers linked collaborative learning interactions, scaffolding, and vicarious learning with an increase in real and perceived scholastic learning for students in the distance education paradigm. Thus, students are

not only learning about the material from the course, they are also learning different ways of understanding and thinking about the material from their peers through engaging the course material in group discussions, assignments, and critical thinking activities (McLoughlin & Luca, 2002). Cicco (2007), in her study of 107 master's-level students, also lends support to the value of collaborative learning interactions as she found a positive significant correlation between a sociological component of learning style (i.e., working in pairs, small groups, and teams) and student attitudes towards the learning paradigm. However, the next part of this section explores less conclusive evidence to support a relationship between a peer-mediated learning effect and student attitudes towards distance education paradigms as is discussed next.

The positive relationship between classroom community interactions and student satisfaction may not be as conclusive as the researchers in the previous section suggest. In fact, there may be little or no positive relationship between these two concepts at all. Swan (2001) in analyzing the empirical survey results from 1,406 students stated that, according to students, communication between student members of distance education classes significantly contributed to student satisfaction and to a greater sense of learning. Swan, however, also found that the value in these interactions may not include collaborative work projects but may be limited to discussion forums. Kelsey and D'souza (2004) in their mixed-methods study of 31 graduate students reported that interstudent interactions were not vital to the learning paradigm and were a lowest priority of interactions in this paradigm. LaPointe and Reisetter (2008), as a result of their online survey study with 74 graduate students, found a significantly low regard for student-student interactions in distance education paradigms. Further, LaPointe and

Reisetter identified two subgroups of students who preferred distance learning programs. One group valued and sought after peer connections and necessitated these exchanges for their learning endeavour. The second subgroup of students who had a preference for distance education paradigms did not value communal formation and interactions, rather these students preferred their learning endeavour be focused on interactions with the instructor, the content, and their own introspection.

Summary of the community factors influential to student satisfaction. A definitive answer about the effects of community building and student–student interactions with respect to student attitudes in distance learning paradigms is still unknown, but research appears for the most part to support peer interactions with (a) respect to providing a supportive student community, and (b) with respect to influencing the learning of students in distance education which would impact student satisfaction. Additional research is needed to clarify any relationships between these variables. Consequently, variables related to student community interactions will be investigated in the survey.

There are two more sets of variables that have been investigated in the literature with respect to their potential impact on student satisfaction in distance learning paradigms. The first set to be examined in the next section is the role of support system factors. This will be followed by an overview of literature that examined the effects of various course factors on distance education student satisfaction.

Support system factors influential to student satisfaction. Educational support system factors have also been investigated with respect to student satisfaction in distance education learning. Specifically, these factors have been examined with respect to

student satisfaction in at least two ways, including: (a) technological access and ability, and (b) technological and administrative support.

Technological access and ability. Researchers have examined student access and student ability to effectively utilize technology in distance education programs with respect to student satisfaction and success (Arbaugh, 2001; Shinkareva & Benson, 2007). Shinkareva and Benson (2007) in their survey study of 198 online continuing education students stated that having the technology to effectively participate in a course and the skills to utilize the technology are basic requirements for students in distance education programs. Thus, an inability to either access the technology or utilize it could disadvantage students, affect their learning ability, and impact their satisfaction and success (Cheurprakobkit, 2000; Christensen et al., 2001; Herrmann et al., 2000; Parsons-Pollard, Lacks, & Grant, 2008). Arbaugh (2001) in his survey study of 390 university students in 25 web-based courses stated that prior student experience with the technological facets of the educational program were significantly positively related to student satisfaction with the delivery system. Further, student attitudes towards the software utilized in the course were significantly positively related to satisfaction with the course. Thus, seemingly having knowledge or familiarity regarding the skills and technology involved in the learning paradigm influenced student satisfaction with distance learning.

Technological and administrative support. Chyung et al. (1999), in their evaluative case study at an American university of a master's-level distance education program, noted that a majority of distance learning students decide in their first couple of courses whether to continue with their educational program based on their satisfaction

and success in these courses. Reasons for dropout included low confidence levels in adult distance education paradigms, low confidence in their own communication skill sets, low competence in utilizing the learning software, and difficulty with the distance in the learning environment. In their study, Chyung et al. ascertained that it was imperative for the educational institution to assist students with their academic performance, confidence levels, and skills and knowledge for the learning paradigm in order for students to be successful. Several other researchers also advocated for a supportive technological and administrative learning environment (Johnson, 1999; Schoech, 2000). Hara and Kling (2000), in their empirical case study specific to the design elements of one particular master's-level course proposed that students will feel frustration in distance education paradigms that are lacking technological supports, and that these frustrated students will experience a more negative attitude towards the program. Further, providing an introductory training course that is program mediated (e.g., through technological or administrative support resources) regarding how to use the technological aspects of the program may be beneficial to increasing student technological efficacy and providing students with experience that will enhance their satisfaction and achievement (Bates & Khasawneh, 2007).

Summary of the support system factors influential to student satisfaction.

Several educational support system factors have been investigated with respect to student satisfaction in distance education programs, and these factors will be assessed in this project's student survey. There is some support that the ability of students to access and effectively utilize the technological aspects of the programming is significantly related with student satisfaction and success in these forms of education (Arbaugh, 2001;

Shinkareva & Benson, 2007). Further, some research has also demonstrated that technological and administrative supports for students regarding the technological aspect of the learning paradigm (e.g., teaching the skills and providing ongoing acute support) are key factors that can influence student satisfaction (Chyung et al. 1999; Hara & Kling, 2000). However, educational supports are not the final factors that have been investigated with respect to student satisfaction in distance education paradigms. Several course factors have also been found to have relevance to distance educated student satisfaction (Chyung & Vachon, 2005; Moore & Kearsley, 2005 Yukselturk & Bulut, 2007).

Course factors influential to student satisfaction. In the literature on distance education, course factors have been examined with relation to student satisfaction. Specifically, some research has demonstrated that course content may impact student satisfaction. Alternatively, other research has indicated that the structure of the course may be influential. Both course factors are examined in this section.

Course content. Chyung and Vachon (2005) in their empirical content analysis research of 164 university students found that e-learning course content that was interesting and applicable was positively correlated with student satisfaction. Yukselturk and Bulut (2007), recommended based on the results of their study with 80 postsecondary students, that online course content that was current, practical, tangible, and applicable to their life and employment pursuits contributes to student success. Lin et al. (2008) lend credence to Yukselturk and Bulut's work by positively linking the value of course content with student satisfaction. Moore and Kearsley (2005), in their empirical and theoretical assessment of distance-education-related literature, and Kelsey and D'souza

(2004), in their survey study of 31 graduate students, identified that student-to-content interaction is another crucial form of interaction in distance education. The student's interaction with the content and course material is the defining characteristic of the learning endeavour, as it is this interactive process by which students understand new concepts, change perspectives, and apply new cognitive, emotional, and behavioural patterns. Thus, having an appropriate means, in a distance education environment, to interact with course content has been supportively linked with student satisfaction in distance education (Moore & Kearsley, 2005). Further, student interaction with course content is further mediated by course structure. As noted in the next section, course structure has similarly been linked with student satisfaction.

Course structure. Perreault, Waldman, Alexander, and Zhao (2002), in their study of 81 distance-learning instructors, Reisetter and Boris (2004), in their survey research with 59 students, and Reisetter, LaPointe, and Korcuska (2007), in their comparative analysis study of 65 students, suggested that the structure of the course and communication of the expectations are important to student attitudes and success. Arbaugh (2000b) found, in his study of five postsecondary education online courses consisting of 88 students, that the flexibility within the course and the usefulness of the software were related to student satisfaction in distance education paradigms. Bolliger and Martindale (2004), in their survey study of 105 online graduate students, expanded on this assertion by stating that course technology must enhance student interaction, must be easy to use, and there must be ample engagement opportunities in the course structure to connect with others through this software. Further, Arbaugh (2001) in his study of 25 web-based class sections of 390 students indicated that the length of the course combined

with instructor experience was significantly negatively associated with student satisfaction in distance education. Arbaugh (2001) postulated that course length can contribute to students feeling overwhelmed and student burnout by the sheer volume of information exchange and interaction in online delivered courses. Subsequently, Arbaugh (2001) recommended that courses be divided into smaller topic sections and posting and email requirements be limited to adjust for this negative correlation between course length and student attitudes.

Summary of the course factors influential to student satisfaction. Course factors have been examined with relation to student satisfaction. This examination has occurred on two levels: content and structure. Research has identified that various aspects of both these levels may impact student satisfaction in distance education paradigms (Kelsey & D'souza, 2004; Reisetter, LaPointe, & Korcuska, 2007); however, further confirmatory studies will lend more concrete support to the impact of these factors.

Summary of factors related to student satisfaction. This section identified factors that may be influential to student attitudes and success in distance education paradigms. As noted, these variables include student factors, instructor factors, factors related to interpersonal interactions, support system factors, and course factors. All of these variables will be included in the student survey in order to assess their relationship with satisfaction in a master's-level counselling distance education paradigm.

Conversely, the next section in this chapter provides an overview of the empirical factors that have been found to be influential to instructor satisfaction in distance

education programs. This overview also provides rationale for examination of these factors in the survey questions in the proposed study for this project.

Factors Contributing to Faculty Satisfaction

Research into factors that influence faculty satisfaction with instructing distance education programs seem to be a more recent area of investigation than those with student populations. These factors can be categorized into three main foci: (a) factors associated with faculty, (b) factors associated with students, and (c) factors associated with the educational organization (Bolliger & Wasilik, 2009). Each of these variables are explored next given that they are integrated into this project's faculty survey.

Faculty-related factors influential to faculty satisfaction. Moore (2002) in her consideration of key research suggested that faculty attitudes and satisfaction are related to factors that contribute to both personal value and professional benefit. Researchers have investigated some of these influential factors, including: (a) personal characteristics of the faculty member, including their motivations for teaching in distance education programs; (b) faculty members' self-efficacy for the skills required to facilitate distance education courses; and (c) demographic characteristics of the instructor. Key literature related to each of these variables are explored in this section.

Motivation with relation to faculty involvement in distance education paradigms. Researchers have investigated numerous reasons why faculty members engage in distance education paradigms. These reasons include: (a) opportunities to reach and engage new student groups and try new things (Belcheir & Cucek, 2002; Tastle et al., 2005); (b) opportunities to engage in research regarding this educational medium (Moore, 2005); (c) to incur respect, esteem, value, and an enhanced image for their

involvement in this form of higher education (Tabata & Johnsrud, 2008); and (d) an interest in distance education programs and the associated technology (Fredericksen et al., 2000a). In fact, Fredericksen et al. (2000a) in their survey study of over 100 distance-learning educators reported that faculty satisfaction had a stronger positive correlation with an interest in distance education or technology than with other faculty motivators. Further, Tabata and Johnsrud (2008), in their empirical study of 1,881 teaching faculty, and Tastle et al. (2005), in their survey study of 103 e-learning academia, reported that how technology was perceived was key to faculty motivation for participation and influenced faculty satisfaction. If technology was viewed positively or was deemed useful, then instructors were more likely to engage in it and use it in their teaching.

Other researchers have identified that the influential motivations with respect to faculty participation, and subsequent satisfaction, are more complex than a single definable factor. Tabata and Johnsrud (2008) found, in their survey assessing faculty participation in distance education, that when faculty perceives quality to exist in distance education paradigms, they are 17 % more motivated to participate in it. Belchier and Cucek (2002), in their survey assessment of 254 faculty instructing distance education courses, found that the main motivators identified by instructors for teaching distance education were trying new things (57%), student benefit (45%), and administration request (33%). Gannon Cook et al. (2009) in their examination of four individual studies of 1,176 university faculty (i.e., both participating and nonparticipating faculty in distance education) stated that both intrinsic and extrinsic factors have been noted to influence faculty participation in distance education paradigms. Further, Gannon Cook et al. in their empirical survey analysis found that up to 70% of the variance for determining

whether an instructor engages in distance education instruction depends on nine motivating factors. For example, nearly 20% of the variance stems from the traditional service ideal (mainly intrinsic motivation), whereas 15% of the variance is influenced by monetary rewards (extrinsic motivation). Thus, a variety of factors motivate faculty to participate in distance education and may be crucial to retaining faculty in these programs. These factors will be explored in this project's faculty survey.

Skill self-efficacy for distance education instruction. In addition to motivators, specific faculty skills are a second factor that has been found to impact faculty attitudes and experiences with distance education. The skills required to effectively teach in the distance education environment are different from those needed in traditional education programs and may be connected with instructor satisfaction and feelings of competency (Belcheir & Cucek, 2002; Fredericksen et al., 2000a; Oomen-Early & Murphy, 2009; Weaver, Robbie, & Borland, 2008). Instructors have to communicate and engage students differently. Some researchers indicated that when faculty was able to effectively adapt their communication styles, they developed strong satisfactory connections with students and between students (Aycock, Garnham, & Kaleta, 2002). For example, when faculty were able to develop creative ways to engage students in online communication interactions and effectively manage these interactions, they were able to create cohesive online communities. Gallien and Oomen-Early (2008), in their comparative study regarding online instructors, and Fredericksen et al. (2000a), in their empirical study of distance education faculty, stated that instructors must adapt their communication skills to distance education mediums. For example, these researchers identified that the increased written component in these paradigms necessitates that instructors adjust for

the amount of time required to respond to students appropriately and to ensure that instructors are providing enough individualized student feedback. Further, Fredericksen et al. (2000a) and Gallien and Oomen-Early (2008) identified that instructor–student connectedness was influenced by these two aspects of instructor communication in distance education. Thus, achieving these necessities especially important to distance education instruction requires instructors to have effective writing and technical skills.

Flexibility in teaching methodology has also been noted as a skill that is influential for faculty attitudes towards distance education paradigms. Fredericksen et al. (2000a) in their survey study stated that faculty need to be flexible in their teaching style in distance education due to the type of medium. For example, effective online instruction makes use of the multiple options of online learning (e.g., many technological modalities and resources), while also recognizing the medium’s limitations and working within these parameters. Thus, instructors must have the comfort and skills necessary to determine the most effective modalities and resources when instructing distance education in order to optimize their course designs and to convey course information. Ultimately, faculty members’ ability and comfort with being flexible will impact their attitudes with and towards this learning medium.

The impact of self-efficacy for technology has also been examined in relation to faculty willingness to use technology and an attitude towards distance education. Several important correlations have been identified, including: (a) a significant positive correlation between self-efficacy for technology and integration and attitude towards technology in learning paradigms (Kagima & Hausafus, 2000), and (b) a significant negative correlation between a perceived high level of self-efficacy for the educational

technology and negative emotionality to other frequent inhibitors of participation in distance education (Berge, Muilenburg, & Haneghan, 2002). Further, Tabata and Johnsrud (2008) in their survey and discussion sessions of 1,881 postsecondary faculty confirmed that perceptions of self-efficacy for technology influence opinions about technology in a positive manner and facilitate faculty to be more open to using technology in other circumstances (e.g., in a distance education environment).

Demographic characteristics of faculty engaged in distance education

instruction. In addition to the research regarding faculty self-efficacy and distance education, researchers have investigated demographic characteristics of faculty that affect their participation in distance education programs. As noted, participation and satisfaction are strongly linked. Tabata and Johnsrud (2008) in their empirical study noted that age was significantly positively correlated with likelihood of faculty engagement in distance education. These researchers suggested that older faculty have already accomplished many aspirations that younger faculty desire and may be in a position and have the time and resources to engage in this educational paradigm. Tabata and Johnsrud also found in their large 10-campus study several significant negative correlations involving faculty demographics, including: (a) between ethnic minority instructors and distance education instruction, and (b) between higher instructor postsecondary personal educational achievement and participation in distance education.

Kagima and Hausafus (2000) found in their study of 176 instructors from three postsecondary institutions offering distance education programming that instructors that were more likely to integrate and use technology to teach were instructors with a higher self-efficacy for computers. Subsequently, Kagima and Hausafus's study revealed

significant correlations between demographically related variables and computer-related self-efficacy, including: (a) female faculty reported feeling significantly less computer self-efficacy, (b) male faculty and faculty younger than 60 years old were more self-efficacious using the Internet, (c) nontenured instructors reported significantly higher computer self-efficacy than tenured instructors, and (d) faculty who had been instructing for greater than 10 years were reportedly significantly less computer self-efficacious. However, Belcheir and Cucek (2002) in their empirical study found no significant correlations between age, gender, or academic ranking of faculty and instruction of distance education courses.

Summary of the faculty factors influential to faculty satisfaction. Thus, researchers have noted relationships between key faculty factors and faculty participation and attitudes in distance education paradigms. These factors include: (a) personal motivations for teaching in distance education programs, (b) skill self-efficacy for facilitation of distance education courses, and (c) instructor demographical characteristics. In this project's survey, these factors are assessed with relation to faculty satisfaction in distance education. However, faculty characteristics are not the only variables that have been found to impact faculty involvement and satisfaction in distance education paradigms. The next section explores student variables that have demonstrated an effect on faculty satisfaction in distance education.

Student-related factors influential to faculty satisfaction. Bolliger and Wasilik (2009) in their study of 102 distance education faculty identified that faculty satisfaction in distance education paradigms was also influenced by student-related variables. Primarily, two sets of variables have been examined in the literature, including student

interactions and student performance. This section focuses on the literature that discussed these student variables.

Student interactions influential to faculty satisfaction. Fredericksen et al. (2000a) in their survey study of 105 distance education faculty found that instructor satisfaction was significantly higher in faculty who felt more connected with their students and who knew their students better. Further, Fredericksen et al. (2000a) indicated that faculty reported a positive correlation between increased student–student interactions and faculty levels of satisfaction with teaching in distance education. Belcheir and Cucek (2002) in their survey study of 254 postsecondary distance education faculty stated that limited interactions with students were a drawback for faculty engaging in distance education paradigms; therefore, it seems that if interactive communities can be created in the distance education environment, faculty may present more positive attitudes towards teaching in distance education. Thus, connectedness and interactions in the course community may be an influential component to faculty satisfaction in distance education paradigms.

Student performance influential to faculty satisfaction. Beyond the research on course interactions, researchers have also investigated how student performance in distance education impacts faculty satisfaction ratings. Fredericksen et al. (2000a) in their empirical survey study reported that when instructors assessed students as having a high performance level, faculty felt significantly more satisfied with their distance education teaching experience. Oomen-Early and Murphy (2009) in the results of their open-ended survey of 101 distance education faculty also noted several factors that could impact faculty satisfaction. Oomen-Early and Murphy stated that some students were not

adequately prepared for distance education programs, and did not possess the skill or understanding required to be successful, which significantly impacted faculty attitudes towards the education paradigm. Oomen-Early and Murphy's findings lend credence to Belcheir and Cucek's (2002) survey research, which stated that students who were unskilled with utilizing the technology involved in a distance education program had a significantly negative impact on faculty satisfaction. Thus, student performance factors may present as a significant influence to faculty satisfaction.

Summary of the student factors influential to faculty satisfaction. In summary, there are a variety of student factors that impact faculty satisfaction with distance education paradigms, which will be included for further investigation into this project's faculty satisfaction survey. Two main sets of student variables that have been examined in the literature are student interactions and student performance. Both of these factors have been demonstrated to have a potential impact on faculty satisfaction in distance education paradigms. However, there is a third set of variables, organizational-related factors, which also critically influence instructor satisfaction in distance education. This set of factors is examined in the next section.

Organizational-related factors influential to faculty satisfaction. Program factors in relation to faculty satisfaction seem to be the most investigated set of variables to date. Many faculty factors that contribute to satisfaction with distance education programs, and subsequent participation in them, relate to the value of the distance education program and the value of those conducting it. Oomen-Early and Murphy (2009) in their qualitative descriptive study indicated that external variables to the instructor that are mediated by the educational organization can interfere with, and

potentially dissuade, many instructors from engaging in distance education programs (e.g., potential for plagiarism, inappropriate student readiness or lack of appropriate assessment for student readiness for the demands of distance education, and inappropriate or lack of administrative, institutional, and technical supports). Schifter (2002) in her study of 46 motivating and inhibiting factors regarding faculty participation in distance education asserted that although administrators seemed to know what would inhibit participation, there was a definite lack of understanding for what would motivate faculty participation (e.g., intellectual challenge, personal motivation to use technology, and overall job satisfaction). Further, many faculty members cited the following as barriers that need to be addressed: (a) workload demands, release time, and training; (b) administration and technical support; (e) recognition, compensation, and promotion or tenure considerations when engaging in distance education instruction. Research on each of these factors is examined in the last section of this comprehensive literature review.

Workload demands, release time, and training. Workload, release time, and training appear to be significant concerns to faculty. An increased workload is consistently cited in the literature as a major concern for faculty members, a deterrent to initial and continued engagement, and as impacting faculty satisfaction in distance education paradigms. Many researchers stated that the time commitment for instructing is significantly greater in distance education (Belcheir & Cucek, 2002; Gallien & Oomen-Early, 2008; Tabata & Johnsrud, 2008). Faculty in the study conducted by Oomen-Early and Murphy (2009) identified that administrative and institutional support for understanding faculty job requirements was lacking and that the faculty themselves felt overwhelmed trying to manage regular job requirements as well as administer a distance

education course without adequate support. Gannon Cook et al. (2009) in their analysis of four studies conducted with postsecondary education faculty found that the increased time requirement associated with the increased workload demands were discouraging for instructors.

Further, release time for course preparation had also been noted as a significant factor in the research literature. Tastle et al. (2005) stated in their survey study that not only does facilitating a distance education course take more time than a traditional course, but Tastle et al. also reported that 89% of 103 distance education instructors indicated that planning and arranging for the courses also requires more time. To support this assertion, Oomen-Early and Murphy (2009) indicated as a result of their empirical study that faculty should have enough release time and workload units allotted to fully plan and prepare for their course prior to its start. The authors did not provide specific recommendations, however, suggested that supportive time policies should be available to instructors of online courses.

In addition, researchers have also linked training opportunities with faculty attitudes in distance education. Oomen-Early and Murphy (2009) stated, as a result of their research from variety of universities, that release time should be associated with training events for distance education faculty. In fact, several researchers posited that distance education faculty should take supplemental training to provide them with the pedagogical and technical skills necessary to facilitate a quality distance education course (Fredericksen et al., 2000a; Knowles, 2001; Vaughan, 2007).

Oomen-Early and Murphy also suggested, in their survey of American state-wide distance education academics, that faculty skill training is related to self-efficacy. Berge

et al. (2002) affirmed, as a result of their survey with 2,504 professionals utilizing distance education mediums, that concerns with a multitude of barriers (e.g., organizational change issues, lack of technical expertise or support, lack of social quality and interaction, evaluation issues, lack of student access, and lack of student support services) for distance education programs significantly decreased with increased faculty skill levels. However, workload, release time, and training constraints are not the only organizational factors that have been found to be influential to faculty attitudes in distance education. Faculty support services have also been recognized to have a significant impact on faculty satisfaction.

Support services. Administration (i.e., individuals classified as deans, presidents, provost, and who often are not engaged in instructing students) and technical support have also been examined in the literature with some inconclusive results (Lee, 2001). Oomen-Early and Murphy (2009) in their research with online instructors indicated that administrative, technical, and collegial support were notably related to faculty work strain in a negative manner. Oomen-Early and Murphy revealed a common theme, in their study of 101 teaching faculty, regarding a lack of administration sensitivity to the demands created by distance education paradigms (e.g., time requirements; demands of increased enrolments; lack of resources for preparation and management of the courses; the need for pedagogical, technological, and instructional support). Further, Oomen-Early and Murphy reported that over 87% of faculty respondents to their survey indicated that administrative and institutional support for the job demands on faculty to effectively design, teach, and manage a distance education course was a key factor influencing satisfaction. Tabata and Johnsrud (2008), in their survey study assessing faculty

participation in distance education, linked institutional support with instructional faculty training opportunities. However, Oomen-Early and Murphy in their survey study with distance educators stated that technical support was a significant factor for faculty, it was positively associated with satisfaction, and faculty felt they needed more assistance and training in this area.

Lee et al. (2002), in their review of design considerations for distance learning paradigms, asserted that faculty need for technical support is equal to that of student need. Oomen-Early and Murphy (2009) in their empirical study stated that often technical support for students fell to the instructor due to the nonstandard work hours students in these programs tend to keep. Finally, Betts (1999) postulated, as a result of her survey study of 539 postsecondary faculty, that faculty motivation for participation will increase as educational organizations address the structural barriers of distance education programs (e.g., technical, administrative, and financial support). However, Tabata and Johnsrud (2008), as a result of their survey study, suggested that the link between faculty members' need and desire to participate in distance education paradigms and support resources is unclear. For example, Tabata and Johnsrud's research seemed to counter other studies by revealing a negative association between institutional resources and support which was negatively associated with faculty participation.

Recognition, compensation, and promotion or tenure considerations. The final organizational factor related to faculty participation and subsequent satisfaction is incentives, including recognition, compensation, and promotion or tenure considerations. Fredericksen et al. (2000a), as a result of their faculty satisfaction survey, stated that faculty satisfaction is positively related with feeling valued. Also, Ellis (2000) indicated,

as a result of her interview study with 21 postsecondary distance educators, that a lack of rewards and incentives for faculty to get involved in distance education paradigms may preclude faculty from becoming involved with them. Further, Oomen-Early and Murphy (2009), as a result of their empirical study, found a significant theme in the open-ended interview responses from faculty regarding the dissatisfaction with the lack of monetary incentives provided for faculty engaged in online instruction.

Various researchers have also identified that faculty have encountered concerns with promotion or tenure, which influenced their participation with and satisfaction for distance education programs. Howell, Saba, Lindsay, and Williams (2004), in their meta-analysis of literature related to distance education faculty, noted a significant theme regarding faculty needing to manage a traditional tenure process for a nontraditional instructional system. Further, Oomen-Early and Murphy (2009) stated that faculty motivations for participating in distance education paradigms were significantly influenced by tenure status, with nontenured instructors being less likely to participate. Schifter (2002), in her survey study of 263 traditional and distance educators, found that faculty were significantly concerned with how facilitating online learning would affect tenure and promotion. In her empirical study, Schifter suggested that younger instructors, those identifying as assistant professors, instructors, or nontenured faculty, may have less motivation for teaching online as it may negatively impact potential promotions or obtaining tenure. Further, Schifter noted that these instructors are encouraged to conduct research, a process which may be significantly affected by engaging in the time-consuming commitment of distance teaching. Thus, Tabata and Johnsrud (2008), in the recommendations stemming from their empirical study, stated

that distance education paradigms require their own promotion and tenure considerations in order to encourage faculty to participate and alleviate concerns regarding future job and promotion opportunities. Oomen-Early and Murphy (2009), as a result of their survey with 101 distance educators, also recommended revisions to existing promotion and tenure policies and assessments to account for the differences from traditional programs.

Summary of the organizational factors influential to faculty satisfaction. In summary, organizational factors have been found to influence faculty satisfaction in distance education paradigms. Workload demands, release time, and training have been supported by several researchers to be significant variables to faculty satisfaction and participation in distance education. Recognition, compensation, and promotion or tenure considerations have also been found to significantly influence distance educators attitudes towards these paradigms. Finally, recognition, compensation, and promotion or tenure considerations have also been supported in the literature as having significant implications towards distance education faculty satisfaction. Thus, this project's survey will assess each of these factors.

Summary of factors related to faculty satisfaction. This section identified factors that may be influential to faculty attitudes and success in distance education paradigms. As noted, these variables include faculty, student, and organizational factors. The variables revealed in this literature review provide rationale for examination of these factors in the survey questions in the proposed study for this project.

Application of the Literature for the Project

This comprehensive literature review addressed 22 main factors that may influence the satisfaction of students and faculty in distance education paradigms. Of

these 22 factors, 14 are researched to correlate with student satisfaction in these types of learning systems and 8 are linked with faculty satisfaction (Appendix A). However, the research has demonstrated that the understanding of the relationship between these factors and the satisfaction of students or faculty is tentative and needs further exploration.

This literature review was completed in order to identify key areas for incorporation into two survey tools to further explore their influence on student and faculty satisfaction. Each of these factors is critical to the survey tools created in this project in that they form guiding themes for the survey questions respective to the population the survey is created for. Therefore, based on the literature review, the student survey will assess student satisfaction with relation to: (a) demographic information, (b) student lifestyle commitments, (c) student learning style characteristics, (d) student intrinsic and extrinsic motivation factors, (e) learning task value, (f) self-efficacy for the learning paradigm, (g) influential faculty characteristics, (h) faculty feedback styles, (i) faculty accessibility, (j) faculty and peer interactions, (k) social learning climate, (l) community interactions, (m) student support systems, and (n) course factors.

Subsequently, based on the eight themes resulting from the literature review regarding factors influential to faculty satisfaction, the faculty survey will examine faculty satisfaction with relation to: (a) demographic information; (b) faculty intrinsic and extrinsic motivation factors; (c) self-efficacy for the learning paradigm; (d) influential student characteristics; (e) organizational factors; (f) workload demands, release time, and training; (g) faculty support systems; and (h) recognition, compensation, and

promotion. My aim is for these surveys to become a valuable resource for assessing satisfaction in students and faculty in distance education.

Research Questions

Given the information in this comprehensive literature review, there are three guiding questions for this research proposal. The first question is: what are the factors that influence student satisfaction in M.C. distance education programs? The second question is: what are the factors that influence faculty satisfaction in M.C. distance education paradigms? And, in turn, the third question is: what relationship, if any, is there between satisfaction in students and faculty in M. C. distance education paradigms?

Closing Summary

In this project I propose the creation of two comprehensive survey tools to assess student and faculty satisfaction in distance education paradigms. In this chapter I provided a comprehensive overview of factors that have been identified across a wide range of distance education programs that may influence student and faculty satisfaction in these types of educational paradigms. Further, this overview is closely linked with the overarching research questions for this project. In the next chapter, the proposed methodology for this project is examined. Additionally, the ethical aspects of carrying out the study are also explored.

Chapter 3: Proposed Methodology

The proposed methodology associated with this project is described in this chapter. The first section of this chapter provides a description of the anticipated participant pool and associated sampling procedures and protocol. The second section of this chapter provides an overview of the proposed statistical analysis. Following the statistical analysis, the measures section provides a breakdown of the sections of both the student and the faculty surveys. Finally, this chapter concludes with an assessment of the ethical considerations of the creation of this project's surveys and those that may potentially arise should the surveys be administered.

Purpose

The purpose of this project was to design a study to assess satisfaction in students and faculty in distance education paradigms. As part of this design, two surveys were created to evaluate the satisfaction in each participant group. Finally, an ethics application was created to facilitate eventual implementation of the project.

Participants

The proposed research participants will be current and former students and faculty involved in the M.C. program offered through the University of Lethbridge, University of Calgary, and Athabasca University. This research aims to solicit a minimum of 30 student participants and 20 faculty participants, and up to a maximum of 1,000 total participants from any of the three universities. Since the programs are graduate level, each university's cohort is generally no more than 20 individuals. Over the length of the program, the total number of students amounts to no more than 1,000 individuals. Instructors in the program tend to be consistent over the length of the program and tend to

teach several courses throughout the program. Thus, the instructor participant pool will be smaller than the student pool. Further, identical study recruitment processes will apply to all three universities.

Participant program description. The M.C. program utilizes a blended learning paradigm with an emphasis on the online or distance learning portion of blended learning. This program was developed approximately 10 years ago as a partnership between the three universities to provide high quality master's-level programming to students for whom traditional programs were not appropriate (Collins & Jerry, 2005). In 2008, the three universities continued to offer the M.C. program, however, moved away from the consortium model to a more individualized approach. The individually administrated programs continue to be similar even though the administrative model has shifted; due to initial structuring of the programs as one entity and the common goals of creating competent, ethically sound, and professional M.C. graduates.

Participant characteristics. Two separate participant groups are outlined in this project proposal. Firstly, the anticipated student participant group are described, followed by the anticipated faculty participant group.

Student participants. It is anticipated that the student survey will be distributed to at least 500 current and former students. Further, it is hoped that at least 30 students are able to fully complete the survey questionnaire. It is expected that the age of these participants will range from 23–60 and that the response rate will be relatively equal in terms of gender. Due to the cultural diversity in Canada and the ability of individuals to access this graduate program from all over North America, it is anticipated that the student participants will come from a range of ethnic backgrounds. Further,

because of the educational requirements to enter the program, the majority of student participants will likely have at least one bachelor's degree in a human services related field (e.g., sociology, psychology, human ecology, etc.). It is anticipated that all participants will be fluent in English.

Faculty participants. It is anticipated that the faculty survey will be distributed to at least 50 current and former faculty members. It is hoped that at least 20 faculty members are able to fully complete surveys. The age range for these faculty members is expected to be between 25–60, and the gender distribution to be relatively equal across both genders. Due to Canada's multicultural diversity and the ability to teach distance education paradigms from anywhere in the world, it is anticipated that the faculty participants will come from a range of ethnic backgrounds. It is also likely that all faculty participants will have at least one graduate degree in the field of psychology. It is anticipated that all participants will be fluent in English.

Summary of the participants. Overall, the proposed research participants will be current and former students and faculty involved in the M.C. distance learning program at the University of Lethbridge, the University of Calgary, or Athabasca University. Individuals in each of these two proposed participants groups are anticipated to have a wide range of demographic characteristics due to accessibility of the program throughout Canada and North America.

Sampling Procedures

This section describes the procedure for contacting the participants, the procedure for obtaining approval for the project and the piloting of the surveys, and administration

of the survey. Please refer to the flow chart of the proposed methodology (Appendix B) for an overview of this section.

Participation recruitment. Student and faculty will be recruited to participate in this project. Recruitment methods will be outlined next.

Students. Upon ethical approval and permission from participating universities, students from the M.C. program at all three universities will be contacted via email by administration. Students, who are currently enrolled in, are graduates of, or who have prematurely left the program will be invited to participate in this project. Efforts will be made to contact all students who fall into these categories since the commencement of the program in 2002 (Collins & Jerry, 2005). Although many of these students are likely to reside in Alberta and nearby provinces, some may come from all corners of North America. However, it is anticipated that the students will come from a wide range of backgrounds, experience a wide range of lifestyles, and represent both genders. All student participants in the student survey (Appendix C) must be consenting adults.

Faculty. Upon ethics approval and university permission, faculty from the M.C. program at all three universities will be contacted via email by administration. Faculty who currently and formerly taught in the programs, regardless of their position or the length of time that they taught, will be invited to participate in this project. Efforts will be made to contact all instructing faculty who fall into either category since the inception of the program in 2002 (Collins & Jerry, 2005). Although many of these instructors are likely to reside in Alberta and nearby provinces, some may come from all corners of North America. However, it is anticipated that the instructors will come from a wide range of backgrounds, experience a wide range of lifestyles, and represent both genders.

All instructor participants in the instructor survey (Appendix D) must be consenting adults.

Ethical clearance and pilot. Once the University of Lethbridge Faculty of Education Human Subjects Research Committee of Human Subject Research (Appendix E) approves the project, two small pilot studies will be conducted with no more than 10 participants each. In each pilot project, the survey will be administered to a small group of either M.C. students who have taken a distance learning course or M.C. faculty who have taught a distance learning course. The consent form will be slightly modified to be appropriate and specific to the pilot, including a disclaimer informing participants that their answers will not be included in the final results. Further, the consent form will inform participants of the pilot studies that upon conclusion of their survey they will be asked a series of questions regarding the instructions, the structure and content in the survey, and the informed consent process. This pilot study will strive to ascertain the ease of utilizing the survey, respondents comfort with it, clarity of instructions and questions, and any concerns. The pilot studies will also provide direction regarding the flow of the survey and the length of time to complete it. Finally, the pilot studies will provide feedback regarding the informed consent directions and information.

Participant contact and survey administration. The research team (comprised of selected University of Lethbridge faculty and myself) will contact the administration of the three universities (i.e., University of Lethbridge, University of Calgary, and Athabasca University) to seek their permission to conduct the study. Each administration team will be provided with an executive summary of this project for their perusal. The

research team will work with each university to determine the best procedure to follow regarding participant recruitment.

I will suggest to the administration teams that current and former students and faculty could be notified of the project through their email. Students would receive approximately three notifications over the span of several months regarding the opportunity to participate.

Potential participants will be invited to review the Project Invitation Letter and Participant Consent Form (Appendix F) and to begin the electronic survey (Appendices C and D). If recruitment is low, the invitees will be asked to send the email containing the Project Invitation Letter and Participant Consent Form to those they know who participated in online learning, in a snowball-like fashion.

Summary of sampling procedures. As outlined above, participants will be contacted utilizing a specific protocol set in place in conjunction with the administration teams at each participating university. Further, in accordance with ethical standards, this project will be reviewed and approved by an ethical committee prior to implementation of any aspect of the project. In addition, the next sections of this chapter review the statistical analysis proposed for the anticipated data collection, the proposed survey tools, and the research design.

Statistical Analysis

I propose that IBM SPSS Statistics 19 be used to analyze the results, as this technology is readily available at the University of Lethbridge. Descriptive statistics, crude odd ratios, and adjusted odd ratios with at least a 95% confidence interval would be used to examine the relationship between satisfaction in distance education learning and

all correlational variables. Predictor variables will include all variables outlined in each part of each survey as described earlier in this chapter. Univariate logistic regression and multivariate logical regression analysis would be the two most significant analyses undertaken. Results would be presented in tables, figures, and charts as appropriate.

Measures and Covariates

In this section of Chapter 3 I review the measures and covariates for the implementation of the surveys in an empirical project. The following section provides a rationale for the selection of a survey design and describes the sections of each of the surveys.

Surveys. Surveys are a quantitative measure of information provided by a section of a representative group that provides information about the larger group (Creswell, 2003). Thus, surveys can be used to make limited inferences about the larger population and are a practical method for collecting information from larger groups of individuals in a fairly uniform and straightforward manner (Leedy & Ormrod, 2005). Further, surveys can be used to obtain information from multiple groups of individuals in a consistent manner, either concurrently or consecutively. Surveys are also useful in collecting a wide range of information, including data regarding demographics, experience and situations, and attitudes and beliefs (Leedy & Ormrod, 2005). This information can be real or hypothetical and can be rooted in the past, the present, or the future.

Surveys rely on percentages, frequency counts, and other statistical analysis to summarize the responses of the population being assessed. However, it is important to recognize that surveys include a level of response bias, in that individuals provide a subjective self-response to the questions in the survey. Therefore, the information

collected by the survey is often a measure of individual perceptions, recollections, and understandings at the time of the collection of the information. As the participant's perceptions, recollections, and understandings change, so will the information retrieved by the survey. Commonly, surveys are developed so that they can be administered by phone, in person, or in writing (Leedy & Ormrod, 2005).

The surveys created in this project are designed to take no more than 45 minutes to complete, but will not be timed. They will be hyperlinked in the Project Invitation Letter and Participant Consent Form (Appendix F) for ease of use. The participants will be able to participate in the surveys without needing a password. Finally, the surveys will likely be mounted on a university sponsored survey site.

Rationale for survey method. As noted in Chapter 2, surveys have been used in examining satisfaction in both students and faculty. However, many of these previous surveys have examined individual sets of variables (e.g., only learning styles, only self-efficacy, only motivation) for either students or faculty in distance education paradigms, which do not provide a comprehensive picture of the variables associated with satisfaction. Further, many of these surveys did not evaluate both faculty and student satisfaction variables simultaneously, which is crucial for identifying the potential myriad of variables related to the quality of the program at any given point in time, and for recommending suitable advances to a program based on the results. Therefore, after thoroughly assessing existing literature and examining several survey protocols in published research, a list of variables was identified as warranting further investigation with regards to both student and faculty satisfaction in distance education programs.

Survey design. As noted in Chapter 2, these satisfaction surveys strive to be consistent with, yet more comprehensive than, former tools that have been utilized to attempt to measure variables contributing to satisfaction in both students and faculty in distance education programs. The questions in the survey tools use primarily multiple-choice, checklist, and Likert-style rating scales. Multiple choice options will be provided for the demographics section of each tool, as these responses tend to be straightforward and place well into defined categories.

The checklist and Likert-style scales will be utilized for the remainder of the questions as they are appropriate for assessing the variables and the relationships that the tools aim to identify (Leedy & Ormrod, 2005). These types of answer systems allow for easy categorization and quantification of the participants attitudes (Leedy & Ormrod, 2005). The checklist items are included in the surveys in order to examine areas of student and faculty satisfaction that may be influenced by more than one factor at a time. This will also provide for an opportunity to assess for themes of interacting variables. The Likert-style scale items allow the participants to choose from at least three options to assess their attitudes towards the item being measured in the question (Leedy & Ormrod, 2005).

Thus, participant responses in the surveys will allow the researchers a better understanding of the correlations between student and faculty participant demographics and attitudes and satisfaction with distance education. Although appropriate for use in these exploratory tools, all of these question formats have limitations that are important to recognize and account for, which are explored further in Chapter 4.

Proposed student survey. The student survey has 82 questions (Appendix C). Each part is described in this section.

Part I. Part one collects demographic information including age range, gender, ethnicity, geographical location, number of distance education courses in the M.C. program that students' have taken, highest obtained level of education, primary educational institution, and distance from their educational institution. Additionally, students are asked about current school status and lifestyle commitments, including their home structure, school enrolment status, other enrolment in postsecondary studies, and employment status. The demographic section is then complete and the student moves into the second section. There are 13 questions.

Part II. This section of the survey inquires about learning styles, enrolment motivation, overall task value for aspects of the courses in the program, and self-efficacy for the programs course tasks and structure. Specifically, questions pertaining to learning styles explore the congruence of student characteristics with factors comprising an autonomous learning style and desire for level of self-control of the pace of the learning endeavour are asked. Several questions examine student motivations, both intrinsic and extrinsic, for engaging in distance education. As noted in Chapter 2, student motivation is an important factor in understanding satisfaction.

Task value has been recognized as correlating with satisfaction. Thus, several questions included in the student survey section assess student attitudes regarding this variable with respect to all courses within the program, the material presented in courses within the program, the learning tasks utilized in the program, and in the interaction and community building tasks. Student attitudes towards their present and past success in

distance education are also examined. Assessment of attitudes towards their potential success with the learning tasks and the material are questioned. Finally students are asked directly about their satisfaction with respect to their learning, the material, and the educational tasks. In total, there are 16 questions for Part II.

Part III. The next portion of the student survey examines the effect of faculty variables on student satisfaction. This segment begins by examining aspects of faculty knowledge and experience level. Several questions focus on how the level of faculty knowledge for the subject material, the way the program structures courses, and the technology used in the program correspond with student satisfaction. The impact on student satisfaction of the ability of the faculty to apply the material to specific stories and examples is also assessed.

Faculty feedback styles and faculty accessibility with respect to student satisfaction are also assessed in the student section of the tool. One question explores the effects of individualized and group feedback on satisfaction, while another investigates the effects of specific and general feedback. Further, the effect of faculty accessibility is also examined with relation to student satisfaction in distance education. Four questions also address the various ways instructor accessibility may impact student satisfaction (e.g., phone, email, online, in person). The final questions of this segment explore response time, and the description and effect of accessibility on the interactions between students and faculty. There are a total of 15 questions.

Part IV. In previous research interpersonal interactions have been connected with student satisfaction in distance education courses. This slice of the student section explores how much interaction is important to students and how the interaction affects

learning (e.g., subject matter and learning tasks). This section explores these items relative to both student–instructor interaction and student–student interaction. Part IV also compares which set of interactions may be more influential to satisfaction.

Part V. Social climates are created differently in distance education paradigms than in traditional learning paradigms. Therefore, it is important to explore the impact of social climates on student satisfaction in distance education. This fraction of the student section asks questions about minimum and maximum interaction requirements and about the desirability and importance of social opportunities and group learning tasks. Part V also inquires about community interactions, which are another set of variables that were identified as potentially affecting student satisfaction in distance education. Three questions assessed community interactions with respect to student satisfaction in terms of: community development, face to face interaction with instructors, and face to face interaction with other students.

Part VI. Support system factors were also identified in the literature review as an area that may have an impact on student satisfaction. Thus, questions regarding support system variables are included in this project’s student section of the tool. Questions in this part focus on: (a) assessing technological access, attitudes, knowledge, and support; (b) course assistance (e.g., library and teaching aide); and (c) administrative support. There are 16 questions in this section.

Part VII. The final set of factors identified in the literature review as having the potential to influence student satisfaction in distance education paradigms were related to the course design. The course material is firstly assessed in the survey for relation between satisfaction and the interest of the content and the usability of the content. This

set of questions then examines variables related to the course structure, expectations, length, and topic set-up. The final question in this area focuses on the ability of students to attain their educational goals without accessing this program.

Overall, the student survey asks 82 questions and, as noted, covers a range of literature supported variables which may impact student satisfaction. The next section similarly details the faculty survey.

Proposed faculty survey. The faculty survey asks 75 questions and has five parts (Appendix D). Each part will be described in this section.

Part I. Similar to the student survey, the faculty survey (Appendix D) begins by investigating demographic variables including age range, gender, ethnicity, highest obtained level of education, geographical location, institution location, distance from primary institution, total number of years instructing postsecondary courses, and number of distance education courses they have taught. Additionally, faculty are asked about their teaching status.

Part II. The next portion of this project's faculty survey section assesses faculty motivations for teaching distance education courses and faculty attitudes towards technology. Both intrinsic and extrinsic factors are examined in evaluating the motivations faculty hold for engaging in distance education instruction. How technology is valued by instructors is also evaluated. This section has eight questions.

Part III. This part of the faculty section of the survey tool evaluates faculty self-efficacy for the skills required to instruct in a distance education paradigm. These questions examine self-perceptions regarding confidence in communication skills, technological skills, time management skills, pedagogical skills, and engagement skills.

Further, flexibility and adaptability in online instruction is examined. This part also includes questions that consider whether engagement in distance learning has changed the level of skills that instructors have for teaching in this distance education domain.

Part IV. The literature review also indicated that student factors can influence faculty satisfaction with distance education. Thus, the questions concerning this topic begin by exploring the value and importance to instructors of connecting with students and having students connect with one another. The next several questions then inquire about instructor attitudes regarding student performance, and about any correlation with faculty satisfaction. The final question in this section explores the effect of instructor skill with distance education on student performance.

Part V. The final questions of the faculty section of the survey tool examine organizational factors with respect to faculty satisfaction. These questions begin by exploring whether feeling valued by others (e.g., administration, peers, and students) correlate with faculty satisfaction in distance education. This section then investigates the experiences of online instructors with respect to workload demands and release time in distance education paradigms. Following the examination of these factors, the relationship between faculty satisfaction and support services in distance education is assessed. Five dimensions of support services are examined, including: (a) general support services, (b) administrative supports, (c) technological supports, (d) collegial supports, and (e) pedagogical supports. A ranking style question also assesses what supports faculty view as being beneficial in distance education. Further, there are numerous questions that inquire about a relationship between recognition, remuneration and monetary incentives, compensation other than money, or promotion opportunities

and faculty satisfaction in distance education. Finally, the last question explores the relationship between tenure and faculty involvement in distance education.

Summary of the Measures and Covariates

This section of Chapter 3 specified the rationale for the selection of a survey design. Further, it provided an overview of the survey measures themselves, and covariates for the implementation of the surveys in a research project. The seven sections of the student survey were described and were rooted in the extensive literature review provided in Chapter 2. The five sections of the faculty survey were also detailed. The next section reviews the proposed research design for implementation of the surveys.

Research Design

Survey protocol. Upon beginning the web-based survey, the participants may choose to complete it or to simply close the webpage without completing it, without submitting their data, and without any negative effect or consequence to the participants. In order to reengage in the survey, participants will have to start the survey again for their results to be counted. The participants will initially identify whether they are or were a student or an instructor. Participants will then complete the survey questions that they are directed to. Upon completion of the survey, the participants will confirm their responses to the survey by submitting it. The participants will be directed to a “thank you” screen, which will confirm the submission of their responses. At all points throughout the process, the participant’s information from the survey and their identifying information are not linked; therefore, any personal information about the individual from the online questionnaire remains anonymous as no identifying information is collected.

Option: Follow-up focus group. The survey will also be configured to ask the participants at the end of the survey if they would like to participate in an upcoming focus group session. However, the focus group is an optional activity that the researchers may not want to implement due to time and budget constraints. If the researchers wish to implement the focus group session, and if there are enough participants, then the focus group session will be designed by the research team and approved by the University of Lethbridge Faculty of Education Human Subjects Research Committee. This focus group session is intended to explore specific questions based on the results of the survey. The focus group is beyond the scope of this final project.

Focus groups are often used to gain more specific information about the topic or clarify data that have already been retrieved and are similar to group interviews. Leedy and Ormrod (2005) suggested that a focus group involves a discussion of up to 12 participants around a particular topic. Thus, in order to support the results of the survey tool developed in this project, a focus group would serve to gather further information or clarify results from the surveys. Further, should there be enough participants, there would be one focus group for student participants and a second group for faculty.

If the participant responds that he or she does not want to participate in a future focus group, then the participant is thanked again on a new screen and the survey is complete. If the participant responds that he or she does want to participate in a focus group, then the participant is asked for contact information, which will be used to set up the focus group. At no time will the participant's identities be linked to the survey she or he had just completed.

Ethical Considerations for the Proposed Methodology

The *Canadian Code of Ethics for Psychologists* (Canadian Psychological Association, 2000) outlines the principles of respect for human dignity, respect for free and informed consent, respect for privacy and confidentiality, respect for justice and inclusiveness, and in balancing harms and benefits (see also Sinclair & Pettifor, 2001); these principles should guide the methodology and analysis of the data. Thus, the proposed methodology was designed with the following ethical considerations in mind: (a) respect for all participants; (b) provide all participants with information about the intent of the project and the rationale for it; (c) ensure all participants have the opportunity to provide informed consent with the stipulation that participants can withdraw their participation and consent at any point without penalization; (d) protect participants by using measures that ensure that the least amount of information possible is collected, ensure that information will only be released to the researcher and the project supervisor, and ensure that identifiers are encoded when disseminating the results of the project; and (e) utilize same participation protocols equally for all participants.

Ethics subject review application. This final project includes a proposed ethical application (Appendix E), which could be utilized should the project be implemented with human subjects. The ethical application outlines all aspects of the project necessary for submission to the University of Lethbridge Faculty of Education Human Subjects Research Committee for approval for implementation with human subjects.

Summary of the research design. This section of Chapter 3 outlined the proposed structure of an empirical study containing the surveys. This section also

discussed the potential for a follow-up focus group session and concluded with an overview of the ethical considerations for implementation of the proposed project.

Chapter Summary

Overall, this chapter solidified this final project proposal by noting the anticipated participant pool, statistical analysis, creation and description of the surveys, proposing a methodology for survey administration and research design, and including an ethical protocol. Great care and attention was taken to provide context for the surveys based on material unearthed in Chapter 2. Further, the final chapter of this project explores the strengths of this proposal and areas for future research. This project, upon my convocation, will be implemented at the University of Lethbridge.

Chapter 4: Strengths and Limitations of the Project

The intent of this project was to assess satisfaction of students and faculty in a M.C. distance education paradigm. In order to do this, two satisfaction surveys, a proposed methodology, and an ethics application were created. These surveys and the associated protocols were created based on past research conducted on the same topic.

As with previous research, this study has unique strengths and insight into the research topic. However, this study also has limitations that creates a need and drives the cycle for new research. Thus, this project's unique strengths and limitations are examined in this final chapter.

Strengths of the Project

There are several key strengths to this research endeavour that are important to recognize. The first set of strengths presented addresses how this project has system-related benefits. Thereafter, the study's benefit to students and faculty are addressed.

Benefits for institutions. Implementing this project holds potential benefits for each institution's administration. Since administrative bodies oversee educational programming and regulate aspects of student and faculty involvement in programming, information from the implementation of the proposed study would provide each institution with variables that could be incorporated into quality standards and best practices. By incorporating the results into their programming, administrative bodies could promote student and faculty satisfaction, subsequently contributing to the reputation of their programming. Increased enrolment, higher retention and graduate rates, increased investors, and more reputable faculty may all result from the incorporation of the results and recommendations of the proposed study.

Finally, other educational institutions, investors, and researchers external to the participating facilities may also benefit from this research. Other educational institutions that currently offer or are looking towards offering successful distance education programs would benefit by this research as they would be able to incorporate aspects of the results of the proposed study that may be appropriate in facilitating successful programming. As distance education programs institute aspects of programming that increase student and faculty satisfaction, which contributes to expansion of the programs (e.g., greater student enrolment and success) and draws a wider range of experienced and reputable faculty, investors will gain a greater return for their investments in these postsecondary institutions. Further, researchers are another peripheral group that may benefit from this research. Since this research adds to the small but growing body of material on distance education programs, and is a unique study for aforementioned reasons, this research provides valid information to help guide future research. Thus, this proposed research study is important to a myriad of individuals, organizations, and investments, and will be a valuable contribution to the body of literature on distance education.

Benefits to students. There are many postsecondary educational choices available to students. Therefore, if this study was implemented, the results have the potential to help students make more informed choices about the appropriateness of distance education for themselves. This will result in more success for the student and a higher regard for the program and the institution that offered the program. Further, the results will also benefit students, as the faculty will learn the needs and preferences of

distance education students. This learning will potentially facilitate student learning, satisfaction, and success.

Benefits to faculty. Should this study be implemented, there may be several benefits for faculty. For instance, it is anticipated that the results of this study would assist faculty in deciding whether distance education paradigms are appropriate teaching endeavours for them. The results may yield information about what qualities to look for in a program in order to assist faculty in deciding about where and when to instruct distance education paradigms. Further, the results may shine light on the types of skills, time commitments, and personal investment that is required to be involved in distance education so that faculty can adequately prepare themselves through skill development and training.

The results of this study could also assist instructors already involved in distance education paradigms, as these faculty members could advocate for factors that will improve their satisfaction with the programs that they are involved with. Further, instructors would have a better sense of the variables that contribute to student satisfaction in distance education after reviewing the study's results. Finally, the results of the study may also assist instructors when creating their courses, as they will know which factors to incorporate into the courses to ensure that students are more satisfied and successful.

Limitations of the Project

This project has several limitations that are important to consider. These limitations fall into three main categories, including: the background literature support, the survey tools, and proposed sampling and associated protocol.

Background literature support. A noteworthy limitation of this project including the proposed implementation involves the literature support. The literature review is by no means the total of the research that has been conducted with postsecondary students and faculty in distance education. Although the literature review process was extensive, incorporating over 100 research-oriented literary pieces, it is important to recognize that additional literature reviews could reveal other factors that may be influential to the satisfaction of students or faculty in distance education, such as information about the effect of class sizes, gender exclusive learning, and shared teaching on student and faculty satisfaction. Thus, before the study is implemented, another intensive sweep of the research literature should be completed.

Survey tools. A second area that may present as a limitation, if this study was to be implemented, are the survey tools themselves. Firstly, checklists and Likert scales create boundaries for measuring complex variables like attitudes and behaviour (Leedy & Ormrod, 2005). Therefore, these boundaries restrict the responses to those presented as options for responding. In turn, some potentially useful and appropriate information may be lost. To account for this issue, focus group sessions have been recommended. Focus group sessions would supplement and clarify the research results, providing an opportunity for other information to be explored that was not available via the survey tools. However, further discussion of the focus groups is beyond the scope of this project.

Another concern with the surveys is that participants could potentially respond to the survey more than once, as the online survey program and the researchers do not keep track of the participants who have already participated. Responding twice or more,

depending on the total number of responses, could skew the results somewhat.

Additional technological investigation is needed to learn how to prevent this concern.

Further, with regards to the proposed participant pool, another limitation is that this project suggests using former students and faculty, which means that these participants need to answer the questions in the survey tool, at least in some cases, from memory. For example, remembering any technical support they may have received or had access too. Working from memory can potentially introduce some inaccuracies into the results because memory degrades, and often what is reported from memory is a coloured version of actualities being investigated (Leedy & Ormrod, 2005).

The length of the survey may also be considered a serious limitation. Students and faculty may be less likely to participate in the survey because it takes time away from other valuable activities that are important in their lives. Should participants begin the survey and need to stop, they cannot restart where they left off. This means that participants may be dissuaded from beginning again. Thus, the length of the survey may contribute to a lower participant response rate. The pilot study will, hopefully, provide valuable information on the survey length so refinements can be made to ensure a good response rate.

As noted earlier, because it is necessary to conduct a pilot project in order to solidify the structure of the surveys, the implementation of the proposed survey project will be delayed. Although this is not a limitation of the project proposal, it affects the implementation process of the project after it is approved by the Faculty of Education Human Subjects Research Committee.

Finally, the survey tools have not been validated or assessed for reliability. Thus, interpreting and responding to any results of the surveys must occur with great care.

Proposed sampling and associated protocol. In terms of the proposed sampling for implementation of this project, generalizability of the results is a concern. Although the proposed project recommends that the study focuses on students across North America at three different institutions within the same program, educators and researchers will need to be mindful of how they are applying the data to other groups of students, instructors, programs, institutions, and research. Therefore, assuming that the potential results of any implementation of the survey tools apply to any other groups may be a misnomer. Due to the specific attributes of this proposed sampling, the results of a potential project would be more appropriately understood to apply to the participants of the targeted programs.

A second potential limitation in the proposed study would be the possibility of a small number of participants due to registration limitations in the programs, disinterest to participate in the survey, and a lack of time due to the busy schedules of both students and faculty in postsecondary institutions. Thus, a small sample size would limit generalizability.

A final limitation of the proposed sampling is the opportunity for nonstudents to respond to the survey. Due to the protocol stipulation encouraging students to send the survey to others they may know from the program (e.g., snowball effect), it is possible that nonstudents may receive the invitation to participate in error and may, nonetheless, respond to it. This would potentially impact the validity of the results, as the

investigators would have no way, due to the desire to protect the identities of the respondents, of identifying these inaccurate response sets and removing them.

Summary of Strengths and Limitations

Firstly, this project is potentially significant to three main groups of individuals in the learning paradigm: the students, the instructors, and the institutions' administration. Secondly, this research may be important to other educational institutions, investors, and researchers external to the facilities that the participants were from. However, as with most research, there are limitations. By addressing these limitations upfront, future researchers can modify and adapt the survey tools appropriately.

As noted earlier, there is a lack of comprehensive research that measures satisfaction of both students and faculty in distance education. Further, I was unable to find research conducted with distance education participants in a M.C. program in Alberta, Canada. Thus, this project will add new insights into the small but growing body of knowledge regarding student and faculty satisfaction in distance education. The proposed methodology for this study is solid and the ethics application is complete. Thus, the proposed study is ready to be implemented upon receiving permission from the ethics review committee.

Future Recommendations

There are many areas that future researchers can build on with respect to this project. Distance education is a learning paradigm that is expected to continue to be popular; therefore, it is important that researchers continue to examine and understand concepts and ideas related to it. Thus, replication of the results of any part of the

implementation of this study, as well as assessing the reliability and validity of the survey tool, will be important in future research endeavours.

Supplementing the survey tool results with additional techniques, including focus group sessions, will expand the project and the results. Furthermore, replication of this study every 3–5 years, following its initial realization, would be recommended so as to see how implementation of any results affects the satisfaction of students and faculty in the program.

Summary and Conclusion

It is appropriate to suggest that studying student and faculty satisfaction in distance education is an important and worthy research endeavour. Realizing the variables that contribute to student and faculty satisfaction are crucial to developing and improving distanced education paradigms. Identifying and studying these variables will fill gaps in current research and will assist in identifying students and faculty that will be appropriate, successful, and satisfied with their distance education experiences. Further, these variables will be important contributions in development of future quality standards and best practices in distance education programs.

Based on the comprehensive literature review in Chapter 2, it appears that only the tip of the iceberg with regards to distance education programs have been explored in the literature. Thus, this proposed research project is building upon, integrating, and challenging previous research by guiding scholars and professionals in new directions. However, as distance education is adopted by more institutions and accepted more widely as a valuable learning paradigm by students and faculty, more exploration regarding the various facets, challenges, and benefits of distance education are likely to occur. Further,

in the pursuit of developing sustainable, successful, and satisfying paradigms, researchers will continue to study student and faculty satisfaction and motivation and their link with quality standards and best practices. Specifically in Canada, very few studies broach these areas with regards to distance education in postsecondary learning paradigms. Even fewer have examined these variables with respect to counselling and psychology programs. Thus, this research project lends itself to examining an area worthy of study, as demonstrated by the statistics and predictions regarding enrolments in distance education of the future.

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**Appendix A: Influential Factors for Satisfaction in Students and Faculty in
Distance Education**

If you are interested in this study and/or the influential factors listed in this appendix,
please contact Andrea Palmer at acpalmer@shaw.ca.

Appendix B: Flow Chart of Methodology

If you are interested in this study and/or the flow chart of methodology listed in this appendix, please contact Andrea Palmer at acpalmer@shaw.ca.

Appendix C: Student Web-Based Survey (non-piloted version)

If you are interested in this study and/or the student web-based survey listed in this appendix, please contact Andrea Palmer at acpalmer@shaw.ca.

Appendix D: Faculty Web-Based Survey (non-piloted version)

If you are interested in this study and/or the faculty web-based survey listed in this appendix, please contact Andrea Palmer at acpalmer@shaw.ca.

**Appendix E: Application for Ethical Review of Human Research Faculty of
Education**

If you are interested in this study and/or the application for ethical review of human research listed in this appendix, please contact Andrea Palmer at acpalmer@shaw.ca.

Appendix F: Project Invitation Letter/Participant (Adult) Consent Form

If you are interested in this study and/or the project invitation letter and consent form listed in this appendix, please contact Andrea Palmer at acpalmer@shaw.ca.