FACTORS INFLUENCING ALUMNI CONNECTION AND COMMITMENT

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Dedication

To University of Lethbridge alumna Eleanor Smith, a devoted teacher and my sister. Your strength and dedication are inspirational.

Abstract

The purpose of this exploratory, mixed method study was to examine factors in students' university experiences that affected their future alumni engagement with their university. A web-based survey instrument was administered to 1,139 University of Lethbridge bachelor's degree holders who graduated during the University's first 40 years (1967 to 2007). Results indicate that the foundation for alumni engagement is set early in the student experience and is particularly affected by the nature of the relationships the student has with the institution. Alumni who were engaged as students were more likely to become engaged alumni through volunteer or donor activity. The higher alumni rated their satisfaction with factors present in their student experience and alumni relationship, the higher the likelihood that they stayed connected with and demonstrated their commitment to their alma mater. Recommendations for further research and for designing student and alumni engagement strategies are provided.

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Chapter 1. Introduction

Background

Alumni form the largest constituent group at a post-secondary institution, and their commitment and involvement play an important role in a university's success.

Directly and indirectly, alumni have an impact on the image and interests of their alma mater and the post-secondary education system.

Engaged alumni give of their time and resources in various roles, such as volunteer, advocate, advisor, mentor, and donor (Weerts & Ronca, 2007a). Barzun (1968) states, "The individual donor, alumnus or friend, is of course as unpredictable as mankind itself" (p. 156). While alumni associations provide structure around this large social group, it is necessary to understand the uniqueness of each member in order to build or improve strategic relationships that are based on informed inquiry in a changing environment. Scherer (1972) comments, "People themselves are complex creatures, and the social forces they call into being are likewise complex and involved, varied, and changing" (p. 24).

Clearly universities benefit, especially in uncertain economic times, from having supportive alumni who are poised for action. Engaged alumni typically provide a willing corps of volunteers and large base of potential donors. The study explores the alumni relationship – where it begins, how it is shaped over time, and how it can best be cultivated to form a lasting positive connection between alumni and their university.

Long-established American universities appear to have advantages over our younger Canadian universities with regard to the volume of research conducted on the topic of alumni relations and, in particular, studies of alumni donors. Although Alberta's

post-secondary institutions may presume that their alumni hold certain beliefs and attitudes, little is known about the factors that affect the relationships of alumni with their institutions in this province. This study focuses on identifying variables that may influence alumni connection and commitment at a university in Alberta, specifically the University of Lethbridge, which was established in 1967.

Data were gathered through a web-based survey of alumni, in order to learn more about how graduates view their personal and shared education journey and how it has impacted their relationship with the University since graduation. Factors that initiate and promote a sense of community in the university experience were addressed in the survey instrument. As Arensberg and Kimball (1965) claim, "wholeness and inclusiveness" (p.16) distinguish communities from other associations. Sanders (1966) adds that a unique feature of "the community as a social system is the function it performs ... to relate the individual to the larger society, helping to satisfy the needs of each" (p. 51). It seems logical to expect that, if a university is addressing the needs of its students and alumni, then its alumni will be more likely to respond to the needs of their university in the years following graduation. Scherer (1972) notes that the term *community* tends to elicit an affective reaction: "To some, this is a strong yearning to return to a pleasant, less complicated past when most people knew community through personal experience" (p. 2).

The interest in building a community through shared experiences has moved beyond the environment of a typical classroom. Distance learning is growing in popularity as a result of new technology. Brown (2001) comments that the consequences of successful online community building can lead to students' feelings of value,

acceptance, and connection. Rovai (2002) proposes that virtual classrooms have the potential to build and sustain students' sense of community at levels comparable to a traditional campus setting. Since campus communities can be created in both physical locations and virtual environments, the survey was therefore designed to explore the emotional components present in the university experience, regardless of the campus environment, in order to gain an understanding of the impact of certain variables on alumni's sense of belonging and feelings of community responsibility.

Purpose of the Study

The purpose of this study is to determine what factors in the university experience have the most influence on alumni engagement and how a university can better meet the needs and expectations of its students and alumni, and in so doing, position itself for future support from graduates. Alumni demonstrate one of the highest levels of alumni commitment when they become donors to their university. Therefore, variables related to alumni donors and alumni non-donors were tested in order to shed light on the dynamics of alumni engagement.

Significance of the Research

Higher education provides one of the most commonly pursued donor groups — university alumni (Blumenfeld & Sartain, 1974). Considerable information exists about the design and implementation of alumni appeals, but information is sparse regarding predictors and early indicators of a graduate's propensity to give back to Canadian universities. Since competition for philanthropic dollars and government funding is steadily growing, it is even more important for a university to know it can count on support from its graduates.

This study seeks to add to the body of knowledge in the field of alumni relationships, especially in Alberta, where little research has been conducted on the subject of alumni engagement with post-secondary institutions. Of practical significance to Alberta's university advancement professionals, this study's findings present current data collected directly from Alberta university alumni who participated in the survey during a time of significant economic challenges in the province. Universities were facing highly publicized budget cuts, and corporations were eliminating jobs after years of declaring labour shortages.

Alberta's post-secondary institutions are likely to benefit from this examination of alumni attitudes, behaviours, and expectations. An understanding of the factors that affect the engagement of both students and alumni will ultimately help universities and colleges to design and sustain efficient and effective communication plans, affinity programs, and fundraising initiatives that will impact financial results.

Overview

Chapter 2 includes a review of the literature relevant to variables in the experiences of post-secondary students and alumni that have a bearing on the alumni-university relationship. The research design and methods used to collect and analyse data are described in Chapter 3, with research results reported in Chapter 4. Finally, Chapter 5 presents a discussion of results, implications, and recommendations for further research.

Chapter 2. Literature Review

Introduction

Building a strong and reliable base of alumni support requires a strategy that ensures alumni know their role and feel needed, valued, and respected. Developing such a strategy requires an understanding of the earliest and most recent interactions that affect the alumni-university relationship and establish a sense of responsibility on both sides.

A review of the literature identified themes and categorized major variables — demographic, social and academic — that appear to be primary indicators of future alumni support and appear to have the most impact on the transitioning of a student to an engaged alumnus. An exploration of the education experience and its relationship to the motivation of alumni sets the framework for the research and provides insight on predictors of the behaviour of future alumni: why they form or do not form a bond with their alma mater, and how they define their relationship with their university community.

Scherer (1972) states, "To understand community, as well as all social life, we attempt to grasp the relationships between factors – between the concept of community and size, and of place and time" (p. 3). She adds, "Members of a community are committed to the community to the extent of identifying directly or indirectly with the whole, and by having shared rather than functional social bonds with others" (p. 123).

An institution-alumni relationship is formed by a complicated network of formal and informal associations and emotions that are rooted in the earliest experiences and the latest transactions. From the literature reviewed, factors have been identified that may have an impact on alumni connection and commitment. The following sections provide a

review of theories related to motivation, variables present in the university experience, and strategies that may encourage alumni to engage.

Theorists

An examination of variables that influence alumni engagement would be incomplete without considering basic motivation theory. Kotler and Armstrong (1993) state, "A motivated person is ready to act. How the person acts is influenced by his or her perception of the situation" (p. 137). Maslow (1943) noted that any motivated behaviour "must be understood to be a channel through which any basic needs may be simultaneously expressed or satisfied" (p. 370). The five-stage model of Maslow's Hierarchy of Needs seeks to explain how people are driven by particular needs at certain times: biological and physiological needs, safety needs, belongingness and love needs, esteem needs, and finally, self-actualisation needs. As Maslow notes, "The appearance of one need usually rests on the prior satisfaction of another, more pre-potent need" (p. 370). Alumni engagement would occur at the level of "belongingness and love needs," since positive alumni relationships share the same characteristics: a sense of belonging, a feeling of inclusion, group relationships, and social connections.

Brugha (1998) argues that Maslow's "belonging and love needs" could be logically separated into two groups, social needs and cultural needs. This approach considers the psychic aspects of love in relationship to social needs and a person's self point of view, and the psychic aspects of esteem in relationship to cultural needs and the perceptions passed on to others. Whether separated or combined, the social and cultural aspects are present in an alumni relationship – the self point of view and perceptions an

alumnus would want to pass on to others – and both would influence an individual's decision to connect.

Erikson's Theory of Human Development (described in Huyck & Hoyer, 1982) is also relevant here. Erikson described human development in terms of eight stages, each representing an essential ego challenge that an individual must successfully resolve. Of particular relevance in this discussion is Erikson's seventh ego challenge, generativity versus stagnation, which occurs in middle adulthood, typically given an age range of 40 to 65:

Generativity versus Stagnation: The next challenge for the mature ego is to establish a sense of generativity and overcome stagnation, a challenge often associated with middle age. Generativity involves a deeper concern for the welfare of future generations and a willingness to work with the younger adults who will inherit leadership. This concern is based on appreciation of the uniqueness and rights of others. (p. 215)

Given this description, it may be useful to compare the seventh ego challenge to the profile of major donors, who represent an important segment of the alumni population. Major donors tend to be middle-aged, and they tend to have successful careers, financial means, grown children, and an increased sense of social responsibility. The shared characteristics of the seventh ego challenge and the alumni donor profile may suggest ways in which a university could identify prospective major donors. With relationship management and cultivation, the resulting alumni engagement may ultimately transition to major gift support. The description of generativity supports the philanthropic advantages of building ties between middle-aged alumni and their university, ties which may ultimately put alumni in direct and indirect contact with future leaders – today's students.

The age and life stage of alumni have not received much attention in the literature reviewed. However, in a study by Feldman and Newcomb (1994), one significant finding emerged: more mature students experienced less change in their values and characteristics, but attending college did affect their world view. Consequently, it would be important for universities to establish the link to mature students by factoring in their age, rather than their year of graduation, when engaging them in alumni activity, given where they are in terms of Erikson's life stages.

Bickhard (1980) outlines a theory on developmental normativity and normative development. Development occurs "within the constraint and framework of a hierarchy of interactive representational levels" (p. 75). Bickhard points out that the "problem with motivation is often construed as the problem of what makes the system do something rather than nothing" (p. 66). He argues that living systems are intrinsically engaged in interactions in order to survive. However, the issue is not whether something will be done, but "what determines what will be engaged in next" (p. 72). This supports the need for a university to design solid engagement programs, so that alumni will have a clear message about what their university needs or expects from them.

In summary, there are always a reason, a cause, and a sense of purpose behind a person's actions. Alumni motivations can be explored in relationship to Maslow's (1943) Theory of Human Motivation, Erikson's Theory of Human Development (explained in Huyck & Hoyer, 1982), and Bickhard's (1980) work on developmental normativity and normative development. Maslow explains the "why," Erikson predicts the "when," and Bickhard (1980) emphasizes the importance of the "what."

The Student Experience

To understand alumni engagement, it is important to explore its origins in the student experience. Feldman and Newcomb (1994) reviewed and integrated over 1,500 studies about the impact of college on students. Taken together, the findings of these studies summarize the attitudes and characteristics of American college students before, during, and after their attendance at college. A broad range of variables was considered, including age, entrance method, accommodations, degree and choice of major, and, importantly, first impression of the campus environment. Feldman and Newcomb's synthesis of the studies supports the assumption that a complex web of connections, beginning with the first interactions with a university or college, will shape a student's perceptions and influence attitudes and behaviours throughout stages in the lifecycle of the student-alumni-university relationship.

The first formal point of contact for a potential student is typically the recruiting and admissions process, which has the power to engage a future alumnus and to form a lifelong, mutually beneficial bond. At this stage, the potential student is judging the university to determine its fit for the pending education partnership. At the same time, through its admissions policy, the university is judging the potential student. Baade and Sundberg (1996) comment:

Admissions policy is obviously a crucial determinant of future alumni generosity, since today's students become tomorrow's alumni... The quality of the experience, as measured by the quality of the student body and instructional spending per student, correlates positively with alumni generosity. The experience students have will influence their attitudes toward the institution as alumni. (p. 80)

Weerts and Ronca (2007a) studied a sample of graduates who were active in an alumni association. By relating the age, employment, and student engagement variables,

Weerts and Ronca found that student engagement was a significant predictor of alumni volunteering, further supporting the assumption that today's student experiences predict tomorrow's alumni involvement. Dugan, Mullin, and Siegfried (2000) tested five explanatory variables: financial aid, socio-demographic, college experience, post-college environmental, and charitable behaviour. They concluded that the college experience variable had the most consistent substantial effects on the likelihood of future alumni donations:

It is clear that students' willingness to contribute to their alma mater is affected by their undergraduate experiences. Decisions regarding Greek organizations, athletics, grading policies, and efforts to keep students on track to graduate with their entering class all bear, to one degree or another, on the likelihood that students will continue to support their college or university after they graduate. (p. 16)

Pumerantz (2005) states, "The experience that students have is critical to the development of their future intention for giving back to their alma mater. Positive experiences increase the probability of giving as alumni" (p. 290). Using existing data from 83 universities to test student relationship variables, Pumerantz found that the single most important theme to emerge and "the most common response from any position-group or institution" (p. 292) was the students' experience. Pumerantz suggests creating an environment that considers students as "alumni-in-training." The more positive the student experience, the higher the probability that a student will become an engaged alumnus: "Happy students make happy alumni ... [and] happy alumni become happy donors" (p. 290). Although the notion of considering students "alumni-in-training" is not new to higher education, universities have not yet fully embraced it to their advantage.

Social System Variables That Impact the Alumni Relationship

Living in Residence

Living in residence was included as a social system variable in many research studies (Feldman & Newcomb, 1994; Pascarella & Terenzini, 2005; Weerts & Ronca 2007a), and in most cases it pointed to increased social involvement, the formation of stronger emotional ties, and higher levels of alumni engagement. The evidence on the impact of living in residence on alumni engagement is varied. Miller and Casebeer (1990) found that alumni donors were less rather than more likely to have lived in residence on campus. Pascarella and Terenzini (2005) found that where students live has no appreciable net impact, although they note their earlier finding in 1991 that living on campus is the single most consistent determinant of the impact of college on a student.

Further study would be required to determine the long-term relationship between having lived in residence and level of engagement of alumni. Changes in residency rules have taken place over the decades, such as the requirement for freshman to live in residence, the introduction of co-ed dorms, and the shift from restricted to unrestricted hours. All may have an impact on the student experience and thus would require further examination. However, it seems reasonable to assume that living in residence does present more opportunities for students to interact with each other and form social groups, and it appears to provide a useful construct for examining alumni interactions later.

Peer Groups

Individual students are powerfully influenced by their peers, who either reinforce or weaken their existing attitudes. Friends tend to reinforce the attitudes and values they

share. Feldman and Newcomb (1994) provided perspectives on the accentuation effect; that is, differences among students can be accentuated, showing that their early positive or negative opinions of all kinds can grow, expand, and be reinforced at all stages during the education experience. Feldman and Newcomb state, "A student's sets of friends can be important in reinforcing certain of his values and attitudes, as well as in bringing about changes in these values and attitudes" (p. 243). Consequently, the effects of negative or positive student experiences could be perpetuated within student groups.

Emotional Ties

Sentimentalism, one of the most distinctive features of a social relationship, develops out of the retaining of emotional ties and the reliving of shared histories (Mael & Ashforth, 1990). Sentimentalism creates a sense of uniqueness, a sense of intimacy, and a sense of consecration, all of which are directly applicable to alumni relationships. Individuals feel the specialness of the relationship and a certain exclusivity through a shared history or common goal (McCall, McCall, Denzin, Suttles, & Kurth, 1970). According to McCall et al., "Ascription, commitment, attachment, investment, and reward dependability are the social psychological glue that cements individuals into the units we know as social relationships" (p. 9). Sentimentalism could also therefore be an outcome of a peer group experience, social or academic.

Taylor and Martin (1995) included "emotional attachment to the university" as an alumni engagement attitudinal variable, along with satisfaction with educational experience, recommending the university to others, satisfaction with preparation for first job after graduation, and perceived need for financial support. The data were not provided to show where the emotional attachment variable ranked; however, it ranked

below the perceived need for financial support variable, which was determined to be the dominant distinguishing factor between alumni donors and alumni non-donors. Results from a study by Liu (2007) suggest that emotional ties to the institution are the strongest motivator for donors and that alumni are less motivated by the educational benefits for society.

Academic System Variables That Impact the Alumni Relationship

Scanzoni (2005) argues that there is a social contract obligating a university or college to provide a quality education to its students and to serve society by addressing urgent social issues. Citing a lack of vision by many post-secondary institutions, the author argues the need to shift from a teaching or instructional paradigm to a learning paradigm in order to improve the overall student experience.

Gaier (2005) demonstrated that the probability of alumni giving to the university was linked to a specific level of satisfaction with the academic system. Gaier's results indicated that the undergraduate academic experience has a significant relationship to alumni's later philanthropy and other involvement with the university. The higher the satisfaction score, the higher the likelihood of alumni support, either financially or through other types of participation. The academic system variables were listed as core/general education requirements, coursework in major, freshman advising, advising in the major, quality of faculty, career counselling/placement, amount of contact with faculty, commitment of faculty to teaching, quality of instruction in non-major courses, quality of instruction in major courses, availability of required courses, variety of course offerings, access to academic support system, integration of general education and major, library collection, relationship with faculty and staff, and level of satisfaction with

undergraduate academic experience. The list of variables used in Gaier's study was one of the most comprehensive groupings of academic variables, compared with those reviewed in other studies on alumni participation.

The nature of the teaching and learning experience can play a significant role in alumni connection. Weerts and Ronca (2007a) noted, "Institutions that focus on teaching and learning are essentially 'growing their own volunteers' by exposing them to high quality academic experiences" (p. 289). Student engagement surfaced as a significant predictor of alumni volunteering, suggesting that institutions that focus on building high quality academic programs may also be strengthening their alumni program many years later:

Above all, campus administrators must be aware that student experiences on campus today play a role in predicting alumni support for tomorrow. As social exchange theory espouses, feelings about the quality of education received are weighed against the costs of time and political/social capital expended in serving one's alma mater. In short, providing a high quality educational experience is critical to garnering future support from future alumni. (p. 289)

Miller and Casebeer (1990) also support this point, reporting that "Alumni donors had self-reported ... that they are highly satisfied with the education received" (p. 3).

Organizational Identification

Shadoian (1989) comments, "Alumni giving is the single most important index of esteem in which the institution is held by a key group of individuals" (p. 1). Alumni identify with their university through their perceptions of its distinctiveness, prestige, quality, and competitive excellence, visible through the attraction of prominent faculty, presence of high profile research, roster of honorary degree recipients, and accomplishments of students and alumni. As defined by Mael and Ashforth (1990), organizational identification is the "perception of oneness with or belongingness to an

organization where the individual defines him or herself at least partly in terms of their organizational membership" (p. 104).

Mael and Ashforth's (1990) research on alumni's identification with their alma mater indicates that the stronger an individual's identification with the organization is, the more likely he or she is to provide support. Their results indicated links between alumni's attitudes and sense of involvement. One finding was that the higher the alumnus rated the college's distinctiveness and prestige variables, the more closely he or she identified with the alma mater; this in turn generated or strengthened a connection, such as interest in sending a child to the same college. According to Michener and Suchner (1972), "A person must feel publicly committed to, or identified with, his actions before a low level of inducement produces large changes in value consistent with the actions" (p. 264).

Organizational identification is also affected by what Schlenker (1980) calls the Association Principle: the relationship between the person and the image, and the way in which people shape information about themselves that will help them make a good impression. People use acclaiming tactics in order to appear responsible for a desirable event, which in turn can maximize the desirability of the event. Schlenker explains:

Two derivations of the association principle are worth noting... First, people want to maximize the association between themselves and desirable images and minimize the association between themselves and undesirable images. This tendency should be greater as the undesirability of the image increases. Second, people want to maximize the attractiveness and minimize the unattractiveness of images with which they are already associated. (p. 106)

In philanthropy, for example, a person contributing to a charity may prefer the audience to credit the action to the donor's belief in the cause as the only motive. The less favourable perception would be for the audience to attribute the action to the donor's response to solicitor pressure, financial ability to contribute, or desire for recognition.

Schlenker (1980) also gives examples of what he calls "basking in reflected glory" (BIRG), explaining how the BIRG effect influences people to claim individual success based on the individual's association with successful institutions or events. In working to control the image presented to others, individuals align with people, organizations, events, and accomplishments that have the potential to lead to an increase in the individual's own personal status. The BIRG effect is therefore present in alumninistitution relationships. When alumni feel more pride in their alma mater, they align with their university's success in order to elevate their own level of personal success. It would therefore follow that, as alumni pride grows, their feeling of responsibility to their university community would grow as well.

Since alumni want to be associated with the accomplishments of their alma mater, it is imperative that institutions communicate these successes. Regular communication is strategic in building a strong positive relationship with alumni. When they know where their university is going and how it plans to get there, alumni tend to feel more invested in the journey and more responsive to requests. An institution's vision and accomplishments, effectively shared with students and alumni, can impact alumni giving. Without knowledge of a university's accomplishments or needs, alumni have no point of reference for connecting through organizational identification or for responding with a show of support. Pumerantz (2005) explains, "The ability of an institution to effectively communicate this vision and, hence, successfully sell the vision to the alumni and students is critical to establishing a platform upon which greater levels of alumni giving

can become possible" (p. 292). Pumerantz's research revealed "the need for staying connected, and doing so on a regular basis, ... understanding what is unique, or special, about an institution, and using that knowledge in a significant way in the communications effort" (p. 291).

Interactions with Faculty and Staff

Satisfactory interactions with faculty and staff are critical to students' positive academic experience. Gaier (2005) found that the variables related to academic work (e.g., coursework in major) had the strongest relationship to future philanthropy, and the variables associated with academic interactions and interpersonal relationships (e.g., relationships with faculty and staff) were more closely connected to nonfinancial support. These findings appear both to support and to contradict the assumptions that the academic system variables result in higher philanthropic support and that the social system variables result in higher volunteer support. However, it is important to consider that students' interactions with faculty and staff are both academic and social, which clearly shows the interrelationship of both systems of variables. Pumerantz (2005) concludes, "Ultimately, it is the experiences the alumni had while they were students and the connections with faculty and staff that have the greatest impact on alumni giving" (p. 292). It could be argued that it is not the experiences but the student's perceptions of the experiences that would have the greatest impact. It would further depend on which system of variables, or interactions between the systems, were most important to that student.

Pascarella and Terenzini (2005) examined career-related variables, such as career-relevant skills, career choice, and occupational status, and explored the net impact of

various types of student interaction with faculty on the dimensions of career development and career attainment. Their findings indicated that the quality of an institution's faculty not only impacts students' and alumni's identification with an institution, but also influences students' careers after graduation.

Career Success

A university education cannot guarantee a graduate's career success, but holding a baccalaureate degree does impact a graduate's access to career opportunities. Pascarella and Terenzini (2005) state, "Educational attainment may not be an educational outcome in and of itself, but education clearly has a powerful influence on a student's future occupational, social, and economic status as well as on other factors that affect quality of life" (p. 436). Tsao and Coll (2005) showed that "three demographic variables (personal income, population of the community where the alumni work, and primary job duties) are significantly associated with alumni giving" (p. 391). These variables were found to impact not only alumni's financial capacity to give, but also their level of career satisfaction, which affects attitudes about the education experience.

Pike (1994) explored the correlation between alumni's satisfaction with their job and their satisfaction with their university experience. In 1988, as part of a regular campus assessment study at the University of Tennessee, 100% of the seniors completed a survey concerning their satisfaction with college. Two years later, a survey containing many of the same items was sent to the same individuals, who were now alumni. Just over 50% responded. The data were analyzed for the 828 respondents who completed both the senior and alumni surveys and were employed full-time at the time of completing the alumni survey. Most had high levels of satisfaction with both their

education experience and their career. Individuals who were not satisfied with their career rated their education experience lower than they had rated it on the earlier survey. Pike concluded that alumni who are satisfied with their careers are more likely to report satisfaction with their education experiences. These findings reinforce the importance of guiding students on educational paths that will lead to fulfilling careers. Clearly alumni's level of career satisfaction affects their level of satisfaction with their student experience, which has a bearing on future giving.

Pike's (1994) study also includes data on how gender issues factor into job satisfaction; for example, women were less satisfied with their pay and men were more satisfied with their pay, but women showed fewer extremes than men when rating their overall job satisfaction. Therefore, if university experience satisfaction levels are affected by job satisfaction levels, gender issues would need to be considered in the design of future research.

Awards

In the early and mid-1900s, scholarships emerged as a favourite gift for alumni contributions (Curti & Nash, 1965). Bursaries, scholarships, and other awards remain a popular choice in philanthropic gifts today. Research findings point to the long-term reciprocal value of student scholarship support and the likelihood that scholarship recipients will be future donors.

Dugan et al. (2000) found that, "Students who receive small merit scholarships contribute more as alumni than students who receive either no merit scholarship or a large merit scholarship" (p. 1). Recipients of academic honour scholarships usually contribute larger gifts. Weerts and Ronca (2007b) support these findings, noting that

"Need-based loans recipients gave less to the institution, while alumni donors who had an academic scholarship while in college increased their gift size" (p. 20). It would therefore be worthwhile financially for a university to study the value of designing student scholarships and award programs based on academic merit.

Although Znaniecki (1965) makes no direct reference to university alumni donor relationships, the described social dynamic supports the concept that an alumni donor may be the end result of a student scholarship recipient's feeling of reciprocity. Znaniecki describes the search for specific social relations in a community: each new member is aware of the potential to discover long-lasting social relationships by offering, exchanging, or performing specific actions for common purposes. An important component of a social system is "mutual aid by gifts," the chief purpose of which is "to help the other partner satisfy his needs, whenever he lacks the means necessary for their satisfaction" (p. 141). Offering gifts solidifies a relationship, and there is an expectation of reciprocity. Therefore, successful student award programs can lay the foundation for future philanthropic support from award recipients.

Motivating Alumni to Give

A message still used today was documented in a "call to action" by William Graham Sumner, an incoming student at Yale, in 1870:

No graduate of a college has ever paid in full what it cost the college to educate him. A part of the expense was borne by the funds given by former benefactors of the institution. A great many men can never pay the debt... There is a very large number who can, and would, cheerfully, give according to their ability in order that the college might hold the same relative position to future generations which it held to their own. The sense of gratitude, the sense of responsibility, the enlightened interest in the cause of education, which are felt by these men, constitute a resource which has never yet been tried, but which would yield richly. (quoted in Curti & Nash, 1965, p. 187)

Motivations for giving are as varied as the individual donors; however, research studies point to major themes and theories. Bruggink and Siddiqui (1995), after reviewing the literature on charitable giving, suggest that altruism, reciprocity, and direct benefits are the three primary motivations. Altruism, as a motivator, is driven by alumni's sense of obligation to give back, reinforced by a university's fundraising requests for support. Furthermore, students' understanding of the role of donors in the success of the institution builds in a sense of reciprocity and the understanding that someday, as alumni, they too will be expected to give back. With regard to direct benefit, there are advantages for alumni of ensuring that their alma mater maintains or improves its reputation and recognition. One benefit is that enhanced prestige associated with the university also enhances the value of the recipient's degree. Other advantages may include alumni donor recognition or alumni honorary distinction. Therefore, the motivation of direct benefit ties directly to the academic system variable of organizational identification.

Sallot (1996) described a range of motivations for giving, including "loyalty to the university/college, a good experience as a student, a good career experience as a result of being a university/college graduate, recognition of the need for funds, pride in the quest for excellence, and gratitude" (p. 56). In Diamond and Kashyap's (1997) study of alumni contributors, the predictor variables or motivations were feelings of reciprocity, individual attachment to the university, perceived need of the university, and perceived efficacy of contribution. The results indicated that reciprocity and individual attachment increase alumni's sense of obligation, with attachment being the stronger factor. Matheny (1999) narrowed to two the motivational factors affecting major gift decisions:

The first factor, strong identification with the institution, is typically built over several years and is the result of carefully planned cultivation. During this time

the donor becomes aware of the mission and priority needs of the institution. Gradually the focus of the donor narrows from general institutional needs to specific programmatic or facility needs.... The second factor, close involvement with an individual associated with the institution, encompasses highly personal factors and relationships rather than identification with the institution itself. (p. 48)

Strategies for Increasing Alumni Donations

Two specific examples of strategies that could motivate alumni to engage in philanthropy are matching donation programs and reunion activities. Both create opportunities for institutions to reach out to alumni and solicit their support.

Matching programs. Matching programs can motivate potential donors to give and existing donors to give more. Employer matching initiatives are typically designed to encourage employee philanthropy and elevate an organization's community investment profile. Harbaugh (1998) comments that the practice of matching employee donations seems "difficult to explain without assuming prestige is important... If the prestige from a donation spills over to the firm, or to the other employees of the firm, matching donations are an obvious means of internalizing the externality" (p. 282).

Government matching programs factor into donor support at post-secondary institutions. A current example is the Government of Alberta's Access to the Future Fund, which was introduced in 2005 to support "innovation and excellence within Alberta's advanced learning system in order to enhance and expand accessible, affordable and high quality learning opportunities" (Government of Alberta, 2009). The University of Lethbridge (2008) acknowledged in its annual report to donors that an "additional \$9 million in matching funds from the Government of Alberta's Access to the Future Fund" was leveraged as a result of donor support, including gifts received from alumni.

Reunions. Reunions create opportunities for alumni to reconnect with each other, to network, and to reminisce, drawing on the emotions and sentimentalism of the earlier student experience. Some reunion attendees may be more interested in seeing their former classmates and professors than they are in increasing their personal involvement with their alma mater; however, a reunion can create an environment that evokes emotions, which may motivate alumni to consider making a gift in the future.

Although considerable costs are involved in hosting reunion events, the philanthropic benefit can be substantial. Wunnava and Lauze (2001) studied the alumni donors of a small private liberal arts college and determined that "Reunions ... are a time of increased giving for consistent and occasional donors alike" (p. 538). In their study, the level of alumni donations increased by 14.7% during reunion years and by 137% in milestone anniversary reunion years. When the "total reunion effect" (p. 538) was considered, giving by current alumni donors increased by 172% as a result of the institution hosting a major reunion.

Willemain, Goyal, Van Deven, and Thukral (1994) analyzed 50 years of inflation-adjusted data from Princeton University's annual giving plan. They found that dollars per giver were significantly larger in reunion years. In addition, they comment that, while five-year reunions have "small but noticeable effects..., participation builds up steadily until reaching a plateau at about the 50th reunion" (p. 623).

Diamond and Kashyap (1997) concluded from their study that, "Graduates who feel successful are more likely to believe that the University taught them things which have been important in their personal and professional lives. Successful graduates are more likely to attend reunions" (p. 923). Alumni want to share their success stories at

reunions and well beyond the reunion environment. University communications plans and alumni relations initiatives that recognize and publicize alumni achievements have the potential to build future support.

Criteria Used to Define an Alumnus

Mael and Ashforth (1990) point out that educational institutions vary in the criteria they use to define an alumnus. They note the following historic description: "The institution follows the century-old convention of including as alumni all who attended the institution ... regardless of whether they received degrees" (p. 110). Some universities define an alumnus as a graduate who has successfully attained a diploma, degree, or honorary degree designation. Other institutions set aggregate credit thresholds, while still others include any student who has completed a minimum of one graded course. Some studies simply refer to *alumni*, without clarifying whether the term refers to degree-holding graduates.

It is relevant to note that the varying criteria used to define alumni would be a factor in comparison of data between universities, unless the universities use the same criteria to define their alumni group. In instances where researchers have not clearly defined alumni as graduates, the research results would not be directly applicable to another university that defines its alumni group differently. Since first impressions and bonds are formed early in the student experience, and those connections can be cultivated for future philanthropic support, a university might be losing the connection with a potentially highly supportive group simply as a result of its definition of alumni. If students begin their post-secondary education at one university and, in pursuit of a specific degree offered elsewhere, transfer to another before graduating, their first

university would lose the student-university relationship, depending on the criteria in use for designation of alumni. This point is significant with regard to alumni giving. The emotional ties formed during a student's first post-secondary experience are typically the strongest, and feeling valued by the first university would factor into the former student's choice regarding potential future support for the university.

Rationale for Current Study

Today's students are tomorrow's alumni and future university supporters.

Successful alumni relationships begin during the student experience, and a university has many opportunities to influence the bond in a manner that will help new graduates understand any future expectations the institution may have for them. It stands to reason then that alumni have expectations of their university as well, and an effective way to gather that information would be to ask alumni directly.

Giving takes both monetary and non-monetary forms. Both are equally valuable to a university, and both require a solid understanding of alumni constituents in order to attract the appropriate responses. Alumni at all ages and life stages have much to offer their alma mater, and it is vital to understand what distinguishing characteristics and factors will prompt the ideal actions or reactions a university is seeking.

Alumni relationships require investments by students, alumni, and the university.

As McCall et al. (1970) explain, social relationships of any significant duration will form bonds, structures, and an emergent culture:

Investment is a ubiquitous and powerful bond between persons. When someone has expended such scarce resources as money, time, and life chances in establishing and maintaining a relationship, he cannot afford to throw them away without realizing substantial returns. (p. 8)

Given the competitive nature of philanthropy and the high costs associated with post-secondary education, universities can benefit in many ways by working to establish stronger lifelong partnerships with alumni. The anticipated outcome would be a significant increase in alumni involvement in various capacities. Strategic direction of efforts and resources to build good relationships at all levels has the potential to pay off in future support. However, the starting point is to understand what motivates alumni to stay connected in the first place.

Both social and academic system variables factor into the interactions that form mutually beneficial relationships. Although some studies point to one variable or system of variables being more dominant than another, the social system and academic system variables impact each other, and clearly they impact the student experience. Whether motivation is tied to a matched interest, loyalty, sense of responsibility, logical need, passion, prestige, or values, the reviewed literature indicates that alumni giving is strongly tied to the student experience and related to many factors and variables.

The literature reviewed provides a framework for structuring demographic, student, and alumni variables in separate, although interrelated, categories. These variables should be tested to determine which ones present in the student experience would have the strongest influence on future alumni engagement in Alberta's post-secondary institutions. However, the central question in this study is the following: What factors in the student experience and alumni relationship influence alumni connection and commitment? Chapter 3 details the methodology used to address this question.

Chapter 3. Methods

Introduction

Factors present in the university experience that may influence alumni engagement were examined in order to identify the strongest indicators of alumni connection and commitment. This chapter details the methods used to design and complete the study, including the research questions, research design, data collection, population, instrument, and analysis of data.

Research Questions

The research was guided by the following central question: What factors in the student experience and alumni relationship influence alumni connection and commitment? This global research question was addressed by posing the following sub-questions:

Part A. Description of Respondents

- 1. What are the general characteristics of the survey participants?
- 2. How do alumni rate their satisfaction with their student experience?
- 3. How do alumni rate their satisfaction with their alumni relationship?

Part B. Factors Affecting Connection

- 4. How frequently and in what ways have alumni stayed connected to their alma mater since graduation?
- 5. What factors have influenced or might influence alumni's decision to stay connected with their alma mater?

Part C. Factors Affecting Commitment

- 6. How frequently and in what ways have alumni demonstrated their commitment to their alma mater through volunteering or donating?
- 7. What factors have influenced or might influence alumni's decision to give back to their alma mater?

Part D. Comparisons Between Volunteer and Non-Volunteer Groups

- 8. Is there a significant relationship between student engagement variables and alumni volunteer status?
- 9. What demographic, student experience, and alumni relationship motivation variables have the most impact on alumni volunteer status?

Part E. Comparisons Between Donor and Non-Donor Groups

- 10. Is there a significant relationship between alumni organizational identification variables and alumni donor status?
- 11. Does specific financial support or academic recognition (e.g., scholarships, bursaries or academic awards of distinction) received as a student impact an alumnus' inclination to donate to the university?
- 12. What demographic, student experience, and alumni relationship motivation variables have the most impact on alumni donor status?

Research Design

To answer the research questions, the study used a mixed method design, incorporating quantitative and qualitative methodologies. The use of a survey instrument allowed examination of data obtained at a single point in time.

The assumption was made that the foundation for alumni engagement is set during students' early experiences at a university and can be influenced by a university at many points throughout the alumni-university relationship. Data related to alumni's satisfaction with their student experience at the University were collected through a survey instrument using a 4-point forced-choice scale (very dissatisfied, dissatisfied, satisfied, and very satisfied). An even number of points was used in order to avoid the tendency of participants to select a mid-point (Cohen, Manion, & Morrison, 2007), such as "neither dissatisfied nor satisfied." A 5-point Likert scale (extremely poor, below average, average, above average, excellent) was used to collect data related to alumni's rating of variables connected to organizational identification, such as the University's reputation, distinctiveness, and prestige.

Variables

The variables were grouped into three categories: demographic, student experience, and alumni relationship. Demographic variables (see Table 1) included age, gender, entrance method to the University of Lethbridge, student residence, degree(s) and factors present in the alumnus' life that may affect the willingness to connect with or commit to the University. These factors included the alumnus' current geographic location, population size of the community where the alumnus works, satisfaction with the alumnus' career, employment opportunities, primary job responsibilities, and household income.

Table 1. Demographic Variables

Type	Variable
General	Age
	Gender
	Entrance method
	Student residence
	Year of completing first University of Lethbridge undergraduate course
	Year of completing first University of Lethbridge undergraduate degree
	University of Lethbridge bachelor's degree
	Additional bachelor's or advanced degree(s) at any university
	Current residence
Career-related	Population of current community where alumnus works
	Extent University of Lethbridge bachelor's degree prepared alumnus for
	chosen career
	Satisfaction with career
	Satisfaction with employment opportunities
	Satisfaction with primary job responsibilities
	Satisfaction with household income

Variables related to the student experience (see Table 2) included those that all students would typically have experienced (admissions process, courses, quality of instruction, relationships with faculty and staff) and those that students may have experienced (recruiting, advising, student support services, student clubs and volunteer

activities, athletics and extracurricular programs, student leadership, and student awards).

Additional student experience variables included respondents' awareness of and interaction with alumni, volunteers, and donors while the graduate was a student.

Respondents were also asked to rate their overall level of satisfaction with their

University of Lethbridge undergraduate academic experience.

Table 2. Student Experience Variables

Туре	Variable
Student support services and	Admissions process
academic experience	Variety of course offerings
	Availability of required courses
	Quality of instruction in courses
	Relationship with faculty
	Relationship with staff
	Recruiting process
	First year advising
	Advising in major
	Career services
	Counselling or other student support services
	Overall level of satisfaction with University of
	Lethbridge undergraduate academic experience
Student financial support	Scholarship
	Bursary
	Academic recognition

Type	Variable
Student engagement	Student clubs
	Volunteer projects
	Pronghorn athletics
	Intramural athletics
	Extracurricular Fine Arts programs
	Non-credit classes
	Other organized student activities
	University of Lethbridge Students' Union leadership
	Awareness of role of University of Lethbridge alumni,
	volunteers and donors
	Opportunities to interact with University of Lethbridge
	alumni, volunteers and donors

Alumni engagement was examined in relationship to the variables present in the alumni relationship that create opportunities for alumni to feel a connection to their university and to demonstrate their support (see Table 3). Alumni connection was identified through interactions with the university and factors that have influenced or might influence an alumnus to stay in touch. Connection variables included those related to events, communications, bonds, and motivating factors that might influence alumni to make a commitment to their alma mater. Alumni commitment was determined through aspects of support or intended support, both non-monetary and monetary, such as

volunteering or donating. Alumni were also asked to rate their overall level of satisfaction with regard to their alumni relationship with the University of Lethbridge.

Table 3. Alumni Relationship Variables

Type	Variable
Connection	Attending University of Lethbridge events
	Attending University of Lethbridge alumni-related events
	Networking with other University of Lethbridge alumni
	Staying in touch with University of Lethbridge faculty or staff
	Serving on Board of Governors, Senate, Advisory Board, or University
	committee
	Volunteering for Alumni Association or alumni-related activity
	Donating to the University of Lethbridge
	Friendships with other University of Lethbridge alumni
	Business relationships with other University of Lethbridge alumni
	Emotional ties
	Reunion events on Lethbridge campus
	Reunion events in alumnus' own community
	Alumni gatherings on Lethbridge campus
	Alumni gatherings in alumnus' own community
	Social networking web sites
	University of Lethbridge's web-based or emailed updates
	University of Lethbridge's mailed publications
Motivation	Appreciation for University of Lethbridge degree

Туре	Variable			
	Appreciation for relationships with faculty			
	Gratitude for financial support received as a student			
	Desire to support students			
	Desire to support research			
	Awareness of University of Lethbridge's needs for financial support			
	Matching programs through alumnus' employer or professional			
	association			
	Matching programs through government funding			
	Recognition by the University of Lethbridge for alumnus' contribution			
	Overall level of satisfaction with alumni relationship with University of			
	Lethbridge			
	Organizational Identification:			
	Reputation			
	Distinctiveness			
	Prestige			
	Quality of programs			
	Contributions to research			
	Competitive excellence when compared to other universities			
	Accomplishments of students			
	Accomplishments of alumni			
Commitment	Volunteer status			
	Donor status			

Institutional Approval

Before the study began, the research plan was approved by the University of Lethbridge Faculty of Education's Human Subject Research Committee. Written permission was obtained from the University's Vice President (Advancement) with regard to accessing alumni data, University Advancement staff, and technical resources required to conduct the study.

Data Collection

Data were collected through a web-based survey instrument (see Appendix A) designed by the researcher to capture data from University of Lethbridge alumni with regard to their university experience. The instrument will be described in more detail. The data were collected, aggregated, and stored electronically on a secure server until released to the researcher in a format compatible with SPSS (Statistical Package for the Social Sciences) data analysis.

Population

Participant Selection

Participants were recruited through an emailed request (see Appendix B) facilitated by the University Advancement office of the University of Lethbridge and delivered through Campaign Monitor software, a web application used to deliver batch email messages. The software allows the sender to monitor activity related to the email, such as the number of unique recipients who have opened the email, the number of clicks registered on a link in the email, the time of day the email was opened, and other statistical data that would help the sender determine the effectiveness of the emailed message. Since valid email contact information in the University's alumni database was

required, the potential respondents were University of Lethbridge alumni who had engaged in online communication with the University by having already provided a current email address and permission to be included on University of Lethbridge email distributions of this nature. As the potential respondents had demonstrated their connection to the University of Lethbridge by providing a valid email address, the sample is comprised of alumni who have already engaged at some level with the University. This will be taken into account in the discussion of the study's results.

The invitation to participate was sent from a distinct email address that referenced the University's URL and was established for one-time use to solicit a response to this alumni survey. The online survey instrument was housed on the University's web site. A University of Lethbridge email address was used and the survey was hosted on the University's web site in anticipation that alumni email recipients would be more trusting of the study and its privacy controls, and therefore more inclined to participate. Sample Group

The total population of University of Lethbridge bachelor's degree holders is approximately 25,000. Ideally, a random sample of these alumni would have been drawn, as it would increase the confidence in and generalizability of the results. However, it is often difficult to keep track of alumni after they have left the institution; contact information (such as phone numbers or addresses) is often not kept current by alumni. Therefore, for this study, convenience sampling was used. A subset of readily accessible alumni was available: alumni who had demonstrated a form of connection by providing an email address to the office of University Advancement and who had expressed a willingness to communicate by email with the University. Valid email addresses were

available for a total of 2,046 alumni, representing all graduation years in the study criteria. Of the convenience sample, 1,139 (55.7%) responded to the invitation to participate. Given this method of convenience sampling, it will be difficult to generalize results to a broader population of alumni. Despite this limitation, a sample size of over 1,100 alumni is sufficient to better understand factors affecting alumni connection to their university.

The resulting sample group consisted of 1,139 University of Lethbridge baccalaureate degree holders who graduated during the University of Lethbridge's first 40 years (1967 to 2007) and who responded to the email inviting them to participate in an online alumni survey. The sample included only those alumni who submitted a completed questionnaire at any point from the time the emailed invitation was distributed (1:44PM MST on June 10, 2009) to the time the survey closed (12:00AM MST on June 30, 2009).

The reference to "the University's first 40 years" in the email invitation was intended to evoke a sense of membership in an elite group in the University of Lethbridge's history, perhaps making alumni feel more emotionally drawn to respond. The baccalaureate degree distinction eliminated advanced degree holders who might have had their early student experience at another post-secondary institution. Using the first 40-year period of the University's operation ensured that 2008 and 2009 graduates in the early stage of their career and the earliest stage of their alumni relationship were also eliminated from the study.

The participation statistics were confirmed by reviewing two sources, the Campaign Monitor activity report and the spreadsheet generated from the collected survey data. Campaign Monitor tracked activity by unique email address, labelled as

"Unique Opens." "Unique Opens" represents the number of unique respondents that actually opened the email. The statistic does not include repeat opens if an individual opens the email multiple times.

Instrument

Web-Based Survey Questionnaire

A web-based survey instrument was utilized in order to reduce barriers of time and distance and to increase ease and convenience for respondents. Advantages of using an online survey questionnaire include the relative quickness in obtaining the data, the comparatively low cost to administer, and the willingness of respondents to participate in a brief single survey.

Alumni, who were invited by email (see Appendix B) to participate, were asked voluntarily to complete a survey titled "Factors Influencing Alumni Connection and Commitment" (see Appendix A), accessible through a link in the email message. The survey consisted of 30 questions (29 yielded quantitative data, and an optional question yielded qualitative data). The questions were grouped into three sections: General Information, Student Experience, and Alumni Experience. The 10 questions in the General Information section related to demographic data, such as age, gender, degree, and residence. The Student Experience section's 9 questions explored social and academic system variables present when the alumnus was attending the University of Lethbridge. The Alumni Experience section included 11 questions designed to elicit information on the nature of alumni connection (events, communications, bonds, and motivating factors) and commitment (volunteerism and philanthropy), and how alumni rate various factors in their university experience.

The procedures for responding were fully described in both the email invitation and the survey instrument, which guided potential participants to and through the sign-in page, consent form, and questionnaire. To be included in the study, participants were required to open the email, link to the web-based survey instrument, sign in (in order to validate that they are University of Lethbridge alumni), and submit a completed questionnaire. They could complete the online survey at their convenience, at a location of their choosing, and using any technology resource that provided access to the Internet.

Instructions and information were included throughout the survey instrument. A page notation in the top right-hand corner (e.g., "Page 1 of 10") advised respondents of their progress through the questionnaire. The survey included two drop-down menus in order to accommodate selection from a list of years associated with the alumnus' earliest University of Lethbridge undergraduate course (between 1967 and 2007) and first University of Lethbridge undergraduate degree (between 1968 and 2007). The response "Other (please specify)" was offered for certain questions to give alumni the opportunity to add a response category that might have been overlooked in the questionnaire design.

"Previous Page" and "Next Page" arrows were available on each page for ease of navigation through the survey. A respondent could return to previous pages without losing data entered for subsequent questions. However, responses were required to every question on a page in order to proceed to the next page, with the exception of the final optional question. Alerts were displayed to highlight questions still requiring a response. The response "Prefer not to answer" was offered to allow alumni to skip any question they did not want to answer. The final question was open-ended and structured to allow alumni to provide comments about their university experience or the survey. The survey

was accessible to potential respondents from June 10 until June 30, 2009, after which time a "survey closed on June 30, 2009" message page replaced the sign-in page.

Timing of Survey Release

The survey request was emailed to alumni at 1:44PM MST on Wednesday,

June 10, 2009. The June release date was selected for three reasons. The first was to
capitalize on nostalgia and the emotions that might be present at a time of year when
university convocations have a high profile in the media. Second, the survey was timed to
be distributed before the end of the K-12 school year, in order to ensure a response from
alumni who might be less accessible after the end of June due to summer vacation
schedules. Finally, the email release was scheduled around other institutional messages
so that the survey invitation would not interfere with established University of Lethbridge
alumni communications being sent to alumni by University Advancement.

A review of resources related to web-based survey design (Hamilton, 2009; PeoplePulse, 2009; Trouteaud, 2004; Zarca Interactive, 2009) addressed time-of-day considerations regarding the release of the email. It was determined that mid-day and mid-week survey requests had the highest probability of achieving a high response rate from the potential respondents. A mid-day email release was chosen to align with time zones across Canada and the United States, where the largest concentration of University of Lethbridge alumni reside. The email would arrive at a time of day when it would not be competing for attention among the high volume of emails usually received in bulk at the beginning of the day. A mid-week release date was selected for a similar reason – to avoid competition with the volume of emails received early in the business week.

Incentive to Complete Survey

Alumni who completed the survey in its entirety were eligible to enter an optional draw for a Flip video camera. Of the 1,139 alumni who submitted valid surveys, 1,020 (89.6%) valid entries were submitted for the draw. An incentive item was offered as it was expected it would encourage a higher response rate. Potential participants are more likely to complete a survey if a popular product is offered, according to a review of multiple resources related to web-based survey design (Infosurv, 2009; Jensen, 2009; PeoplePulse, 2009; Trouteaud, 2004; Zarca Interactive, 2009). The Flip video camera was selected because it is a fairly new technology, reasonably priced (under \$200), simple to use, compatible with technologies in locations where the largest populations of University of Lethbridge alumni reside (i.e., Canada, the United States, and the Pacific Rim), and a good alternative to offering an iPod or digital camera, since it was believed that many individuals may already own those items.

Eligibility for inclusion in the draw was introduced on the sign-in page of the survey. Respondents could access the draw entry page only upon submitting a completed survey questionnaire. Of the 1,024 draw entries, 1,020 were validated through the technology design, which flagged 8 suspected duplicate entries. Upon examination, 4 were determined to be similar but unique. The remaining 4 were identified as duplicate entries and eliminated from the draw.

Quantitative Data Analysis

Quantitative data analysis included descriptive analysis, frequency counts, and tests of statistical significance. As the variables were nominal, the Chi-square test was used to compare frequencies of groups and to determine whether an obtained distribution

of scores differed reliably from what was expected. The researcher applied the standard preselected probability level of .05 (p = .05) used by education researchers (Gay, Mills, & Airasian, 2006) to determine if there is a significant relationship between variables or if the difference occurred by chance. Instances where probability was less than or equal to .01 (p <= .01) were also noted. The data analysis was structured around the research sub-questions as described in the following sections.

Part A. Description of Respondents

- 1. What are the general characteristics of the survey participants?
- 2. How do alumni rate their satisfaction with their student experience?
- 3. How do alumni rate their satisfaction with their alumni relationship?

To answer A1, descriptive analysis was used to describe the demographic characteristics of the respondents, as requested in Items 1 through 10, Item 26, and Item 27 of the survey questionnaire. Items 1 through 10 address age, gender, entrance method, student residence, degree(s), alumni's current geographic location, and population size of the community where the alumnus works. To further understand the characteristics of the respondents, descriptive analysis was used to analyse alumni's level of satisfaction with their career, employment opportunities, primary job responsibilities, and household income, as asked in Items 26 and 27.

Research question A2 was addressed by using descriptive analysis to describe alumni's satisfaction with the student experience, as represented in Items 11, 12 and 28. Item 11 included variables in the student experience that all students would typically have experienced (admissions process, courses, quality of instruction, relationships with faculty and staff). Item 12 presented variables that students may have experienced

(recruiting, advising, career services, and counselling or other student support services). Finally, Item 28 asked alumni to rate their overall level of satisfaction with their undergraduate academic experience.

Descriptive analysis was also used to analyse research question A3, which related to participants' satisfaction with their alumni relationship. Item 29 asked them to rate their overall level of satisfaction with their alumni relationship with the University of Lethbridge.

Part B. Factors Affecting Connection

- 4. How frequently and in what ways have alumni stayed connected to their alma mater since graduation?
- 5. What factors have influenced or might influence alumni's decision to stay connected with their alma mater?

To analyse the data related to the criteria variable of connection in the research questions B4 and B5, descriptive statistics and frequency counts were used to analyse the variables in the alumni relationship that provide opportunities for alumni to connect with the University and other alumni. The data were organized in rank order by raw frequencies with the corresponding percentages.

To answer B4, data related to connection were analysed from responses to Item 20 (attending events, networking with other alumni, staying in touch with faculty or staff, volunteering for the University, and making a donation). To answer B5, Item 21 (friendships with other alumni), Item 22 (business relationships that included other alumni), and Item 23 (emotional ties, reunions, alumni gatherings, social networking, web-based or emailed updates, and mailed publications) provided data that were analysed

to determine what factors have the most impact on the alumnus' decision to stay connected to the University.

Part C. Factors Affecting Commitment

- 6. How frequently and in what ways have alumni demonstrated their commitment to their alma mater through volunteering or donating?
- 7. What factors have influenced or might influence alumni's decision to give back to their alma mater?

The criteria variable of commitment was analysed in response to C6 and C7 by using descriptive analysis and frequency counts to identify the variables that influence alumni to demonstrate their commitment by volunteering or donating. The data were organized in rank order by raw frequencies with the corresponding percentages.

Volunteer and donor commitment variables were included in Item 20, which asked alumni to rate how frequently (never, sometimes, often) they had stayed connected with the University by being a volunteer or donor. Item 24 asked alumni to select factors that have influenced or might influence them to give back to the University as a volunteer or donor. The list included appreciation for the opportunities the degree afforded them, appreciation for the relationships with faculty, gratitude for the financial support received as a student, desire to support students, desire to support research, awareness of the University's need for financial support, matching programs through the alumnus' employer, professional association, or the government, and recognition by the University for the alumnus' contribution.

Part D. Comparisons Between Volunteer and Non-Volunteer Groups

- 8. Is there a significant relationship between student engagement variables and alumni volunteer status?
- 9. What demographic, student experience, and alumni relationship motivation variables have the most impact on alumni volunteer status?

In response to D8 and D9, the data were analysed by dividing the respondents into two groups – volunteers and non-volunteers. Alumni volunteer status was determined by alumni responses to "Served on U of L Board of Governors, Senate, Advisory Board or other university committee" and "Volunteered services for U of L Alumni Association, Chapter, committee or event," as listed in Item 20. The data were analysed using descriptive analysis and frequency counts, and Chi-square analysis.

Researchers (Gaier, 2005; Weerts & Ronca, 2007a) suggest a strong relationship between student engagement and future alumni volunteer activity. To answer D8, Chi-square analysis was used to compare group frequencies and to determine if there is a significant relationship between student engagement and alumni volunteerism. Volunteer status was cross-tabulated with the student engagement variables in Items 13, 14, 18, and 19. Item 13 included student clubs, volunteer projects, athletics, extracurricular programs, and other organized student activities. Item 14 asked if the alumnus held a leadership position with the Students' Union. Items 18 and 19 involved awareness of and interactions with alumni, volunteers, and donors.

To answer D9, Chi-square analysis was used to compare group frequencies and to determine if there is a significant relationship between the variable of volunteer status and any of the demographic, student experience, and alumni relationship motivation

variables (see Tables 1, 2, and 3). Since the student engagement variables were presented in detail in response to D8, these variables were not included in the response to question D9, which cross-tabulated volunteer status to all other demographic, student experience, and alumni relationship motivation variables. The Chi-square test results were grouped by variable type and presented in a summary table. In instances where data analysis showed a probability level of less than or equal to .05 (p <= .05), the results were noted in the summary table.

Part E. Comparisons Between Donor and Non-Donor Groups

- 10. Is there a significant relationship between alumni organizational identification variables and alumni donor status?
- 11. Does specific financial support or academic recognition (e.g., scholarships, bursaries or academic awards of distinction) received as a student impact an alumnus' inclination to donate to the university?
- 12. What demographic, student experience, and alumni relationship motivation variables have the most impact on alumni donor status?

In order to answer E10, E11, and E12, the data were analysed by dividing the respondents into two groups – donors and non-donors. Descriptive analysis and frequency counts were used to describe the data. As the variables were nominal, Chi-square analysis was used to compare group frequencies and to determine if there is a significant relationship between the variable of donor status and any of the demographic, student experience, and alumni relationship motivation variables. Donor status for E10, E11, and E12 was established by alumni response to Item 20 of the survey questionnaire, which asked alumni to indicate if they have "Donated to the U of L."

Organizational identification variables were identified by researchers (Mael & Ashforth, 1990; Shadoian, 1989; Schlenker, 1980) as factors that affect how an individual connects or associates with an organization. Therefore, it would be important to consider organizational identification factors that might influence alumni's decision to give back to their alma mater. To answer research question E10, Item 25 asked alumni to rate the University in relationship to eight organizational identification variables (reputation, distinctiveness, prestige, quality of programs, contributions to research, competitive excellence when compared to other universities, accomplishment of students, and accomplishments of alumni). These variables were cross-tabulated with alumni donor status to find out if significant relationships exist.

Reciprocity was identified by researchers (Diamond & Kashyap, 1997; Weerts & Ronca, 2007b) as a major motivator in philanthropy, particularly as related to student awards. The nature of student awards provides the opportunity to determine whether having received recognition or financial support as a student was related to giving back financial support as an alumnus. To answer research question E11, the donor and nongroups were cross-tabulated with student scholarships (Item 15), bursaries (Item 16), and academic awards (Item 17) to determine if there were any significant relationships to alumni donor status.

Since the alumni relationship motivation variables of organizational identification were presented in detail in response to E10, and the student experience variables of student financial support (scholarship, bursary, and academic recognition) variables were examined in response to E11, these variables were not included in the response to question E12, which cross-tabulated donor status to all other demographic, student

experience, and alumni relationship motivation variables (see Tables 1, 2, and 3). For E12, Chi-square test results were grouped by variable type and organized in summary tables. In instances where data analysis indicated a probability level of less than or equal to .05 (p <= .05), results were noted in the summary table.

Qualitative Data Analysis

Qualitative data analysis of responses allowed the researcher to summarize patterns and strengths and to identify perceived issues. Content analysis was used to determine what common topics or themes were most prevalent in the qualitative data, in order to gain more understanding of the predominant values in the phenomenon of the alumni relationship.

Weber (1990) describes content analysis as a process by which the volume of words is condensed into fewer categories. Categories, or the main groupings or key features of the text, are developed from the areas of interest identified in advance of the data analysis or in response to the data that have been collected. For this research study, the demographic, student experience, and alumni relationships variables (see Tables 1, 2, and 3) created the framework for categories and guided the content analysis. The qualitative data were also reviewed to identify emerging categories that were not addressed through items presented in the survey instrument.

The main qualitative data were collected in response to Item 30, the final question of the survey questionnaire:

(OPTIONAL) Please feel free to comment in any way about your U of L student experience or your experience as an alumnus of the U of L, or share any other thoughts you may have as a result of completing this survey.

Space for additional qualitative data collection was provided in the "Other (please specify)" response option for Items 3, 7, 8, 20, 23, and 24, for the purpose of allowing respondents to add categories they felt were missing in the available response selections. Item 3 related to entrance method, Item 7 to University of Lethbridge undergraduate degree, Item 8 to additional undergraduate or advanced degree(s), Item 20 to frequency and ways of connecting since graduation, Item 23 to factors influencing connection, and Item 24 to factors influencing giving back.

Cohen et al. (2007) emphasize the importance of deciding whether the content analysis will be coded for the existence of or incidences of the categories. In the case of existence, the frequency of certain words would be lost, but the frequency does not equate to the importance. In the case of incidences, the meaning behind or significance of the words may be lost. For the purpose of this study, content analysis of the qualitative data broke down the text into units of analysis in order to report the main variables and themes addressed by the respondents. Responses were also reviewed to identify any interconnectedness of variables that may be implied by respondents.

After the initial reading and categorizing of the qualitative data, the researcher repeated the process to ensure the data were accurately categorized to properly reflect the alumnus respondent's intention. The qualitative data were presented in summary form and identified key factors, issues, and concepts.

The quantitative and qualitative results for this research study are reported in detail in Chapter 4. Further discussion of the study's findings and implications, and recommendations for areas of subsequent research, are presented in Chapter 5.

Chapter 4. Results

Introduction

The purpose of the study was to examine factors present in the university experience that may influence alumni engagement. This chapter reports the findings from the web-based survey titled "Factors Influencing Alumni Connection and Commitment," which was conducted from June 10 to June 30, 2009. The survey was divided into three sections: General Information, Student Experience, and Alumni Experience. In total, 1,139 valid responses were received. Respondents were University of Lethbridge baccalaureate degree holders who graduated during the University's first 40 years (1967 to 2007) and who responded to an email inviting them to participate in the online alumni survey.

Response Rate

Criteria for participation in the research included valid email contact information in the University's alumni database. Potential respondents were University of Lethbridge alumni who had engaged in online communication with the University by having already provided a current email address and permission to be included in University of Lethbridge email distributions of this nature.

An email invitation to complete a web-based survey was sent to the 2,046 alumni who met the convenience sampling criteria, and 1,142 alumni submitted responses. Upon inspection of the data, three respondents were eliminated from further data analysis because they did not meet the main participation criterion (e.g., they did not graduate with a University of Lethbridge baccalaureate degree in a year from 1967 to 2007). The three invalid surveys appeared to have reached the correct alumni household, but were

completed by the wrong alumnus, who shared the same household email address. Of the eliminated survey questionnaires, one respondent mentioned a graduation year of 2009 and a spouse who holds a University of Lethbridge bachelor's degree. Another mentioned receiving a certificate and not a bachelor's degree from the University. The other respondent was currently enrolled in a master's program at the University of Lethbridge, had a bachelor's degree from another university, and mentioned that her spouse had attended the University of Lethbridge. Thus, data analysis was conducted on a total of 1,139 valid responses out of a population of 2,046 potential alumni respondents, for a response rate of 55.7%.

The participation statistics were confirmed by reviewing two sources, the Campaign Monitor activity report and the spreadsheet generated from the collected survey data. Campaign Monitor tracked activity by unique email address. That report indicated there were 2,044 "Unique Opens," two less than the final number of potential respondents. "Unique Opens" represents the number of unique respondents who actually opened the email. The statistic did not include repeat opens if the individual opened the email multiple times. Thus 2,046 alumni opened the invitation to participate in the survey. A total of 1,360 (66.5% of 2,046) alumni accessed the sign-in page of the survey. Of these, 1,142 (84.0% of 1,360) viewed the sign-in page and completed the survey in its entirety.

The spreadsheet generated from the collected survey data showed that the 1,142 surveys, of which 1,139 were valid submissions, were completed by 1,142 unique respondents, with two instances of alumni sharing the same email address to access and submit a valid questionnaire. The survey's technology design had safeguards built in to

identify suspected duplicate survey entries. No duplicates were detected. However, as a result of the two shared email addresses, it was necessary to add a count of two to the Unique Opens and the "Unique Clicks" statistics of Campaign Monitor, which tracked activity by unique email address. "Unique Clicks" represents the number of unique clicks on a link in the email, which in this case was the link to the survey, and that count does not include repeat clicks on the link by the same respondent. The Campaign Monitor totals were therefore adjusted to indicate 2,046 Unique Opens, for a population of 2,046 unique respondents, and 1,360 Unique Clicks, which indicated that 1,360 alumni clicked on the link in the email and accessed the sign-in page of the survey instrument.

The timing strategy of releasing the email mid-day and mid-week appeared to be effective, as 427 (37.4%) of the 1,142 completed questionnaires were submitted between the email release time of 1:44PM MST on June 10, 2009, and 6:00PM MST on the same day, with 582 (51.0%) of the 1,142 completed surveys submitted before midnight on the release date of June 10. Of note, 61.8% of the 2,046 potential respondents opened the email on June 10, and 37.1% accessed the sign-in page of the survey that same day.

Another statistic of note is the "Total Opens," the total number of times the email was opened. Campaign Monitor counted 3,335 Total Opens. This means there were 1,289 instances (3,335 Total Opens less 2,046 Unique Opens) where unique respondents opened the email a second time or multiple times, after opening it the first time. Reopening the email may indicate that alumni were interested enough to return to the email to access the survey later, that they revisited the email later when they had the time to read it or respond to the survey, or that they opened the email again after they had already completed the survey.

Quantitative Data Analysis

Quantitative data analysis included descriptive analysis, through the use of raw frequency counts and percentages. Analysis also included tests of statistical significance. As the variables were nominal, the Chi-square test was used to compare frequencies of groups and to determine whether an obtained distribution of scores differed reliably from what was expected. To determine if there is a significant relationship between variables or if the difference occurred by chance, the standard preselected probability level of .05 (p = .05) used by education researchers was utilized. Instances where probability was less than or equal to .01 $(p \le .01)$ were also noted.

The central research question was the following: What factors in the student experience and alumni relationship influence alumni connection and commitment? This global research question was addressed by answering 12 research sub-questions grouped in five parts:

Part A. Description of Respondents

Part B. Factors Affecting Connection

Part C. Factors Affecting Commitment

Part D. Comparisons Between Volunteer and Non-Volunteer Groups

Part E. Comparisons Between Donor and Non-Donor Groups

The results of the data analysis for each part are presented next.

Part A. Description of Respondents

Three questions were posed in Part A:

- 1. What are the general characteristics of the survey participants?
- 2. How do alumni rate their satisfaction with their student experience?

3. How do alumni rate their satisfaction with their alumni relationship?

Research Question A1: What are the general characteristics of the survey participants?

In response to research question A1, descriptive analysis was used to describe the demographic characteristics of the respondents, as requested in Items 1 through 10, Item 26, and Item 27 of the survey questionnaire (see Appendix A).

Item 1 asked participants to provide their age by selecting an age range from one of the six categories offered. The "25 to 34" age range had the highest number of responses, representing 46.1% (525) of the sample (see Table 4). The fewest number of responses (16; 1.4%) fell in the "65 or more" category, which is understandable given that the University of Lethbridge was established in 1967.

Table 4. Participants by Age

Age	n	%
24 or less	33	2.9
25 to 34	525	46.1
35 to 44	276	24.2
45 to 54	183	16.1
55 to 64	102	9.0
65 or more	16	1.4
Prefer not to answer	4	.4
Total	1139	100.0

Item 2 asked alumni to indicate their gender (see Table 5). A total of 647 (56.8%) participants were female and 489 (42.9%) were male.

Table 5. Participants by Gender

Gender	n	%
Male	489	42.9
Female	647	56.8
Prefer not to answer	3	.3
Total	1139	100.0

The participant's entrance method was requested in Item 3 of the questionnaire. The highest number of respondents (429; 37.7%) entered the University of Lethbridge in the fall or spring immediately after completing high school (see Table 6). A total of 325 (28.5%) transferred to the University after taking courses from another institution, and 226 (19.8%) enrolled after completing a degree or diploma program elsewhere. Thirteen percent (148) of the participants entered university a year or more after completing high school, but without obtaining credits from any other post-secondary institution.

Table 6. Participants by Entrance Method to University of Lethbridge

Entrance method	n	%
Entrance in fall or spring immediately after completing high school	429	37.7
Entrance after period of one year or more after completing high	148	13.0
school		
Transfer after taking courses from another post-secondary institution	325	28.5
Entrance after completing diploma or degree program at other post-	226	19.8
secondary institution		
Prefer not to answer	2	.2
Other	9	.8
Total	1139	100.0

Respondents were asked in Item 4 if they had lived in student residence while attending the University of Lethbridge (see Table 7). Of the 1,139 survey participants, 240 (21.1%) indicated they had lived in student residence and 899 (78.9%) responded they had not.

Table 7. Student Residence

n	%
240	21.1
899	78.9
1139	100.0
	240 899

Items 5 and 6 of the survey questionnaire asked alumni to indicate the year they completed their first undergraduate course (with choices of 1967 to 2007) and their first undergraduate degree (with choices of 1968 to 2007) at the University of Lethbridge. All of the years offered in Items 5 and 6 were represented in the participants' responses. For data analysis, the years were grouped into four ranges, for ease of applying Chi-square analysis. The date range of 1998 to 2007 had the most responses for both Items 5 and 6. A total of 473 (41.5%) participants completed their first University of Lethbridge course between 1998 and 2007 (see Table 8).

Table 8. Year of Completing First University of Lethbridge Undergraduate Course

Range of years	n	%
1967 to 1977	133	11.7
1978 to 1987	171	15.0
1988 to 1997	353	31.0
1998 to 2007	473	41.5
Don't remember	7	.6
Prefer not to answer	2	.2
Total	1,139	100.0

A total of 660 (57.9%) respondents completed their first degree in the same date range (see Table 9).

Table 9. Year of Completing First University of Lethbridge Undergraduate Degree

Range of years	n	%
1968 to 1977	86	7.6
1978 to 1987	132	11.6
1988 to 1997	251	22.0
1998 to 2007	660	57.9
Don't remember	3	.3
Prefer not to answer	7	.6
Total	1,139	100.0

In Item 7a, respondents were asked to indicate their first or only University of Lethbridge degree from a list of 17 degree options (see Table 10). The top five degrees obtained by respondents were Bachelor of Management (297; 26.1%), Bachelor of Arts (257; 22.6%), Bachelor of Science (167; 14.7%), Bachelor of Education (149; 13.1%), and Bachelor of Arts and Science (84; 7.4%).

Table 10. First or Only University of Lethbridge Bachelor's Degree

Degree	n	%
Bachelor of Arts	257	22.6
Bachelor of Arts and Science	84	7.4
Bachelor of Education	149	13.1
Bachelor of Fine Arts	48	4.2
Bachelor of Health Sciences	6	.5
Bachelor of Management	297	26.1
Bachelor of Management Arts	3	.3
Bachelor of Music	18	1.6
Bachelor of Nursing	18	1.6
Bachelor of Science	167	14.7
Combined Bachelor of Arts/Bachelor of Education	45	4.0
Combined Bachelor of Arts/Bachelor of Management	6	.5
Combined Bachelor of Fine Arts/Bachelor of Education	5	.4
Combined Bachelor of Management/Bachelor of Education	3	.3
Combined Bachelor of Music/Bachelor of Education	5	.4
Combined Bachelor of Science/Bachelor of Education	22	1.9
Combined Bachelor of Science/Bachelor of Management	4	.4
Other	2	.2
Total	1,139	100.0

In Item 7b, alumni were asked to select, from the same list of degree options presented in Item 7a, any additional University of Lethbridge bachelor's degree(s) they had received since completing their first University of Lethbridge degree. In a review of the data, it was determined that the responses to Item 7b were invalid. Thirty alumni selected the "Other" category. The qualitative data will be presented in the Qualitative Data Analysis section of this chapter. However, it is important to note here that the majority of the respondents selecting "Other" for Item 7b indicated they had selected a degree option, but had actually obtained a University of Lethbridge certificate or were currently working on a second bachelor's degree. Since the "Other" comments suggested respondents did not respond in the manner intended by the survey question, it was determined that the item itself was ambiguous and thus the data related to Item 7b have been excluded from further analysis.

Item 8 of the survey questionnaire asked alumni to indicate if they had received any additional degree(s) at any university in any year since obtaining their first University of Lethbridge bachelor's degree. Table 11 displays the results.

Table 11. Academic Degree(s) Completed at any University in any Year Since

Completing First University of Lethbridge Bachelor's Degree

		% of survey
Degree	n	respondents
Additional bachelor's degree(s) at U of L	27	2.4
Additional bachelor's degree(s) at another university	60	5.3
Master's degree at U of L	69	6.1
Master's degree at another university	201	17.6
PhD at U of L	3	.3
PhD at another university	42	3.7
Other	18	1.6

The most prevalent response was in the master's degree category, with 201 (17.6%) participants completing a master's degree at another university and 69 (6.1%) obtaining a master's degree at the University of Lethbridge. The lowest number of responses was found in the "PhD at U of L" category, which is indicative of the newness of these programs at the University of Lethbridge and the comparatively small number of Ph.D. spaces available.

Respondents were asked in Item 9 to indicate where they currently reside, in order to determine the alumnus' proximity to the University of Lethbridge's main campus, which is located in the city of Lethbridge in southern Alberta. Broad geographic regions were offered as responses. The results are detailed in Table 12. Of the 1,139 alumni respondents, 860 (75.5%) reside in Alberta.

Table 12. Geographic Region of Current Residence

Current residence	n	%
Alberta, Canada	860	75.5
Outside of Alberta, but in Canada	187	16.4
United States	31	2.7
Outside of Canada and the United States	60	5.3
Prefer not to answer	1	.1
Total	1139	100.0

Item 10 asked alumni to indicate the population size of the community where they work. Of the four options provided, the highest responses were received in the "Over 500,000" (35.6%; 405) and "50,000 to 499,000" (34.0%; 387) categories (see Table 13).

Table 13. Population of Community Where Alumnus Currently Works

Population	n	%
Less than 5,000	109	9.6
5,000 to 49,000	143	12.6
50,000 to 499,999	387	34.0
Over 500,000	405	35.6
Not currently employed	81	7.1
Prefer not to answer	14	1.2
Total	1139	100.0

Alumni were asked to rate their level of satisfaction regarding their career, employment opportunities, primary job responsibilities, and household income, as asked in Items 26 and 27 of the survey questionnaire, in order to further understand the characteristics of the respondents. Item 26 asked, To what extent did your U of L Bachelor's degree prepare you for your chosen career after graduation? The results are provided in Table 14.

Table 14. Extent to Which University of Lethbridge Bachelor's Degree Prepared

Alumnus for Chosen Career

Extent to which U of L bachelor's degree		
prepared alumnus for chosen career	n	%
Not at all	42	3.7
Very little	104	9.1
Somewhat	478	42.0
To a great extent	510	44.8
Prefer not to answer	5	.4
Total	1,139	100.0

Most alumni felt their degree had prepared them for their chosen career. A total of 510 (44.8%) answered "To a great extent," 478 (42.0%) answered "Somewhat," and 104 (9.1%) answered "Very little." Forty-two (3.7%) alumni felt their degree had not prepared them for their chosen career.

Item 27 asked alumni to rate their overall level of satisfaction in areas of their life related to their career or income. The results are summarized in Table 15.

Table 15. Satisfaction With Career, Employment Opportunities, Primary Job

Responsibilities, and Household Income

	V	ery					V	ery	Total
	dissa	tisfied	Dissa	tisfied	Sati	sfied	sati	sfied	responses
Variable	n	%	n	%	n	%	n	%	n
Career	23	2.0	67	5.9	322	28.3	696	61.1	1,108
Employment	32	2.8	118	10.4	402	35.3	540	47.4	1,092
opportunities									
Primary job responsibilities	18	1.6	62	5.4	387	34.0	621	54.5	1,088
Household income	33	2.9	106	9.3	501	44.0	450	39.5	1,090

The majority of the survey participants reported being "Satisfied" or "Very satisfied" with their career (91.9%; 1,018), employment opportunities (86.3%; 942), primary job responsibilities (92.6%; 1,008), and household income (87.2%; 951), than they are "Very dissatisfied" or "Dissatisfied."

Research Question A2: How do alumni rate their satisfaction with their student experience?

Research question A2 was addressed by asking respondents to rate their satisfaction with student support services as well as their overall academic experience, as represented in Items 11, 12, and 28. Item 11 relations to aspects of student support services that all students would typically have experienced (i.e., admissions process,

courses, quality of instruction, and relationships with faculty and staff). Table 16 summarizes the responses to this item.

Table 16. Satisfaction With Student Support Services Typically Experienced by all
Students

	V	ery					V	ery	Total
	dissa	tisfied	Dissa	tisfied	Satisfied		ied satisfied		responses
Variable	n	%	n	%	n	%	n	%	n
Admissions									
process	13	1.2	35	3.1	626	56.2	440	39.5	1,114
Variety of course									
offerings	3	.3	103	9.1	672	59.2	356	31.4	1,134
Availability of									
required courses	13	1.2	141	12.4	679	59.8	302	26.6	1,135
Quality of									
instruction in									
courses	4	.4	30	2.9	499	47.9	509	48.8	1,042
Relationship with									
faculty	7	.7	45	4.3	379	36.4	611	58.6	1,042
Relationship with									
staff	5	.5	39	3.7	529	50.8	469	45.0	1,042

The majority of respondents were either "Satisfied" or "Very satisfied" with the admissions process (95.7%; 1,066), variety of course offerings (90.7%; 1,028),

availability of required courses (86.4%; 981), quality of instruction in courses (96.7%; 1,008), relationship with faculty (95.0%; 990), and relationship with staff (95.8%; 998). Thus, alumni were generally satisfied with these types of student support services.

Alumni were asked in Item 12 to rate their satisfaction level regarding student support services they may have experienced (i.e., recruiting, advising, career services, and counselling or other student support services) while attending the University. Table 17 displays the results.

Table 17. Satisfaction With Student Support Services That Students May Have Accessed

	Very				Very				
	dissatisfied Di		Dissatisfied		Satisfied		satisfied		Total
Variable	n	%	n	%	n	%	n	%	n
Recruiting process	12	2.2	54	9.9	372	68.3	107	19.6	545
First year advising	41	5.2	164	20.9	453	57.7	127	16.2	785
Advising in major	44	4.9	162	17.9	496	54.9	201	22.3	903
Career services	44	6.6	168	25.2	343	51.4	112	16.8	667
Counselling or other									
student support services	24	4.4	85	15.6	323	59.3	113	20.7	545

The majority of participants indicated they were "Satisfied" or "Very satisfied" with the recruiting process (87.9%; 479), first year advising (73.9%; 580), advising in major (77.2%; 697), career services (68.2%; 455), and counselling or other student support services (80.0%; 436). Respondents indicated they were more satisfied than dissatisfied with these forms of student support.

Item 28 asked alumni to rate their overall level of satisfaction with their undergraduate academic experience. Table 18 displays the results.

Table 18. Overall Level of Satisfaction With University of Lethbridge Undergraduate

Academic Experience

Satisfaction with U of L undergraduate academic experience	n	%
Very dissatisfied	28	2.5
Dissatisfied	30	2.6
Satisfied	515	45.2
Very satisfied	561	49.3
Prefer not to answer	5	.4
Total	1139	100.0

A total of 561 (49.3%) selected "Very satisfied" and 515 (45.2%) indicated they were "Satisfied" with their undergraduate academic experience. In all, 1,076 (94.5%) of the participants were more satisfied than dissatisfied.

Research Question A3: How do alumni rate their satisfaction with their alumni relationship?

Question A3 was addressed by analysing the responses to Item 29, which asked alumni to rate their overall level of satisfaction with their alumni relationship with the University of Lethbridge. The results are shown in Table 19.

Table 19. Overall Level of Satisfaction With Alumni Relationship With University of Lethbridge

Satisfaction with U of L alumni relationship	n	%
Very dissatisfied	19	1.7
Dissatisfied	129	11.3
Satisfied	766	67.2
Very satisfied	77	6.8
Prefer not to answer	148	13.0
Total	1139	100.0

A total of 766 (67.2%) respondents indicated they were "Satisfied" with their alumni relationship, and 77 (6.8%) that they were "Very satisfied" (see Table 19). Of note, 148 (13.0%) participants declined to provide a rating of their alumni experience; this was the highest "Prefer not to answer" count recorded for any item in the survey.

Responses to the research questions in Part A provided information on the general characteristics of the participants, including demographic information, and the way they rate factors in their university experience. Overall, participants indicated they are generally satisfied with their student experience and alumni relationship with the University of Lethbridge.

Part B. Factors Affecting Connection

Two research questions explored factors that may affect alumni connection to the University. The data related to the criteria variable of connection were analyzed using

descriptive statistics and frequency counts, and were organized in rank order by raw frequency count and corresponding percentages.

Research Question B4: How frequently and in what ways have alumni stayed connected to their alma mater since graduation?

To answer B4, data related to the criteria variable of connection were analysed from responses to Item 20, which explored ways that alumni have stayed connected to the University (i.e., attending events, networking with other alumni, staying in touch with faculty or staff, volunteering for the University, and making a donation). The results are presented in Table 20.

Table 20. Ranking of Ways Alumni Have Stayed Connected to University of Lethbridge
Since Graduation

	,	Stayed co	l		
					Total
	Y	es	No		responses
Variable	n	%	n	%	n
Stayed in touch with U of L faculty or staff	697	61.6	435	38.4	1,132
Networked with other U of L alumni	669	59.1	463	40.9	1,132
Attended U of L events	524	46.2	611	53.8	1,135
Donated to U of L	323	28.9	794	71.1	1,117
Attended U of L alumni-related events	293	25.9	840	74.1	1,133
Volunteered services for U of L Alumni	92	8.1	1,041	91.9	1,133
Association, Chapter, committee or event					
Served on Board of Governors, Senate,	64	5.7	1,068	94.3	1,132
Advisory Board or other U of L committee					

The data indicate that the most popular way to stay connected was by staying in touch with faculty or staff (697, 61.6%), followed by networking with other alumni (669; 59.1%), attending University of Lethbridge events (524; 46.2%), donating to the University (323; 28.9%), and attending alumni-related events (293; 25.9%). Volunteer activities ranked as the lowest connection options.

Research Question B5: What factors influenced or might influence alumni's decision to stay connected with their alma mater?

To answer B5, data were analyzed regarding factors that may influence an alumnus' decision to stay connected to the University. Item 21 asked alumni if they had maintained friendships with other alumni. Item 22 asked if respondents had a business relationship that included other alumni. Item 23 provided a list of options (i.e., emotional ties, reunions, alumni gatherings, social networking, web-based or emailed updates, and mailed publications) that may influence connection with the University. The results are displayed in Table 21.

Table 21. Ranking of Factors That Have Influenced or Might Influence Alumni's

Decision to Connect With University of Lethbridge or Other Alumni

	Total	% of survey
Variable	responses	respondents
Friendships with other U of L alumni	967	85.6
Emotional ties	929	81.6
U of L mailed publications	510	44.8
U of L web-based or emailed updates	489	42.9
Business relationships with other U of L alumni	462	41.1
Social networking web sites	455	39.9
Alumni gatherings in alumnus' own community	252	22.1
Reunion events on Lethbridge campus	250	21.9
Reunion events in alumnus' own community	200	17.6
Alumni gatherings on Lethbridge campus	167	14.7
Other	7	.6

Friendships with other University of Lethbridge alumni had the highest response rate at 967 (85.6%). Emotional ties followed, with 929 (81.6%) responses. University of Lethbridge mailed publications received 510 (44.8%) responses, ranking higher than the web-based or emailed updates, which had 489 (42.9%) responses. Considering that the survey sample is comprised of alumni who have demonstrated their engagement with the University of Lethbridge by providing a valid email address and by indicating a willingness to communicate online, it is interesting to note that connection by mailed

publications ranks higher for these alumni than connection by web-based or emailed updates. The data were examined to see if results were linked to a participant's age. The number of responses in each age range was not that different between the two variables; for instance, 209 (18.4%) in the "25 to 34" range selected web-based or emailed updates, and 200 (17.6%) in "25 to 34" range selected mailed publications. The percentage of alumni preferring mailed publications increased only slightly with each age range after the age of 34.

Reunion events on the Lethbridge campus (21.9%; 250) ranked one place higher than reunion events in the alumnus' own community (17.6%; 200). Alumni gatherings in the alumnus' own community (22.1%; 252) ranked three places higher than alumni gatherings on the Lethbridge campus (14.7%; 167).

Responses to the research questions in Part B indicate that the highest ranked factors influencing alumni connection are relationships and friendships with faculty, staff, and other University of Lethbridge alumni. The data also indicate that mailed publications ranked higher than web-based or emailed updates as a factor that has influenced or might influence alumni's decision to connect to the University.

Part C. Factors Affecting Commitment

Two research questions were used to explore the criteria variable of commitment.

Descriptive analysis and frequency counts were used to identify variables that influence alumni to demonstrate their commitment by volunteering or donating. The data were organized in rank order by raw frequency count and corresponding percentages.

Research Question C6: How frequently and in what ways have alumni demonstrated their commitment to their alma mater through volunteering or donating?

In question C6, alumni were asked to rate how frequently they had volunteered or donated to the University of Lethbridge. Commitment was determined by analysing responses to the volunteer and donor variables included with the connection variables in Item 20 in the survey questionnaire. Item 20 provided the volunteer status and donor status data for the study and collected the quantitative data related to the criteria variable of commitment. Since volunteering and donating are both connection and commitment variables, they were ranked with the connection variables in Table 20, and are listed again, in rank order, as the only commitment variables included in the survey. Table 22 displays the results.

Table 22. Ranking of Ways Alumni Have Demonstrated Commitment to University of Lethbridge

					Total
	Sometimes		Often		responses
Demonstration of commitment	n	%	n	%	n
Donated to U of L	251	77.7	72	22.3	323
Volunteered services for U of L Alumni					
Association, Chapter, committee, or event	68	73.9	24	26.1	92
Served on U of L Board of Governors, Senate,					
Advisory Board or other university committee	36	56.3	28	43.7	64

Showing commitment by donating to the University was selected by 323 (28.4%) survey respondents, and ranked higher than the two volunteerism options provided.

Volunteering was related to the "Alumni Association, Chapter, committee or event" (92;

8.1%) or "Board of Governors, Senate, Advisory Board or other university committee" (64; 5.6%) response options in Item 20 of the survey questionnaire.

Research Question C7: What factors have influenced or might influence alumni's decision to give back to their alma mater?

Item 24 asked alumni to select factors that have influenced or might influence them to give back to the University as a volunteer or donor. The list included appreciation for the opportunities the degree afforded them, appreciation for relationships with faculty, gratitude for financial support received as a student, desire to support students, desire to support research, awareness of the University's needs for financial support, matching programs through the alumnus' employer, professional association, or the government, and recognition by the University for the alumnus' contribution. Table 23 displays the results.

Table 23. Ranking of Factors That Have Influenced or Might Influence Alumni's

Decision to Give Back to University of Lethbridge

	Total	% of survey
Variable	responses	respondents
Desire to support students	551	48.4
Appreciation for opportunities U of L degree		
afforded alumnus	506	44.4
Appreciation for relationships with faculty	348	30.6
Desire to support research	285	25.0
Awareness of the U of L's needs for financial		
support	218	19.1
Matching programs through alumnus' employer		
or professional association	158	13.9
Gratitude for financial support received as a		
student	148	13.0
Recognition by the U of L for alumnus'		
contribution	126	11.1
Matching programs through government funding	123	10.8
Other	90	7.9

The main factor influencing alumni to give back to the University, based on the participants' responses, is the desire to support students (551; 48.4%), followed next by appreciation for the opportunities their University of Lethbridge degree has afforded

them (506; 44.4%). Appreciation for their relationships with faculty (348; 30.6%) ranked higher than the desire to support research (285; 25.0%), awareness of the University's needs for financial support (218; 19.1%), matching programs through the alumnus' employer or professional association (158; 13.9%), gratitude for financial support received as a student (148; 13.0%), recognition by the University for the alumnus' contribution (126; 11.1%), and matching programs through government funding (123; 10.8%).

Responses to the research questions in Part C indicate that donating ranks higher than volunteering as alumni's demonstration of commitment to their alma mater. Several factors may impact alumni's decision to commit the University of Lethbridge, but the desire to support students appears to have the most influence.

Part D. Comparisons Between Volunteer and Non-Volunteer Groups

Two research questions explored the relationship of volunteer status to demographic, student experience, and alumni relationship motivation variables. For both questions, the data were analysed by dividing the respondents into two groups — volunteers and non-volunteers — and by using descriptive analysis, frequency counts, and Chi-square analysis.

Research Question D8: Is there a significant relationship between student engagement variables and alumni volunteer status?

Researchers (Gaier, 2005; Weerts & Ronca, 2007a) suggest a strong relationship between student engagement and future alumni volunteer activity. To answer D8, Chi-square analysis was used to compare group frequencies and to determine if there is a significant relationship between student engagement and alumni volunteerism. Alumni

volunteer status used for research question D8 was determined by the survey responses to "Volunteered services for U of L Alumni Association, Chapter, committee or event" and "Served on U of L Board of Governors, Senate, Advisory Board or other university committee," as listed with options in Item 20 of the survey. The data were cross-tabulated with the student engagement variables in Items 13, 14, 18, and 19. Item 13 included student clubs, volunteer projects, athletics, extracurricular programs, and other organized student activities. Item 14 asked if the alumnus held a leadership position with the Students' Union. Items 18 and 19 involved awareness of and interactions with alumni, volunteers, and donors. Table 24 details the results.

Table 24. Chi-Square Summary of Student Engagement Variables by Volunteer Status

Variable	n	df	X2	p	
Student clubs	1,125	1	9.917	.002	**
Volunteer projects	1,122	1	27.558	.000	**
Pronghorn athletics	1,123	1	7.362	.007	**
Intramural athletics	1,122	1	5.952	.015	*
Extracurricular Fine Arts programs	1,121	1	8.589	.003	**
Non-credit classes	1,120	1	1.979	.160	
Other organized student activities	1,119	1	6.162	.013	*
Leadership position with Students' Union	1,128	1	11.453	.001	**
Awareness of role of U of L alumni	1,128	3	14.168	.003	**
Awareness of role of U of L volunteers	1,126	3	16.689	.001	**
Awareness of role of U of L donors	1,126	3	2.163	.539	
Interactions with U of L alumni	1,122	2	13.550	.001	**
Interactions with U of L volunteers	1,118	2	29.113	.000	**
Interactions with U of L donors	1,124	2	25.112	.000	**

^{*} p <= .05, ** p <= .01

All of the student engagement variables presented in Table 24, with the exception of non-credit classes and student awareness of the role of donors, indicated a significant relationship to alumni volunteerism. The results are discussed in more detail below and also presented in supplementary data tables (see Appendix C).

The highest percentages of alumni volunteers were found among respondents who, as students, were aware of the role of volunteers (71.4%; 85 of 119 alumni

volunteers), were aware of the role of alumni (68.1%; 81 of 119), and had been involved in student clubs (59.5%; 69 of 116). Volunteers were also found among alumni who had engaged in the following student activities: student volunteer projects (49.6%; 57 of 115); other organized student activities (47.0%; 55 of 117); intramural athletics (38.8%; 45 of 116); extracurricular Fine Arts programs (22.8%; 26 of 114); Pronghorn athletics (19.1%; 22 of 115); and Students' Union leadership (11.1%; 13 of 117). Fifty-one (43.2% of 118) alumni volunteers, as students, had had the opportunity to interact with alumni, 50 (42.4% of 118) to interact with volunteers, other than student volunteers, and 26 (22.0% of 118) to interact with donors. The research findings therefore indicate there is a higher likelihood that alumni will volunteer if as students they had an awareness of the role of alumni and volunteers and were active in student clubs.

Research Question D9: What demographic, student experience, and alumni relationship motivation variables have the most impact on alumni volunteer status?

To answer D9, Chi-square analysis was used to compare group frequencies and to determine if there is a significant relationship between volunteer status and any of the demographic, student experience, and alumni relationship motivation variables (see Tables 1, 2, and 3). Since the student engagement variables were presented in detail in response to D8, these variables were not included in the response to question D9, which cross-tabulated volunteer status to the other demographic, student experience, and alumni relationship motivation variables. The Chi-square test results were grouped by variable type and presented in a summary table. In instances where data analysis showed a probability level of less than or equal to .05 (p <= .05), the results were noted in the

summary table. First, all of the demographic variables were cross-tabulated to volunteer status to determine if any significant relationships exist. Table 25 displays the results.

Table 25. Chi-Square Summary of Demographic Variables by Volunteer Status

Variable	n	df	X2	p	
Age	1,127	5	17.038	.004	**
Gender	1,128	1	1.978	.160	
Entrance method	1,120	3	1.503	.681	
Student residence	1,131	1	.000	.992	
Year of completing first U of L					
undergraduate course	1,122	3	16.394	.001	**
Year of completing first U of L					
undergraduate degree	1,122	3	8.883	.031	*
First or only U of L bachelor's degree	1,129	16	21.717	.153	
Additional bachelor`s or advanced					
degree(s) at any university	1,131	1	2.200	.138	
Geographic region of current residence	1,130	3	7.964	.047	*
Population of community where					
alumnus works	1,037	3	12.322	.006	**
Extent U of L bachelor's degree					
prepared alumnus for chosen career	1,126	3	1.087	.780	
Satisfaction with career	1,100	3	3.041	.385	
Satisfaction with employment					
opportunities	1,084	3	4.176	.243	

Variable	n	df	X2	p	
Satisfaction with primary job					
responsibilities	1,080	3	3.076	.380	
Satisfaction with household income	1,083	3	4.352	.226	

^{*} p <= .05, ** p <= .01

Five of the demographic variables had a significant relationship to volunteer status: age, year of completing first University of Lethbridge undergraduate course, year of completing first University of Lethbridge undergraduate degree, geographic region of current residence, and population of community where alumnus works. The cross-tabulated data for these five variables as related to volunteer status are presented in Tables 26 to 30.

Table 26 displays the results related to age and volunteer status. Volunteerism appears to be the highest in the "25 to 34" age range (48; 40.7% of 118 volunteers), which is also the age range with the highest response rate to the survey (525; 46.1% of 1,139 respondents). The age ranges of "35 to 44," "45 to 54," and "55 to 64" were almost equally represented with 21 (17.8%), 23 (19.5%), and 21 (17.8%) of the 118 volunteers, respectively.

Table 26. Age by Volunteer Status

	Non-volunteer		Volunteer		Tot	al
Age	n	%	n	%	n	%
24 or less	30	2.6	2	.2	32	2.8
25 to 34	472	41.9	48	4.3	520	46.2
35 to 44	254	22.5	21	1.9	275	24.4
45 to 54	159	14.1	23	2.0	182	16.1
55 to 64	81	7.2	21	1.9	102	9.1
65 or more	13	1.2	3	.2	16	1.4
Total	1,009	89.5	118	10.5	1,127	100.0

Age is essentially also a factor when considering the year alumni completed their first University of Lethbridge undergraduate course or degree. The data for year of completion of "first undergraduate course at the U of L" is displayed in Table 27. The highest number of volunteers completed their first course in the "1988 to 1997" year range (37; 31.1% of 119).

Table 27. Year of Completing First University of Lethbridge Undergraduate Course by

Volunteer Status

	Non-vol	unteer	Volunteer		Tot	al
Range of Years	n	%	n	%	n	%
1967 to 1977	108	9.6	25	2.2	133	11.8
1978 to 1987	147	13.1	23	2.1	170	15.2
1988 to 1997	315	28.1	37	3.3	352	31.4
1998 to 2007	433	38.6	34	3.0	467	41.6
Total	1,003	89.4	119	10.6	1,122	100.0

The highest number of volunteers completed their first University of Lethbridge degree in the "1998 to 2007" year range (57; 47.9% of 119) (see Table 28).

Table 28. Year of Completing First University of Lethbridge Undergraduate Degree by

Volunteer Status

	Non-volunteer		Volunteer		Tot	al
Range of Years	n	%	n	%	n	%
1968 to 1977	71	6.3	15	1.3	86	7.6
1978 to 1987	112	10.0	19	1.7	131	11.7
1988 to 1997	223	19.9	28	2.5	251	22.4
1998 to 2007	597	53.2	57	5.1	654	58.3
Total	1,003	89.4	119	10.6	1,122	100.0

The cross-tabulation of volunteer status to geographic region of alumnus' current residence shows that the majority of alumni volunteers (102; 85.7% of 119) reside in Alberta (see Table 29).

Table 29. Geographic Region of Current Residence by Volunteer Status

	Non-vol	unteer	Volunteer		Tot	al
Current Residence	n	%	n	%	n	%
Alberta, Canada	753	66.6	102	9.0	855	75.6
Outside of Alberta, but in						
Canada	175	15.5	11	1.0	186	16.5
United States	30	2.7	1	.1	31	2.8
Outside of Canada and the						
United States	53	4.7	5	.4	58	.51
Total	1,011	89.5	119	10.5	1,130	100.0

The cross-tabulation of volunteer status to the population of the community where the alumnus currently works showed that over half of the alumni volunteers (56; 50.5% of 111) worked in a community with a population between "50,000 and 499,000" (see Table 30). The city of Lethbridge, where the University's main campus is located, has a population that falls in that range.

Table 30. Population of Current Community Where Alumnus Works by Volunteer Status

	Non-volunteer		Volunteer		Non-volunteer Volunteer To		al
Population	n	%	n	%	n	%	
Less than 5,000	104	10.0	5	.5	109	10.5	
5,000 to 49,000	132	12.7	11	1.1	143	13.8	
50,000 to 499,000	326	31.4	56	5.4	382	36.8	
Over 500,000	364	35.1	39	3.8	403	38.9	
Total	926	89.2	111	10.8	1,037	100.0	

Volunteer status was cross-tabulated with student experience variables listed in Table 2. The Chi-square results indicated that no significant relationships exist between volunteer status and the student support services or academic experience variables (see Table 31).

Table 31. Chi-Square Summary of Student Support Services and Academic Experience

Variables by Volunteer Status

Variable	n	df	X2	p
Admissions process	1,109	3	2.798	.424
Variety of course offerings	1,127	3	4.570	.206
Availability of required courses	1,127	3	.410	.938
Quality of instruction in courses	1,130	3	2.134	.545
Relationship with faculty	1,115	3	2.912	.405
Relationship with staff	1,041	3	4.960	.175
Recruiting process	539	3	7.205	.066
First year advising	779	3	5.308	.151
Advising in major	896	3	1.569	.666
Career services	660	3	2.729	.435
Counselling or other student support				
services	540	3	.424	.935
Overall level of satisfaction with				
undergraduate academic experience	1,126	3	1.472	.689

Volunteer status was cross-tabulated with the student financial support variables of scholarship, bursary, and academic recognition. The Chi-square results indicated no significant relationships between student financial support and volunteer status (see Table 32).

Table 32. Chi-Square Summary of Student Financial Support by Volunteer Status

Variable	n	df	X2	p
Scholarship	1,122	1	.021	.886
Bursary	1,123	1	.024	.876
Academic recognition	1,120	1	2.283	.131

All of the alumni relationship motivation variables that are associated with non-monetary forms of commitment were next cross-tabulated with volunteer status in order to determine what factors in the alumni relationship impact volunteerism. Table 33 displays the results.

Table 33. Chi-Square Summary of Alumni Relationship Motivation Variables by

Volunteer Status

Variable	n	df	X2	p	
Appreciation for U of L degree	1,131	1	8.520	.004	**
Appreciation for relationships with					
faculty	1,131	1	3.977	.046	*
Gratitude for financial support					
received as a student	1,131	1	4.713	.030	*
Desire to support students	1,131	1	20.486	.000	**
Desire to support research	1,131	1	5.113	.024	*
Recognition by the U of L for					
alumnus' contribution	1,131	1	33.326	.000	**

n	df	X2	p	
984	3	37.512	.000	**
1,113	4	1.450	.835	
1,083	4	3.908	.419	
1,092	4	3.748	.441	
1,117	4	1.080	.897	
892	4	9.432	.051	
1,007	4	7.227	.124	
967	4	9.689	.046	*
908	4	18.260	.001	**
	984 1,113 1,083 1,092 1,117 892 1,007 967	984 3 1,113 4 1,083 4 1,092 4 1,117 4 892 4 1,007 4 967 4	984 3 37.512 1,113 4 1.450 1,083 4 3.908 1,092 4 3.748 1,117 4 1.080 892 4 9.432 1,007 4 7.227 967 4 9.689	984 3 37.512 .000 1,113 4 1.450 .835 1,083 4 3.908 .419 1,092 4 3.748 .441 1,117 4 1.080 .897 892 4 9.432 .051 1,007 4 7.227 .124 967 4 9.689 .046

^{*} p <= .05, ** p <= .01

The results of the cross-tabulation of alumni relationship motivation variables to volunteer status are discussed in more detail below and also presented in supplementary data tables (see Appendix D).

A total of 81 (68.1%) of the 119 volunteers appeared to be motivated by the desire to support students and 68 (57.1%) by appreciation for their University of Lethbridge degree. A lower number of volunteers was found in relationship to the following variables: appreciation for relationships with faculty (46; 38.6%), gratitude for financial support received as a student (23; 19.3%), desire to support research (40; 33.6%), and recognition by the University for their contribution as alumni (32; 26.9%). Ninety-four

(83.2% of 113) alumni volunteers indicated they were "Satisfied" or "Very satisfied" with their relationship as alumni with the University.

Of the eight organizational identification variables included in Table 33 (reputation, distinctiveness, prestige, quality of programs, contributions to research, competitive excellence when compared to other universities, accomplishments of students, and accomplishments of alumni), only two show a significant relationship to volunteer status. A total of 94.6% (106 of 112) alumni volunteers rated the University at "Average," "Above average," or "Excellent" regarding the accomplishments of University of Lethbridge students, and 95.0% (113 of 119) rated the University highly on the accomplishments of its alumni.

The data analysis for Part D, comparing volunteer and non-volunteer groups, indicates that many variables in the student experience and alumni relationship impact volunteer status. Students who are aware of the role of alumni and volunteers or active in student clubs are more likely to become alumni volunteers. Age and geographic location variables impact volunteer status. There is no significant relationship between volunteer status and student support services or student financial support variables. Alumni's volunteer status is significantly related to several alumni relationship motivation variables, including two organizational identification variables (accomplishments of students and accomplishments of alumni).

Part E. Comparisons Between Donor and Non-Donor Groups

Three research questions explored the relationship of donor status to demographic, student experience, and alumni relationship motivation variables. In order to answer E10, E11, and E12, the data were analysed by dividing the respondents into

two groups – donors and non-donors. Descriptive analysis and frequency counts were used to describe the data. As the variables were nominal, Chi-square analysis was used to compare group frequencies and to determine if there is a significant relationship between donor status and any of the demographic, student experience, and alumni relationship motivation variables. Donor status for E10, E11, and E12 was established by participants' responses to Item 20 of the survey questionnaire. A total of 323 (28.4%) respondents declared they have "Donated to the U of L."

Research Question E10: Is there a significant relationship between alumni organizational identification variables and alumni donor status?

Organizational identification variables were identified by researchers (Mael & Ashforth, 1990; Shadoian, 1989; Schlenker, 1980) as factors that affect how an individual connects or associates with an organization. Therefore, it would be important to consider organizational identification factors that might influence alumni's decision to give back to their alma mater. To answer research question E10, Item 25 asked alumni to rate the University in relationship to eight organizational identification variables (reputation, distinctiveness, prestige, quality of programs, contributions to research, competitive excellence when compared to other universities, accomplishment of students, and accomplishments of alumni). These variables were cross-tabulated with alumni donor status to find out if significant relationships exist. The results are presented in Table 34.

Table 34. Chi-Square Summary of Organizational Identification Variables by Donor Status

Variable	n	df	X2	p	
Reputation	1,099	4	39.901	.000	**
Distinctiveness	1,069	4	50.181	.000	**
Prestige	1,078	4	26.144	.000	**
Quality of programs	1,103	4	25.770	.000	**
Contributions to research	881	4	16.592	.002	**
Competitive excellence when					
compared to other universities	996	4	46.370	.000	**
Accomplishments of students	958	4	23.570	.000	**
Accomplishments of alumni	899	4	30.504	.000	**

^{*} p <= .05, ** p <= .01

All of the organizational identification variables had a significant relationship to donor status, as evidenced by probability levels of less than .01 (p < .01). The number of donors appreciably increased in relationship to alumni's more positive rating of the University with regard to each organizational identification variable. The results are detailed in Tables 35 to 42.

Table 35 displays the results for the organization identification variable of reputation. Seven (0.6%) donors gave the University's reputation a rating of "Extremely poor" or "Below average," while 313 (28.4%) gave a rating of "Average," "Above average," or "Excellent." Therefore, alumni who give the University a higher rating regarding reputation are more likely to become donors.

Table 35. Organization Identification Variable of Reputation by Donor Status

		Donor				
	Non-donor		Donor		Total	
Reputation	n	%	n	%	n	%
Extremely poor	4	.4	1	.1	5	.5
Below average	47	4.3	6	.5	53	4.8
Average	252	22.9	65	5.9	317	28.8
Above average	327	29.8	141	12.8	468	42.6
Excellent	149	13.6	107	9.7	256	23.3
Total	779	71.0	320	29.0	1,099	100.0

The results for the organization identification variable of distinctiveness are provided in Table 36.

Table 36. Organization Identification Variable of Distinctiveness by Donor Status

		Donor				
	Non-donor		Donor		Total	
Distinctiveness	n	%	n	%	n	%
Extremely poor	4	.4	0	.0	4	.4
Below average	50	4.6	7	.7	57	5.3
Average	327	30.6	81	7.6	408	38.2
Above average	266	24.9	150	14.0	416	38.9
Excellent	107	10.0	77	7.2	184	17.2
Total	754	70.5	315	29.5	1,069	100.0

A total of 315 alumni donors rated the University regarding its distinctiveness.

Alumni donors who rated the University's distinctiveness as "Below average" comprised 0.7% (7) of the respondents. By comparison, alumni donors who gave a rating of "Average," "Above average," and "Excellent" represented 28.8% (308) of the respondents. Therefore, the higher alumni rate the University on its distinctiveness, the more likely they are to become donors.

A total of 35 (3.2% of respondents) donors rated the University's prestige as "Below average," and 280 (26.0%) donors gave a rating of "Average," "Above average," or "Excellent," as displayed in Table 37. Thus, there is higher likelihood that alumni will become donors if they rate the University higher in terms of its prestige.

Table 37. Organization Identification Variable of Prestige by Donor Status

		Donor				
	Non-donor		Donor		Total	
Prestige	n	%	n	%	n	%
Extremely poor	13	1.2	0	.0	13	1.2
Below average	131	12.2	35	3.2	166	15.4
Average	397	36.8	144	13.4	541	50.2
Above average	174	16.1	103	9.6	277	25.7
Excellent	48	4.5	33	3.0	81	7.5
Total	763	70.8	315	29.2	1,078	100.0

The results for the quality of programs variable are displayed in Table 38. Three (0.3% of respondents) donors rated the University as "Below average" with regard to the

quality of programs. In contrast, 317 (28.7%) donors rated the University as "Average," "Above average," or "Excellent."

Table 38. Organization Identification Variable of Quality of Programs by Donor Status

		Donor				
	Non-donor		Donor		Total	
Quality of programs	n	%	n	%	n	%
Extremely poor	1	.1	0	.0	1	.1
Below average	21	1.9	3	.3	24	2.2
Average	226	20.5	65	5.9	291	26.4
Above average	382	34.6	149	13.5	531	48.1
Excellent	153	13.9	103	9.3	256	23.2
Total	783	71.0	320	29.0	1,103	100.0

Alumni were also more likely to be donors if they rated the University's contributions to research higher. Eleven (1.2%) of the 881 respondents to the organization variable item regarding the University's contributions to research gave a rating of "Below average." In contrast, respondents who gave a rating of "Average," "Above average," or "Excellent" comprised 29.3% (258) of the donors. These results are displayed in Table 39.

Table 39. Organization Identification Variable of Contributions to Research by Donor
Status

		Donor				
	Non-donor		Donor		То	tal
Contributions to research	n	%	n	%	n	%
Extremely poor	2	.2	0	.0	2	.2
Below average	45	5.2	11	1.2	56	6.4
Average	218	24.7	72	8.2	290	32.9
Above average	223	25.3	105	11.9	328	37.2
Excellent	124	14.1	81	9.2	205	23.3
Total	612	69.5	269	30.5	881	100.0

Table 40 presents the results for the cross-tabulation of donor status to the University's competitive excellence. Fourteen (1.4%) respondents to this item, rated the University's competitive excellence as "Below average." In contrast, 272 (27.3%) donors gave a rating of "Average," "Above average, or "Excellent."

Table 40. Organization Identification Variable of Competitive Excellence by Donor Status

		Donor				
	Non-donor		Donor		Total	
Competitive excellence when						
compared to other						
universities	n	%	n	%	n	%
Extremely poor	7	.7	0	.0	7	.7
Below average	75	7.5	14	1.4	89	8.9
Average	314	31.5	79	7.9	393	39.4
Above average	216	21.7	137	13.8	353	35.5
Excellent	98	9.9	56	5.6	154	15.5
Total	710	71.3	286	28.7	996	100.0

Table 41 summarizes the results for donor status in relationship to the organizational identification variable of accomplishments of students. The majority of donors (281 of 288) rated the accomplishments of students as "Average," "Above average," or "Excellent"; they comprised 29.4% (281) of the survey respondents. Only 0.7% (7) of the respondents who rated this item as "Below average" were donors.

Table 41. Organization Identification Variable of Accomplishments of Students by Donor Status

		Donor				
	Non-donor		Donor		То	tal
Accomplishments of students	n	%	n	%	n	%
Extremely poor	1	.1	0	.0	1	.1
Below average	23	2.4	7	.7	30	3.1
Average	329	34.3	100	10.5	429	44.8
Above average	227	23.7	115	12.0	342	35.7
Excellent	90	9.4	66	6.9	156	16.3
Total	670	69.9	288	30.1	958	100.0

The final organizational identification variable that was cross-tabulated with donor status was the accomplishments of alumni. A total of 266 (29.6%) of the respondents who rated the accomplishments of alumni as "Average," "Above average," or "Excellent" were donors. By comparison, only 1 (1.0%) donor rated accomplishments of alumni as "Below average." The results are presented in Table 42.

Table 42. Organization Identification Variable of Accomplishments of Alumni by Donor Status

		Donor				
	Non-donor		Donor		То	tal
Accomplishments of alumni	n	%	n	%	n	%
Extremely poor	0	.0	1	.1	1	.1
Below average	25	2.8	8	.9	33	3.7
Average	312	34.7	94	10.5	406	45.2
Above average	198	22.0	99	11.0	297	33.0
Excellent	89	9.9	73	8.1	162	18.0
Total	624	69.4	275	30.6	899	100.0

All eight of the organizational identification variables, as presented in Tables 35 to 42, influence alumni to donate to their alma mater. The number of donors increases noticeably when alumni's rating of the University of Lethbridge is "Average," "Above average," or "Excellent" in the areas of reputation, distinctiveness, prestige, quality of programs, contributions to research, competitive excellence when compared to other universities, accomplishment of students, and accomplishments of alumni.

Research Question E11: Does specific financial support or academic recognition (e.g., scholarships, bursaries or academic awards of distinction) received as a student impact an alumnus' inclination to donate to the university?

Reciprocity was identified by researchers (Diamond & Kashyap, 1997; Weerts & Ronca, 2007b) as a major motivator in philanthropy, particularly as related to student

awards. The nature of student awards (Item 15 of the survey questionnaire), bursaries (Item 16), and academic awards (Item 17) provided the researcher with the opportunity to determine whether having received financial support or academic recognition as a student was related to reciprocity in the form of giving back financial support as an alumnus. Table 43 displays the results.

Table 43. Chi-Square Summary of Student Financial Support or Academic Recognition by Donor Status

Variable	n	df	X2	p	
Scholarship	1,110	1	.916	.339	
Bursary	1,110	1	4.721	.030	*
Academic recognition	1,107	1	.183	.669	

^{*} p <= .05, ** p <= .01

A total of 452 (39.7%) survey participants indicated they had received a scholarship, 274 (24.1%) had received a bursary, and 391 (34.3%) had received an academic award. The donor and non-donor groups were cross-tabulated with receipt of student scholarships, bursaries, and academic awards to determine if there were any significant relationships to alumni donor status.

Student financial support in the form of a bursary was the only student financial support variable that showed a significant relationship to donor status, and was therefore explored in more detail. The results indicate a negative impact with regard to donor status and student receipt of a bursary (see Table 44). The percentage of alumni donors who did not receive a bursary (23.2%) was over four times higher than the percentage of donors

who did receive a bursary (5.7%). In other words, students who receive bursaries are less likely to become donors as alumni.

Table 44. Bursary by Donor Status

	Donor status							
	Non-donor		Donor		Non-donor Donor To		То	tal
Bursary	n	%	n	%	n	%		
Yes	206	18.6	64	5.7	270	24.3		
No	583	52.5	257	23.2	840	75.7		
Total	789	71.1	321	28.9	1,110	100.0		

To determine if a relationship might exist between the receipt of student bursary support and career-related factors that might impact alumni's current ability to donate, the data regarding the bursary variable and donor status were cross-tabulated with alumni's satisfaction with their career, employment opportunities, and household income. No significant relationships were found (see Table 45).

Table 45. Chi-Square Summary of Donor Status by Bursary and Career-Related

Variables

Variable	n	df	X2	p
Satisfaction with career	1,082	3	1.440	.696
Satisfaction with employment				
opportunities	1,065	3	.683	.877
Satisfaction with household income	1,064	3	3.347	.341

A review of the data showed that 244 (91.4% of 267) bursary recipients were "Satisfied" or "Very satisfied" with their career, 233 (87.9% of 265) with their employment opportunities, and 224 (86.5% of 259) with their household income. More data would be required to determine whether the lack of future support from bursary recipients is tied to socio-economic factors present in the student experience that may also be present in their lives as alumni.

Survey respondents had identified in an earlier item (see Table 23) that the top factor influencing alumni's decision to give back to the University of Lethbridge was the desire to support students. Since the scholarship, bursary and academic award questions (Items 15, 16, and 17 of the survey questionnaire) were worded in relationship to the alumnus' receipt or non-receipt of such support or recognition, a direct comparison between alumni's desire to support students in this manner and alumni's feeling that they should have received such support as a student, is not included in this analysis. However, it is of interest to note that, of the 531 survey respondents who indicated their donor status and also indicated they are influenced by the desire to support students, 246 (46.3% of 531) had received a scholarship, 137 (25.8% of 531) had received a bursary, and 217 (40.9% of 531) had received academic recognition. The overlaps between the donor groups show that 175 (15.0% of 1,126 respondents) received a scholarship and a bursary, 262 (23.4% of 1,118 respondents) received a scholarship and an academic award, and 127 (11.3% of 1,120 respondents) received a bursary and an academic award. More specific questioning would be required in order to understand more fully the relationships of the student financial support variables to each other and to alumni donor status.

Research Question E12: What demographic, student experience, and alumni relationship motivation variables have the most impact on alumni donor status?

The alumni relationship motivation variables of organizational identification were presented in detail in response to E10, and the student experience variables of student financial support (scholarship, bursary, and academic recognition) variables were examined in response to E11. These variables are therefore not included in the response to question E12, which cross-tabulated donor status to all other demographic, student experience, and alumni relationship motivation variables (see Tables 1, 2, and 3). For E12, Chi-square test results were grouped by variable type and organized in summary tables. In instances where data analysis indicated a probability level of less than or equal to .05 (p <= .05), results were noted in the summary table. Fifteen demographic variables were cross-tabulated with donor status. The results are displayed in Table 46.

Table 46. Chi-Square Summary of Demographic Variables by Donor Status

Variable	n	df	X2	р	
Age	1,113	5	218.934	.000	**
Gender	1,114	1	.157	.692	
Entrance method	1,107	3	25.200	.000	**
Student residence	1,117	1	.292	.589	
Year of completing first U of L					
undergraduate course	1,108	3	247.522	.000	**
Year of completing first U of L					
undergraduate degree	1,108	3	241.457	.000	**

Variable	n	df	X2	р	
First or only U of L bachelor's					
degree	1,116	16	75.924	.000	**
Additional bachelor`s or advanced					
degree(s) at any university	1,117	1	9.907	.002	**
Geographic region of current					
residence	1,116	3	4.916	.178	
Population of community where					
alumnus works	1,104	4	25.834	.000	**
Extent U of L bachelor`s degree					
prepared alumnus for chosen career	1,112	3	29.661	.000	**
Satisfaction with career	1,088	3	18.689	.000	**
Satisfaction with employment					
opportunities	1,072	3	29.063	.000	**
Satisfaction with primary job					
responsibilities	1,069	3	21.241	.000	**
Satisfaction with household income	1,071	3	32.434	.000	**

^{*} p <= .05, ** p <= .01

The variables of gender, living in student residence, and the alumnus' current geographic location of residence had no significant relationship to donor status. However, all other demographic variables were determined to have a significant relationship to donor status. These have been examined in more detail below, starting with age. Table 27 displays the results for age by donor status.

Table 47. Age by Donor Status

	Non-donor		Donor		Tot	al
Age	n	%	n	%	n	%
24 or less	32	2.9	1	.1	33	3.0
25 to 34	456	41.0	57	5.1	513	46.1
35 to 44	178	16.0	94	8.4	272	24.4
45 to 54	85	7.6	94	8.4	179	16.0
55 to 64	36	3.2	64	5.8	100	9.0
65 or more	4	.4	12	1.1	16	1.5
Total	791	71.1	322	28.9	1,113	100.0

In the "24 or less," "25 to 34," and "35 to 44" age ranges, there are considerably more non-donors (666; 59.9%) than donors (152; 13.6%). However, the percentage of donors begins to shift with the "45 to 54" age range, with more donors than non-donors in each category. A total of 15.3% (170) of respondents were donors over 44 years of age, as compared to 11.2% (125) non-donors for the same age group.

Entrance method, year of completing the first University of Lethbridge course, and year of completing the first University of Lethbridge degree, also indicate a strong relationship between the alumnus' age or earliest student experience and the alumnus' donor status. For entrance method, alumni who entered the University in the fall or spring immediately following high school represented the highest number of donors (149; 46.9% of 318).

The "1988 to 1997" year range of completing the first University of Lethbridge course showed the largest number of donors (101; 31.5% of 321 donors). There are more non-donors (246; 22.2% of 1,108) than donors (101; 9.1% of 1,108) in that year range. The same is evident in the "1998 to 2007" year range, with 424 (38.3%) non-donors and only 39 (3.5%) donors. The opposite is found in "1978 to 1987," which has more donors (91; 8.2%) than non-donors (75; 6.8%), and "1967 to 1977," which also has more donors (90; 8.1%) than non-donors (42; 3.8%).

The results for the year of completing the first University degree were similar. Most donors fell in the "1988 to 1997" category (113; 35.2% of 321 donors). There are more non-donors (134; 12.1% of 1,108) than donors (113; 10.2% of 1,108) in that range of years. In the "1998 to 2007" range, there are 570 (51.4%) non-donors and 76 (6.9%) donors. The opposite is found in "1978 to 1987," which has 72 (6.5%) donors and 57 (5.1%) non-donors, and "1967 to 1977," which has 60 (5.4%) donors and 26 (2.3%) non-donors. Thus, the percentage of donors to non-donors is highest in alumni who completed their first course or first degree before the year-range of "1988 to 1997."

The variables related to degree(s) showed a significant relationship to donor status. The ranking of alumni's first University of Lethbridge degree, in order of the highest to lowest number of donors in each degree option, is as follows: Bachelor of Education (75; 23.2%), Bachelor of Management (71; 22.0%), Bachelor of Arts (65; 20.1%), Bachelor of Arts and Science (38; 11.7%), and Bachelor of Science (37; 11.5%). All other degrees combined made up the final 37 (11.5%) of the 323 alumni donors in relationship to the alumnus' first University degree. The data indicate that most donors have Education degrees, the fourth-ranked degree (13.1%) by population of respondents.

In terms of overall survey participation in relationship to degrees, 50.3% (75) of the 149 Bachelor of Education respondents are donors, as are 23.9% (71) of the 297 Bachelor of Management respondents, 25.3% (65) of the 257 Bachelor of Arts respondents, 45.2% (38) of the 84 Bachelor of Arts and Science respondents, and 22.2% (37) of the 167 Bachelor of Science respondents. The University of Lethbridge's Faculty of Education and Faculty of Arts and Science were established in 1967, the year in which the University commenced operations; the Faculty of Management was established in 1981. It is therefore interesting to note that, when combining the Arts, Arts and Science, and Science degrees, the percentage of donors (27.6%; 140 of 508 survey respondents) in the Faculty of Arts and Science is still noticeably less than the percentage of donors in the Faculty of Education (50.3%; 75 of 149 survey respondents) and only slightly above the percentage of donors (23.9%; 71 of 297 survey respondents) in the Faculty of Management.

Other variables related to degrees indicate significant relationships to donor status. A total of 196 (60.7%) of the alumni donors hold an additional or advanced degree, as compared to 127 donors (39.3%) who do not. As to the extent to which respondents felt their University of Lethbridge degree had prepared them for their chosen career, 291 (90.1%) alumni donors responded "Somewhat" or "To a great extent," and 32 (9.9%) donors selected "Not at all" or "Very little." Thus alumni are more likely to donate if they hold an additional degree, or if they feel their University of Lethbridge bachelor's degree prepared them for their chosen career.

There is a significant relationship between donor status and the population of the community where the alumnus works. Results are as follows, ranked highest to lowest:

46.6% of the donors work in communities in the "50,000 to 499,000" population range, 28.2% in the "500,000 and above" range, 12.9% in the "5,000 to 49,999" range, and 12.3% in the "Less than 5,000" range.

The final group of demographic variables cross-tabulated to donor status all related to career, employment opportunities, primary job responsibilities, and household income. In every case, the higher the satisfaction rating, the higher the percentage of donors. In all, 301 (95% of 317) donors are "Satisfied" or "Very satisfied" with their career, 293 (93.3% of 314) with their employment opportunities, 300 (95.8% of 313) with their primary job responsibilities, and 293 (92.5% of 317) with their household income.

The next analysis in response to research question E12 required cross-tabulation of donor status to student support services and academic experience variables. The results are presented in Table 48.

Table 48. Chi-Square Summary of Student Support Services and Academic Experience

Variables by Donor Status

Variable	n	df	X2	p	
Admissions process	1,094	3	3.621	.305	
Variety of course offerings	1,113	3	23.053	.000	**
Availability of required courses	1,113	3	6.979	.073	
Quality of instruction in courses	1,116	3	10.573	.014	*
Relationship with faculty	1,103	3	9.290	.026	*
Relationship with staff	1,029	3	8.527	.036	*
Recruiting process	536	3	2.232	.526	
First year advising	768	3	.591	.898	
Advising in major	888	3	3.468	.325	
Career services	652	3	2.506	.474	
Counselling or other student					
support services	535	3	3.119	.374	
Overall level of satisfaction with					
undergraduate academic experience	974	3	13.756	.003	**

^{*} p <= .05, ** p <= .01

No significant relationships were found regarding donor status and the variables of admissions process, availability of required courses, recruiting process, advising, career services, and counselling or other student support services. However, significant relationships were found with regard to the variety of course offerings, quality of instruction in courses, relationship with faculty, relationship with staff, and overall level

of satisfaction with undergraduate academic experience variables. A total of 303 (94.4% of 321) donors were "Satisfied" or "Very satisfied" with the variety of course offerings, 318 (98.5% of 323) with the quality of instruction in courses, 313 (97.6% of 321) with their relationship with faculty, 295 (97.7% of 302) with their relationship with staff, and 270 (89.1% of 303) with their overall level of satisfaction with their University of Lethbridge undergraduate academic experience.

Student engagement variables were cross-tabulated with donor status. The results are summarized in Table 49.

Table 49. Chi-Square Summary of Student Engagement Variables by Donor Status

Variable	n	df	X2	p	
Student clubs	1,111	1	10.325	.001	**
Volunteer projects	1,108	1	11.212	.001	**
Pronghorn athletics	1,109	1	18.421	.000	**
Intramural athletics	1,108	1	.371	.542	
Extracurricular Fine Arts programs	1,107	1	6.454	.011	*
Non-credit classes	1,105	1	24.638	.000	**
Other organized student activities	1,105	1	7.380	.007	**
Leadership position with Students'					
Union	1,114	1	10.113	.001	**
Awareness of role of U of L alumni	1,114	3	12.025	.007	**
Awareness of role of U of L volunteers	1,112	3	15.330	.002	**
Awareness of role of U of L donors	1,112	3	6.978	.073	
Interactions with U of L alumni	1,112	3	1.207	.751	
Interactions with U of L volunteers	1,104	2	10.854	.004	**
Interactions with U of L donors	1,110	2	9.455	.009	**
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^{*} p <= .05, ** p <= .01

The student engagement variables of intramural athletics, awareness of role of University of Lethbridge donors, and interactions with University of Lethbridge alumni did not appear to have significant relationships to alumni donor status. However, the Chi-square test showed significant relationships between donor status and the remainder

of the student engagement variables in Table 49, which are discussed in more detail below and also presented in supplementary data tables (see Appendix E).

Alumni who as students were active in student clubs (170; 53.3% of 319 donors) and were aware of the role of University alumni (202; 62.9% of 321 donors) and the role of University volunteers (231; 72.2% of 320 donors) are more likely to contribute financially to their alma mater. Fewer donors were found among participants who were involved in student volunteer projects (115; 36.2% of 318 donors), Pronghorn athletics (57; 17.9% of 318 donors), extracurricular Fine Arts programs (57; 18.0% of 317 donors), non-credit classes (67; 21.2% of 316 donors), other student organized activities (134; 42.4% of 316 donors), and Students' Union leadership (26; 8.0% of 323 donors). Only 33.0% (106) of the 321 alumni donors responded that, as students, they had opportunities to interact with University of Lethbridge volunteers (other than student volunteers), and 14.3% (46 of 322 donors) had opportunities to interact with donors.

The final Chi-square analysis related to donor status was a test of the alumni relationship motivation variables. The organizational identification variables examined extensively in response to research question E10 (see Tables 34 to 42) were not included in this analysis. Results regarding the balance of motivation variables are summarized in Table 50.

Table 50. Chi-Square Summary of Alumni Relationship Motivation Variables by Donor Status

Variable	n	df	X2	p	
Appreciation for U of L degree	1,117	1	97.314	.000	**
Appreciation for relationships with faculty	1,117	1	14.719	.000	**
Gratitude for financial support received as a					
student	1,117	1	5.618	.018	*
Desire to support students	1,117	1	72.686	.000	**
Desire to support research	1,117	1	12.642	.000	**
Awareness of U of L's needs for financial					
support	1,117	1	75.273	.000	**
Matching programs through alumnus'					
employer or professional association	1,117	1	2.628	.105	
Matching programs through government					
funding	1,117	1	5.800	.016	*
Recognition by the U of L for alumnus'					
contribution	1,117	1	14.059	.000	**
Overall level of satisfaction with alumni					
relationship with U of L	974	3	13.756	.003	**

^{*} p <= .05, ** p <= .01

All of the alumni relationship motivation variables listed in Table 50, with the exception of matching programs through the alumnus' employer or professional association, had a significant relationship to donor status. The results of the

cross-tabulation of alumni relationship motivation variables to donor status are discussed in more detail below and also presented in supplementary data tables (see Appendix F).

The highest number of alumni donors were found in relationship to the following variables: alumni's overall level of satisfaction with their alumni relationship (270; 89.1% of 303), desire to support students (221; 68.4% of 323), and appreciation for University of Lethbridge degree (218; 67.5% of 323). Lower numbers of alumni donors were found for the following variables: appreciation for relationships with faculty (126; 39.0% of 323), awareness of the University's needs for financial support (114; 35.3% of 323), desire to support research (104; 37.3% of 323), recognition by the University for alumnus' contribution (53; 16.4% of 323), matching programs through government funding (46; 14.2% of 323), and gratitude for financial support received as a student (54; 16.7% of 323).

The data analysis related to Part E, comparing donor and non-donor groups, indicates that many variables are present in the student experience and in the alumni experience that impact donor status. Alumni who rate the University highly on the organizational identification variables are highly likely to become donors. Bursary recipients are less likely to donate to the University. There are more donors than non-donors among alumni who graduated before 1988 or who are older than 44. The highest number of donors is found in relationship to a first bachelor's degree in Education, followed by Management, Arts, Arts and Science, and Science. Alumni who hold an additional or advanced degree are also more likely to donate.

Summary

The quantitative data analysis has provided information on variables that impact alumni engagement. The results support findings in the reviewed literature that certain demographic, student experience, and alumni relationship variables influence alumni connection and commitment. Engaged students are more likely to become engaged alumni, and they are more likely to volunteer or donate as alumni. Alumni who rate the University higher on its organizational identification variables are more likely to demonstrate their commitment to their alma mater by becoming donors. The higher alumni rate their overall student experience and alumni relationship, the more likely they will become donors. In short, many factors influence alumni connection and commitment.

Qualitative Data Analysis

Qualitative data analysis of responses allowed the researcher to summarize patterns and strengths and to identify perceived issues. Content analysis was used to determine what common topics or themes were most prevalent in the qualitative data, in order to gain more understanding of the predominant values in the phenomenon of the alumni relationship. For this study, the demographic, student experience, and alumni relationships variables (see Tables 1, 2, and 3) created the framework for categories and guided the content analysis.

The qualitative data were also reviewed to identify emerging categories that were not addressed through items presented in the survey instrument. Content analysis of the qualitative data broke down the text into units of analysis in order to report the main

variables and themes addressed by the respondents. Responses were also reviewed to identify any interconnectedness of variables that may be implied by respondents.

The main qualitative data were collected in response to Item 30, the final question of the survey questionnaire:

(OPTIONAL) Please feel free to comment in any way about your U of L student experience or your experience as an alumnus of the U of L, or to share any other thoughts you may have as a result of completing this survey.

Space for additional qualitative data collection was provided in the "Other (please specify)" response option for Item 3 (entrance method), Item 7 (University of Lethbridge undergraduate degree), Item 8 (additional undergraduate or advanced degree), Item 20 (frequency and ways of connecting since graduation), Item 23 (factors influencing connection), and Item 24 (factors influencing giving back), for the purpose of allowing respondents to add categories they felt were missing in the available response selections.

The qualitative data are presented in summary form and identify key factors, issues, and concepts. The data provided in response to Item 30, the main qualitative question, will be discussed in the final section of the qualitative data analysis. The comments provided in response to the "Other (please specify)" field for Items 3, 7, 8, 20, 23, and 24 in the survey instrument will be presented next, and in the order in which the items appeared in the questionnaire.

Response to "Other (please specify)" in Items 3, 7, 8, 20, 23 and 24 on Survey Questionnaire

Item 3 on the survey questionnaire asked, What was your entrance method with regard to attending the U of L? There were 17 comments regarding the entrance method to the University of Lethbridge. Comments related to entrance to the University while

still in high school, entrance after taking an ESL course, and entrance as an adult or mature student. With regard to entrance while in high school, the two respondents had selected the response option that indicated they entered the University in the fall or spring semester immediately after completing high school, which is when they would have been formally registered to attend the University. Six of the mature students selected the response option of entrance after a period of one year or more after completing high school. Two of the other seven mature students referenced tests or upgrade courses. The other five selected "Other," as did the two ESL students. Entrance through a non-traditional adult admission evaluation process, without completing high school or completing earlier undergraduate courses, was not presented as a response option in the questionnaire. More information would be needed in order to determine if the respondents who selected "Other" had completed high school or attended another post-secondary institution before entering the University of Lethbridge, or had entered through a non-traditional adult admission evaluation process.

Item 7a on the survey questionnaire asked, What was your first (or only) U of L Bachelor's degree? Seventeen comments were entered for this survey question. The responses provided additional information about the alumnus' first degree, such as major or a reference to a combined degree, offered as a response option. Item 7b of the survey asked, What additional U of L Bachelor's degree(s) did you obtain, if any? Earlier it was noted that the "Other" comments related to Item 7b suggested respondents did not respond in the manner intended by the survey question. It was determined that the item itself was ambiguous, and thus the data related to Item 7b have been excluded from further analysis.

Item 8 on the survey questionnaire asked, What academic degree(s) have you completed at any university in any year, since completing your first U of L degree? The 99 comments included information on courses, diplomas, certifications, designations (e.g., CA, CGA, and CMA), and additional details about advanced degree programs or universities that respondents had attended. Eighteen responses indicated that alumni had completed advanced degrees not offered as a response option (e.g., DC, DDS, DVM, LLB, LLM, and MD).

Item 20 on the survey asked, Since you graduated from the U of L, how frequently have you stayed connected with the U of L in any of the following ways? Alumni expanded on the questionnaire response options. Of the 95 responses, 25 alumni commented that they stay connected through current or past employment on the faculty or staff of the University. One former sessional instructor mentioned she has included wording in her Will leaving a bequest to the University of Lethbridge. Other comments mentioned connection to the University by supporting student teachers, hosting students in their home, attending job fairs, hiring co-op students, bringing visitors to campus, mentoring students, making presentations on campus, sharing their University experiences with future students at recruitment seminars, inviting University of Lethbridge students to speak to high school classes, attending convocation ceremonies, shopping at the University Bookstore, and maintaining a University gym membership. In addition, alumni mentioned their connection through children, grandchildren, and other family members who are attending or have attended the University. Email, magazines, newsletters, and the web were mentioned in 11 comments. These three media-related options were also explored in the earlier quantitative data analysis, as they were offered

as response options in the survey question related to factors influencing connection (Item 23 in the survey questionnaire).

Alumni were asked in Item 23, Which of the following have influenced (or might influence) your decision to stay in touch with the U of L or other U of L alumni? A total of 22 comments were provided by the participants. They mentioned connections through their work environments, planned networking opportunities, and chance meetings.

Alumni stated their desire for alumni events to be designed with consideration for the era or age group of potential attendees, and for more events to be held in their own community. The only geographic references mentioned in the comments, other than "my community," were "Yellowknife," "overseas," and "lower mainland."

Item 24 on the survey questionnaire asked, Which of the following have influenced (or might influence) your decision to give back to the U of L as a volunteer or donor? In the 46 responses, ten alumni mentioned that their financial circumstances will have the most impact on their decision to give back. Other responses noted the desire to find a stronger link and the right cause, and an interest in supporting students. A theme emerged that related to the transactional nature of education. Judging by some comments, some alumni believe that they have given back to the University through the tuition they paid for themselves or for family members. One alumnus mentioned government responsibility and stated that it is "the government's job to fund the university." Three of the 46 comments described a negative education experience, which could be categorized under the following variables: a program's admissions process, interaction with a certain staff member, and dissatisfaction with the alumnus' current career.

Optional Response to Item 30 on Survey Questionnaire

Item 30 was the final item on the survey questionnaire:

(OPTIONAL) Please feel free to comment in any way about your U of L student experience or your experience as an alumnus of the U of L, or share any other thoughts you may have as a result of completing this survey.

A total of 315 (27.7%) of the 1,139 survey participants entered a response to Item 30. Of these responses, 180 (57.2%) were completely positive; however, 54 (17.1%) contained a mix of positive comments, constructive criticism, or recommendations for improvements, and 81 (25.7%) contained at least one negative or less positive comment. However, the majority of these 81 comments also included complimentary remarks about the University. As well, respondents included explanations or justification for why they may not have rated the University at the highest level for certain factors presented in the survey questionnaire.

The researcher reviewed the qualitative data multiple times and recorded 535 instances in the comments that could be categorized as a specific variable (i.e., age) or related to multiple variables (i.e., age, type of alumni event for age group, geographic location of event). The data for all 535 comments are organized and summarized under the main variable headings of demographic, student experience, and alumni relationship. *Demographic*

There were 81 comments related to the demographic variables, with the most predominant being age or current geographic location of the alumnus. Fourteen respondents mentioned age, entrance as a mature student, family responsibilities, or the commute to campus as reasons why they had not been able to engage more as students. Forty-four alumni spoke of their age or current residence location as an obstacle to

engaging more with the University as an alumnus, but most alumni hoped there would be an event or occasion of interest that would bring them back to campus sometime in the near future. Nine respondents mentioned they had retired or were nearing retirement.

Three respondents shared information regarding an additional degree or designation, and one mentioned a plan to return to campus to work on another University of Lethbridge degree. Twenty comments were related to career variables. In nine responses, alumni implied they had chosen the wrong degree or that their choice of degree (i.e., two in Fine Arts and one in Education) had been economically challenging with regard to financial compensation or career opportunities. Eleven alumni expressed gratitude for the impact their degree had on their career success. One response mentioned the alumnus' current salary.

Student Experience

There were 172 comments related to student support services and the academic experience. A total of 48 comments mentioned valued relationships with faculty. Twenty remarks also referred to the small class size or intimate setting of the University campus that helped facilitate strong bonds between students and professors. In the four less positive comments regarding faculty, it appeared the difficulties were related to an advising or admissions issue, rather than to a faculty member.

The most negative comments in response to Item 30 were related to student support services and student financial support variables. The comments mentioned frustrations with experiences related to admissions (11), advising (10), or career services (10). In contrast, two comments expressed thanks for advising services and counselling support. Student financial support was mentioned in 26 comments, with respondents

noting the lack of availability of or access to scholarships. One participant mentioned having been greatly disappointed and feeling "less valued as a student" as a result of having no access to student awards. Twelve comments also referenced student debt and the need for more student financial support.

Fifty-eight alumni said they had an overall positive student experience. Only one mentioned having had an overall negative student experience. Another commented that there were parts of the student experience that were not very enjoyable, but this individual also had high praise for the efforts of faculty and staff that helped turn the situation around.

There were 32 comments related to student engagement. Sixteen alumni mentioned that they appreciated the opportunities they had to engage as students. The types of student engagement included two references to athletics and one to Students' Union activities. Sixteen alumni mentioned they had not felt engaged as students, and five of these stated they felt diversity issues had created obstacles (one general comment, one regarding physical disability, and three FNMI-related) during their student experience. Another two alumni thanked the University for the considerations given to students dealing with diversity issues (one general and one FNMI-related). Two respondents added that, as students, they would have appreciated interacting more with alumni.

Alumni Relationship

A total of 224 comments were related to the alumni relationship, with 112 comments mentioning connection and 112 mentioning motivation variables. With regard to connection, 77 comments expressed sentiments about emotional ties, fond memories,

friendships, and contacts with other alumni. Alumni expanded on their feelings of connection and asked for more opportunities to network with other alumni through reunions or alumni events. Fourteen comments mentioned the lack of alumni events appropriate for the alumnus' age group, or the lack of alumni gatherings in the alumnus' community (i.e., Calgary and Edmonton). In contrast, 26 comments indicated that alumni have appreciated alumni events and would like more opportunities to network with alumni in their own communities (i.e., Calgary, Edmonton, Ottawa, and Vancouver). Alumni who had not attended classes on the Lethbridge campus asked for ways to feel more a part of the overall University of Lethbridge alumni community.

Seventeen alumni commented that they either feel no connection or have not had the connection options communicated to them. Another 21 expressed gratitude for updates and communications about fellow alumni and alumni events. Four said they wanted to hear from the University other than for the annual alumni fundraising appeal, and three suggested the University might benefit from providing more opportunities for alumni to interact with current students. Six alumni commented that they appreciated being asked to participate in the survey, as they wanted to help the University improve or build its alumni program. Some noted that their distance from campus or their family responsibilities were the only reasons why they had not been more involved in alumni activities. Most mentioned their intentions of being more involved with and donating to the University in the future. One alumnus even expressed a feeling of guilt and the intention of showing loyalty and commitment to the University of Lethbridge in the future. Others mentioned that they hope to be more involved with the University now that they have recently retired or will be retiring soon.

There were 99 comments related to the alumni relationship motivation variables. Alumni expressed thanks and gratitude to the University for the quality of the student experience. They also expressed appreciation for their degree, the life-changing experience the University of Lethbridge provided, and the life-long relationships they have maintained with alumni, faculty, and staff. Sixteen alumni stated that they have recommended the University to others as a result of the pride they feel in their degree and education. Pride, prestige, and reputation were common themes in the praise expressed by these alumni, as well as the high quality of professors and academic programs at the University. Three alumni commented on the need for the University to share the news of its accomplishments more widely and to develop a stronger profile and presence beyond Alberta and Canada.

Summary

The qualitative data collected in response to Item 30 indicate that alumni appreciate the University of Lethbridge and are looking for ways to increase their engagement and support. The comments reinforce the findings in the reviewed literature and the quantitative data analysis, and provide information on the factors that appear to have the most influence on alumni connection and commitment.

Discussion of the study's findings, implications, and recommendations for areas of subsequent research follow in Chapter 5.

Chapter 5. Discussion

Introduction

The purpose of the study was to determine what factors in the university experience have the most influence on alumni engagement. The research was exploratory in nature and was designed to solicit information directly from alumni in order to gain insight on how and when a university might have opportunities to influence the alumni-university relationship in a mutually beneficial manner.

A total of 1,139 University of Lethbridge baccalaureate degree holders who graduated during the University's first 40 years (1967 to 2007) was surveyed in June 2009 through a web-based survey titled "Factors Influencing Alumni Connection and Commitment," designed by the researcher. The survey was structured to identify potential relationships between variables representative of the student experience and variables representative of alumni engagement.

The resulting data analysis provided an overview of the factors that have an influence on alumni as they develop their relationship with their alma mater. Additional data included information that respondents offered about the nature of their individual and shared education experiences, their earliest and most recent associations with the University of Lethbridge, and the impact these interactions have had on their level of interest in supporting the University financially or non-financially.

This chapter includes a discussion of the results presented in Chapter 4, relating these results to findings reported in the literature. The researcher also comments on the implications for practice regarding university student and alumni programs, notes the limitations of the current study, and offers suggestions for further research with regard to

factors influencing alumni engagement. This section includes a discussion of the results analyzed by descriptive means, as well as the variables that were cross-tabulated using Chi-square analysis. The discussion follows the sequence of main conclusions, alumni connection, alumni commitment, and the comparison of volunteers and donors as related to demographic, student experience, and alumni relationship variables. The variables were tested in order to answer the central research question: What factors in the student experience and alumni relationship influence alumni connection and commitment?

Main Conclusions

As noted in the previous chapter, there were a number of statistically significant relationships between the engagement variables and forms of alumni connection.

Although the general results could lead to a wide array of suggestions and recommendations, five main themes among the conclusions became apparent, and these form the heart of this discussion. The five main conclusions are as follows:

- 1. Relationships formed during the student experience impact alumni's interest in staying engaged with their alma matter. Positive interactions between students and other university constituents (e.g., faculty, staff, and other students) will benefit alumni programs years later. Of these relationships, the nature of the relationship between faculty members and students seems to be paramount.
- 2. Alumni are highly likely to become donors to the first university attended after high school, which indicates a strong relationship to the entrance method and the earliest student experience. Investing in a retention program to keep first-year students at a university through to their graduation is an investment in the university's future alumni donors.

- 3. Engaged students are more likely to become engaged alumni and future alumni volunteers or donors. Therefore, it is worthwhile for a university to support student activities that provide opportunities to increase student engagement.
- 4. Bursary recipients are less likely to become donors. A university will benefit from diverse student financial support programs that address the needs of students requiring financial aid, but also meet the needs of the institution years later, through financially supportive alumni.
- 5. Alumni philanthropy is linked to alumni's level of satisfaction regarding their academic experience (e.g., availability and quality of courses, relationships with faculty and staff, overall undergraduate academic experience) and the university's organizational identification variables (e.g., reputation, distinctiveness, prestige, quality). Variables that elevate the status of a university affect alumni's perception of their own status and will impact alumni giving.

Alumni Connection

In order to understand alumni connection, alumni were asked how frequently and in what ways they have stayed connected to their alma mater since graduation. They were also asked what factors have influenced or might influence their decision to stay connected to the University of Lethbridge. Participants revealed many connections outside of the formal alumni program. The data show that alumni have stayed connected primarily through the relationships they have established with faculty, staff, and other alumni. Respondents referred to the small class size, intimate classroom setting, and ability to have close relationships with faculty as major benefits of attending the University of Lethbridge. The emotional ties, such as friendships with other alumni, are

strong connection factors (Lui, 2007; Mael & Ashforth, 1990; Taylor & Martin, 1995). Alumni's overall appreciation for their academic experiences as students (Gaier, 2005) have impacted their sense of community and formed the basis for long-lasting connections.

University and alumni events and communications play an important role in alumni's connection to their alma mater. Respondents expressed a desire for more opportunities to interact with the University and each other. By designing effective programs that cater to the needs, expectations, and interests of alumni, the University has an opportunity to become not only a facilitator but a valued partner. Integrated programs that include relevant events and communications, as well as volunteer and donor opportunities, are the major components that build and strengthen the alumni bonds with each other and the University. Events and communications results will be discussed next. *Events*

Events ranked lower than personal relationships with faculty, staff, or other alumni. However, over half of the respondents indicated they have networked with other alumni, and nearly half had attended University events. For comparison, donating and volunteering, which are both connection and commitment variables, ranked below attending University of Lethbridge events; donating ranked slightly above attending alumni-related events. The data therefore suggest that events designed to provide opportunities for alumni to enhance existing relationships and build new ones with other alumni are important components of a university's alumni program.

The data indicate that these alumni are highly interested in reunion events that will bring them back to campus, and alumni gatherings that will facilitate alumni

networking and community-building in their current geographic locations. This clearly shows their interest in reliving the shared history in the actual environment of their student days, and in extending the alumni community through networking opportunities well beyond the campus. These alumni are expressing what Scherer (1972) describes as "a strong yearning to return to a pleasant, less complicated past when most people knew community through personal experience" (p. 2) in their the affective reaction to the term *community*.

The University of Lethbridge is maturing, and so are its alumni. Each year the average age of these alumni is increasing, as was evident in their references to age or era in the qualitative data related to events. They asked for the University to consider the types of events, on campus and in their communities, which would have more appeal to certain generations of alumni. Age and life stage (explained in Huyck & Hoyer, 1982) are important factors to be considered in alumni connection, and they will be included in the discussion of demographic variables.

Well planned events that take age and era into consideration would be beneficial in increasing alumni engagement. It is also important to ensure that events are structured to create occasions for the personal interactions of most interest to alumni. For example, activities need to be arranged in a manner that will help alumni with similar degrees or programs to find each other easily, and also to find the faculty members they are hoping to see. The University should also consider the most effective ways to involve its faculties and schools, as their presence will enhance the alumni-university relationship. If the University plans gatherings that provide opportunities for alumni to reconnect with

faculty, staff, and other alumni, it will be addressing the top ranking connection variables
-- personal relationships and networking with other alumni.

Communications

The survey respondents were University of Lethbridge alumni who had already engaged in online communication by providing a current email address and by indicating their willingness to communicate online with the University. The data show that mailed publications rank higher than web-based or emailed updates as alumni's preferred method of communication. An examination of the data indicates that age was not a factor, so the outcome could be the result of the availability of or access to online communication known to or of perceived value to the participants.

Alumni indicated that they want to hear from the University. However, they want to know not only what's new, but what is relevant to them. This point was particularly noticeable in the qualitative data, where alumni expressed the desire to hear more news about their fellow classmates, certain faculty members, the achievements of alumni, and University activities, especially those with ties to their own communities. It would be beneficial for the University to review periodically its web traffic, email contacts, and mailed communications materials to determine the overall impact of online activity or mailed publications, and to understand to what extent alumni engagement appears related to specific content or a method of communication. Focus groups with alumni and fourth-year students would also be valuable to the University when decisions are being made on web-based and traditional communications programs, and would start the communication process with the students who are next in line to become the University's alumni.

Strategically designed online activity creates huge opportunities for a university to build community and increase alumni's feelings of inclusion and of value to the organization.

Comments from alumni also included suggestions that the University promote itself more widely. Such comments show alumni's interest in ensuring that the University's profile and that of its constituents are communicated broadly. This finding supports Pumerantz's (2005) emphasis on "the need for staying connected, and doing so on a regular basis, ... understanding what is unique, or special, about an institution, and using that knowledge in a significant way in the communications effort" (p. 291). Elevating the University's profile and image would also by association elevate the status of each alumnus, thereby increasing the perceived value of a University of Lethbridge degree. This point will be discussed in more detail, along with the alumni relationship motivation variables. However, it is important to note here that content in communications, whether mailed or online, must maintain a high level of quality and relevance in order to generate and maintain the interest of alumni and protect the best interests of the University.

Alumni Commitment

Volunteering and Donating

Volunteering and donating are both connection and commitment variables and were therefore included in the list of ways in which alumni have stayed connected to the University of Lethbridge. Donating ranked higher than volunteering. As donating is a demonstration of commitment available to all alumni, it is not surprising that it ranks ahead of volunteering, which is limited by the availability of volunteer roles that match alumni's interests or geographic locations. However, comments in the qualitative data

indicate that these alumni are willing to give both financially and non-financially, if not at present, then when they have the time or resources to do so. Based on the information they provided on what might influence their decision to give back, the University has an opportunity to design engagement programs and fundraising campaigns that will address those factors.

Decision to Give Back

Alumni ranked "Desire to support students" at the top, when asked what has influenced or might influence their decision to give back to the University of Lethbridge. Next ranked were appreciation for the degree, appreciation for relationships with faculty, desire to support research, and awareness of the University's needs for financial support. The latter is an important consideration (Diamond & Kashyap, 1997; Sallot, 1996; Taylor & Martin, 1995) and also affects all of the higher ranking variables. The issue is not whether something will be done, but what will be the determining factor that influences what will be done (Bickhard, 1980). Having alumni programs that communicate the University's financial needs (Diamond & Kashyap, 1997; Sallot, 1996) and match them to known areas of alumni interest would obviously create a more beneficial partnership between the University and its alumni. The current study therefore suggests that University of Lethbridge fundraising messages that link alumni to their desire to support students would attract alumni support that would enhance the education experience for students, enhance the alumni relationship for graduates, and ultimately address the University's financial needs. After alumni donate, the University needs to communicate to them the impact that their contribution has had on students. Knowing that their gifts make a difference builds alumni's sense of pride and satisfaction. It also provides the

University with another occasion to strengthen the connection between alumni and their desire to support students.

Matching programs, recognition for alumni's contributions, and gratitude for support they received as students ranked lowest of the variables influencing alumni's decision to give back. With regard to the first two, alumni may be less willing to admit that they are giving because of matching dollars or personal recognition, instead preferring a perception that they are making their contribution based solely on their belief in the cause. The low ranking of alumni's gratitude for financial support received when they were students essentially aligns with the qualitative data about student debt and the lack of availability of student awards. Many alumni stated their personal disappointment at not having awards available to them while they were students. They also emphasized the high cost of post-secondary education and lack of enough scholarships to meet the demands of students. This reinforces the study's appropriate placement of "desire to help students" as the highest ranking factor influencing alumni to give back to their university. Volunteer programs and fundraising programs that link alumni support to the needs of University of Lethbridge students would logically form the strongest connections and have the most likelihood of success.

Comparison of Volunteers and Donors

There are several similarities and many distinct differences among the factors influencing alumni volunteers and donors. The following discussion provides a comparison of demographic, student experience, and alumni relationship motivation variables that impact volunteer status and donor status.

Demographic Variables

Demographic variables (i.e., age, gender, entrance method, student residence, degree(s), and career-related) were cross-tabulated with volunteer status and donor status. The gender and student residence variables did not show a significant relationship to either volunteering or donating. Demographic factors related to age and geographic location are the only variables that appeared to have a significant relationship to volunteerism, while age, entrance method, degree, and career-related variables seemed to have a significant relationship to donor status.

Age. Volunteerism is highest among younger alumni, possibly because they tend to have more time than money early in their careers, or perhaps because they want to extend the social connections made during their student experience. The highest number of volunteers can be found in the "25 to 34" age range, when many graduates are still dealing with student loans. The number drops by more than half in the "35 to 44" age range and remains low for those in the higher age ranges. However, the reverse is the case for donors. An equal number of donors are present in the "35 to 44" and "45 to 54" range. There are more donors than non-donors in age groups after the age of 44, with a steady increase in the percentage of donors to non-donors in subsequent age ranges. Also, in relationship to age, the highest number of volunteers and donors completed their first course in the "1988 to 1997" year range. However, with regard to completion of the first degree, there are more volunteers in the "1998 to 2007" range and more donors in the "1988 to 1997" range. This indicates that most of the alumni donors are middle aged. The class of 1988 would be in their 40's in 2009, the year the survey was conducted.

The findings related to age are in line with the seventh ego challenge,

Generativity versus Stagnation, in Erikson's Theory of Human Development (described in Huyck & Hoyer, 1982). This stage occurs in middle age, 40 to 65, when individuals have "a deeper concern for the welfare of future generations and a willingness to work with the younger adults who will inherit leadership" (p. 215). Middle-aged alumni at the University of Lethbridge represent the largest group of alumni donors and are clearly demonstrating their concern for future generations by showing their support for today's students.

The relationship of age to volunteer status or to donor status is therefore an important consideration in designing programs for solicitation of support from alumni. Younger alumni are more likely to volunteer, while middle-aged or older alumni are more likely to donate.

Entrance method. Entrance method was not significantly related to volunteer status, but it was to donor status. Alumni who entered the University in the fall or spring immediately after high school represented almost half of the donors. This indicates a strong relationship between alumni's first or earliest student experience and the impact on their affinity to their first university. Feldman and Newcomb (1994) reported that the first student experiences ultimately shaped the student-alumni-university relationship and the level of affinity. This study's findings suggest that the more the University can do to strengthen its relationship with new students, the stronger its bond will be to those students when they become alumni. Retention programs that keep first-year students at the University of Lethbridge through to graduation are essentially investing in the University's future donors.

Degree. Holding a first degree from the University of Lethbridge and attaining any subsequent degree(s) at any university also influence donor status, but not volunteer status. Alumni who completed their first degree at the University of Lethbridge and subsequently completed a master's degree at any university, including the University of Lethbridge, were highly likely to become University of Lethbridge donors. This finding again demonstrates that alumni have a strong affinity to the institution where they had their early student experience, and this affinity is financially beneficial for a university years later.

Career-related variables. According to the data, the geographic region where alumni currently reside affects volunteer status, but not donor status. This is to be expected, as the majority of volunteer opportunities would be located in Alberta, the University's home province. However, the population of the community where the alumnus works appears to be a factor for both volunteering and donating. A total of 85.6% of the volunteers and 74.8% of the donors in this study work in communities with a population of 50,000 or more. Other career-related variables impacted donor status, but not volunteer status. As alumni's satisfaction level with career, employment opportunities, primary job responsibilities, and household income increased, so did their likelihood of donating to the University. Tsao and Coll (2005) found the same results regarding the relationship of donor status to the variables of population in alumni's work community, primary job responsibilities, and personal income. The capacity to give is obviously impacted by economic factors, but the willingness to give to the University would be tied to alumni's belief that their degree provided them with career

opportunities. This finding emphasizes the importance of ensuring quality in the University's advising services and career counselling.

Student Experience Variables

The results of the study indicate that alumni's student experience is a major factor in determining alumni's future intention to give back to their alma mater, a finding which agrees with those of Dugan et al. (2000) and Pumerantz (2005). Not one of the student support services, academic experience, or student financial support variables showed a significant relationship to alumni volunteering. However, that is not the case regarding the relationship of student engagement variables and volunteer status.

Student engagement. As Weerts and Ronca (2007a) and Gaier (2005) found, student engagement can predict alumni volunteerism. This study's findings indicate that University of Lethbridge alumni who, as students, were engaged in student clubs and were aware of the role of alumni and volunteers are more likely to become alumni volunteers. The student engagement variables related to athletics or extracurricular programs yielded fewer volunteers than those related to student clubs. This is possibly the result of many student clubs being more service-oriented in nature, and therefore they would lead logically to volunteer service years later.

Gaier's (2005) findings did not show a relationship between student engagement and philanthropy. However, this study's findings indicate that student engagement variables impact alumni's donor status at the University of Lethbridge. Involvement in student clubs increased the likelihood of alumni philanthropy. In addition, students who are aware of the role of alumni and aware of the role of volunteers are most likely to become donors as alumni. Interestingly, awareness of the role of donors did not impact

donor status. It was expected that understanding the role of donors and knowing what they do for students might influence students to give as alumni, by building in a sense of reciprocity, one of the primary motivation variables suggested by Bruggink and Siddiqui (1995). This study's findings imply that the University could positively affect future alumni philanthropy by supporting student clubs in ways that would give students opportunities to learn what alumni and volunteers do for the University.

Academic system variables. Academic system variables had a significant relationship to philanthropy but no relationship to volunteerism, as Gaier (2005) predicted. For student support services and academic experience variables, more donors were found among alumni who gave a high satisfaction rating to the variety of course offerings, quality of instruction in courses, relationships with faculty and staff, and the overall undergraduate academic experience. The results align with those of researchers who found that alumni's giving to their university was linked to a specific level of satisfaction with academic system variables in the student experience (Gaier, 2005; Miller & Casebeer, 1990). The current study supports the ongoing importance of a university's investment in the quality of its academic programs.

Student financial support. Alumni want to support students. The most direct link to students takes the form of scholarships and bursaries. Student financial support variables were tested to see if reciprocity existed between receipt of a scholarship, bursary, or academic award and alumni's future commitment as donors. Znaniecki (1965) suggested that if one party offers a gift to help the other party satisfy its needs, the gift would solidify the relationship and build in an expectation of reciprocity. This study found a relationship between donor status and only the bursary variable, with results

indicating University of Lethbridge bursary recipients are less likely to donate. As Weerts and Ronca (2007b) state, "Need-based loans recipients gave less to the institution" (p. 20).

Knowing that bursary recipients give less, or are less likely to give at all, is an important consideration for the design of student awards programs. It would be advantageous for a university to build diverse student financial support programs that adequately meet the needs of students requiring financial aid, but that also meet the needs of the institution years later, through financially supportive alumni. Close collaborations are therefore recommended between fundraising professionals and scholarship officers so that they are working together to design alumni-supported student awards programs that will have long-term impacts.

A socio-economic argument could be made about the social service nature of bursaries. Fewer donors are found among alumni who received bursaries, which could be the result of economic challenges that have persisted since their student experience. More alumni donors are found among the respondents who did not receive a bursary.

Therefore, it could be presumed that the students who did not need bursary support came from an advantaged economic background, which would be a predictor of their future economic status and their ability to donate as alumni.

It was surprising that no relationships were found between the receipt of scholarships and donor status. However, the tone of the comments in the qualitative data shows that alumni have a personal connection to student awards, either because they experienced the lack of awards while students or because they recognize the ongoing financial needs of today's students.

Alumni Relationship Motivation Variables

Alumni relationship motivation variables related to connection and commitment were cross-tabulated with volunteer status and donor status. The alumni relationship motivation variables impacting both volunteer status and donor status, and resulting in a higher likelihood of alumni volunteering and donating, are the following: appreciation for degree, desire to support students, overall level of satisfaction with their alumni relationship, and the organizational identification variables of accomplishments of students and accomplishments of alumni. The remaining organizational identification variables (reputation, distinctiveness, prestige, quality of programs, contributions to research, competitive excellence when compared to other universities) appear to have no significant relationship to volunteer status, although they are significantly related to donor status.

Mael and Ashforth (1990) described the "perception of oneness with or belongingness to an organization where the individual defines him or herself at least partly in terms of organizational membership" (p. 104). The alumni relationship is affected by the Association Principle (Schlenker, 1980) and an individual's impulse to maximize the association between the individual and desirable images. It would therefore be expected that the higher alumni rate the University on its organizational identification variables, the more value they place on the alumni-university relationship and, ultimately, on the value of their degree. This study's findings show that the majority of the University's alumni donors are satisfied or extremely satisfied with all of the organizational identification variables presented in the survey. In essence, alumni are demonstrating what Schlenker (1980) called the BIRG effect ("basking in reflected

glory"); that is, they are claiming individual success based on their association with successful institutions or events.

Organizational identification variables are therefore critical elements of alumni communications strategies. Communicating what is special and unique about a university and its alumni is likely to increase alumni giving (Pumerantz, 2005). When the University communicates its accomplishments, it elevates its profile. By sharing news of the accomplishments of students, alumni, and researchers, the University increases alumni's perception of the value of their own degrees, giving them a privileged sense of membership in an elite organization. Ultimately, organizational identification components are vital in promoting the University's brand and will have a major effect on alumni's decision to support their alma mater financially. A university should therefore ensure that communications reaching alumni are crafted to stay on brand.

Summary

The data indicate that it is possible to forecast alumni engagement, with a high level of confidence, through certain demographic, student experience, and alumni relationship variables. Relationships formed in the student experience create foundational bonds for alumni. The type and frequency of events and communications are critical in establishing, continuing, and developing the connection.

Key demographic, student experience, and alumni relationship variables influence commitment. Alumni's age, life stage, geographic location, and first degree affect their ability or willingness to contribute. Younger alumni form the primary corps of University volunteers. The ability or interest in donating is higher in middle age, with a noticeable increase in the number of alumni offering financial support in later years, as their family

responsibilities lessen and their careers have provided the stability for them to be more involved in philanthropy. The early student experience, first baccalaureate degree, and subsequent degree(s) also impact alumni giving. Alumni who entered the University in the fall or spring immediately following high school are more likely to become donors, as are alumni who hold an additional bachelor's degree or an advanced degree, whether the subsequent degree was obtained at the University of Lethbridge or at another university.

The researcher expected student engagement to relate only to alumni volunteer activity, but the results show a definite connection to both volunteer and donor support. Student support services and academic experience variables have no significant relationship to volunteer status; however, several variables impact donor status (i.e., variety of course offerings, quality of instruction in courses, relationships with faculty and staff, and overall level of satisfaction with the undergraduate academic experience). Organizational identification variables that elevate the status of the University have a major influence on alumni's motivation to donate to their alma mater, as these variables affect alumni's perception of their own status.

Implications and Recommendations for Practice

Competition for philanthropic dollars is steadily growing. The need for universities to design and implement effective alumni relations programs is growing as well. Models such as the integrated University Advancement model (Alumni Relations, Communications, and Development) are therefore essential in managing strategic connections with alumni.

Post-secondary institutions can maximize an advantage not available to other fundraising organizations. With each year and each convocation, their alumni population

increases, increasing in turn the number of potential supporters already connected to the organization. However, the relationship starts during the student experience and needs to continue through regular interactions. After a student graduates, many opportunities to influence engagement are lost. Planned, purposeful contacts with future and current alumni are within a university's control. Universities risk losing their closeness to alumni if they do not address student concerns and adapt to meet the changing needs and expectations of both students and alumni.

Many findings of this study relate to variables beyond the control of a university. One example relates to age. More alumni donors are found in higher age groups.

Knowing this, advancement professionals need to build tailored fundraising programs with targeted messages for certain age groups in order to ensure the highest probability of getting the desired response. If alumni are asked too soon to give financially, there is a risk that they may distance themselves from the alumni-university relationship. This does not mean that fundraising programs should exclude younger alumni; however, it points out the importance of ensuring that alumni have had many opportunities to engage with their alma mater long before they are asked to make a donation. Volunteering is more prevalent among younger alumni and therefore creates the perfect opportunity to bridge non-financial alumni engagement to financial alumni engagement, which is most prevalent in middle age.

A university's first goal should be to generate participation. Events and communications will keep alumni interested in their university and provide occasions for volunteering. During times of tight budget controls, events and communications programs are often viewed as extravagance. While Universities are sometimes quick to

cut those alumni activities, doing so will eventually affect alumni donations and the institution's financial results. Scaled-down events may be appropriate, but university communications will be more important than ever, to ensure that alumni know their alma mater has been fiscally responsible and is able to maintain its level of quality throughout any economic downturn.

University events and communications programs have many components: types, frequency, messages, and audiences. A university and its alumni benefit from an integrated approach, with Alumni Relations, Communications, and Development operating collaboratively to generate alumni interest, promote a sense of community, capitalize on emotional bonds, design programs that elevate the university's and alumni's profiles, and ultimately increase the probability of alumni support. The key is therefore to plan effective alumni contacts, with activities and messages geared to promote engagement.

The linking of students to alumni programs through early interactions will help students understand the benefits of their future alumni membership. To be effective, transition plans from student to alumnus should encourage connection immediately and introduce alumni volunteering and philanthropy early. Students will gain increased awareness of the expectations their university will have for them after they graduate, and alumni will feel more engaged and eager to encourage and support students. The connections formed will inspire alumni to give to their university now and students to give to their university later, as alumni.

The quality of a university's database is obviously a cornerstone of alumni engagement. Timeliness and accuracy in transferring student contact information from

the Registrar's Office to the Alumni Relations database immediately after convocation are essential in establishing the initial connection for new alumni. This creates opportunities for the important first communications. Carefully structured messages should be mailed or emailed as soon as possible after graduation to the newest alumni, who are at a point of many changes in their lives. The communications should be designed to demonstrate to these alumni the benefits of staying in touch with their university, encouraging them to keep their contact information current over the years.

An important risk to consider is that, if contact is not maintained in the early years, alumni may miss certain key messages. They may engage or re-engage at a point in a communications program that may give them the impression they are being immediately targeted for financial support. Advancement professionals need to time their fundraising appeals to alumni with consideration of where alumni are at in their alumni-university relationship. It is therefore in the best interests of a university to manage its alumni database through sophisticated data structuring and strategic alumni prospect research.

Alumni want to connect, but in relevant and meaningful ways. In this study, alumni ranked the desire to support students as the top factor influencing their decision to give back to the University of Lethbridge. Alumni understand the value of scholarships. Student award programs that link students and alumni would increase students' awareness of the role of alumni. Such programs would also encourage alumni to engage emotionally with their university by drawing their thoughts back to the student experience and strengthening the alumni-university bond. It would be expected that donor

experiences that are satisfying for alumni would also be rewarding for student recipients, who are themselves potential future alumni donors.

Universities have the opportunity to leverage the alumni-faculty relationships in a manner that will show their pride in the accomplishments of their academic staff and promote a sense of community, connectedness, and nostalgia in key communications with their alumni. Universities would benefit from ensuring that faculty are brought into the structure of alumni events and communications. Faculty need to know they are a welcomed and valued component of Alumni Relations programs. As faculty members retire or relocate, it would be beneficial for Human Resources to assist Alumni Relations in establishing communications with faculty members who would like to be included in future alumni activities. Information can then be shared regarding university reunions or other programs that would link former faculty to former students and other faculty members.

Alumni's thirst for information on other alumni and faculty may also indicate that they want to have more of a forum in which to tell their own stories. By linking an alumni story to an individual faculty member, for example, publications could showcase both constituent groups as well as elevate the university's profile and promote its brand.

A well planned relevant reunion, although costly, provides another link to community and emotional elements that can increase alumni connection and commitment years after graduation. As Diamond and Kashyap (1997) found, successful alumni are highly likely to attend reunions. Reunions give universities the opportunity to build stronger ties with alumni, increase a sense of community, learn more about alumni's successes, and gather content for future communications materials. Sharing news about

successful alumni impacts the organizational identification variables that elevate a university's image and affect alumni's willingness to connect and commit. It is also important to note the value of broadly publicizing reunion events in major publications in key markets. Doing so gives a university the opportunity to promote its brand, connect to the success of engaged alumni in these markets, and potentially reach other alumni who may now be prompted to engage or re-engage with the institution.

No matter how motivated alumni may be to volunteer, their ability to do so may be limited by their distance from campus (Weerts & Ronca, 2007a). Alumni Relations professionals can increase volunteer opportunities by considering virtual alumni communities that have the potential to engage alumni globally. For instance, with current technology, alumni guest lecturers could be included regularly in web lecture series for current students and alumni around the world. In addition, web traffic or online responses could determine alumni interest in activities in locations where large concentrations of alumni live or work. Decisions could then be made regarding the feasibility of expanding alumni chapters or holding targeted events to build alumni communities that would draw more supporters closer to the university. A university's online presence has an impact on its image and requires well-coordinated messages that link alumni programs to the institution's brand and strategic plan. While the possibilities are vast, the content must meet the needs of the institution and address areas of interest to alumni and future alumni.

Universities strive to provide the resources that will help ensure that students have a positive experience. The impact of student support services on donor status cannot be ignored. Any negative student experiences can be amplified in alumni's memory over the years, subsequently limiting alumni support many years later. It is therefore important

that university administrators regularly monitor the quality of student support services to ensure that an environment of excellent customer service is maintained. A similar customer service approach would be essential throughout the alumni relationship as well.

Limitations of the Study

The sample was limited to alumni connected by email to the University of Lethbridge. This obviously eliminates alumni who have not yet engaged or have no intention of engaging in online communications with the University. As graduates not connected by email form an alumni group that is equally important to the University, their perspective on alumni engagement is missing from this study and would form an important part of future studies.

The study is limited by using retrospective data and having participants recall and interpret past events. Collecting data from alumni years or decades after they have graduated involves the risk of collecting distorted results. Attitudes change over time. Emotional needs can motivate people to reconstruct the past in order to justify their behaviour or decisions. For some participants, a particular item on the survey, or even situational influences such as the current economic downturn, may have triggered a negative response that tainted other responses. A negative student experience might over the years have come to seem worse than it was. Similarly, the recollection of a particularly positive experience could distort the accuracy of other satisfaction ratings.

The study presented only two volunteer variables: "Volunteered services for U of L Alumni Association, Chapter, committee or event" and "Served on U of L Board of Governors, Senate, Advisory Board or other university committee." Therefore, other forms of volunteerism beyond these options are not represented in this study.

Alumni donor status was determined simply by whether or not the respondent had contributed financially to the University. Participants were not asked to provide information on how much they donated. Therefore, it is not possible to determine the dollar value of donations as related to variables that may have the most impact on the University's financial results. Such information would be valuable in measuring the financial impact of certain variables and allocating appropriate dollars to programs that would have the highest return on investment.

Researcher Bias

The researcher holds a senior position in University Advancement at the University of Lethbridge, is an alumna of two post-secondary institutions, and is currently experiencing the student environment at the University of Lethbridge. She has also experienced undergraduate and graduate studies in Canada and the United States, in both traditional and virtual classrooms, and at public and private universities. Although the diversity of her education experience might somewhat diminish researcher bias, the potential for researcher bias is acknowledged. While the findings of this study provided information of value, further testing is required in order to draw definitive conclusions.

Recommendations for Future Research

The study stayed true to the central research question: What factors in the student experience and alumni relationship influence alumni connection and commitment? Many relationships were found between variables representative of the student experience and representative of the alumni experience. The natural next step would be to determine what factors, in what combinations, and in what order would predict alumni connection and commitment.

The results indicate that alumni holding master's degrees are more likely to donate than those holding bachelor's degrees. The study limited the sample to University of Lethbridge bachelor's degree holders, therefore excluding data on alumni who have a master's degree from the University of Lethbridge and a bachelor's degree from elsewhere. In order to address overall alumni connection and commitment at the University of Lethbridge, all graduates of the University would need to be included. This would also provide the opportunity to determine if University of Lethbridge master's degree holders with bachelor's degrees from another university have a closer affinity to the University of Lethbridge or to the university where they had their first student experience.

Many key variables are outside of a university's control (e.g., demographic, alumni's personal relationships, and economic situation). However, there are many variables within a university's area of influence (e.g., student support services, events, communications, volunteer programs, donor opportunities) that could be manipulated to the advantage of students, alumni, and their university. An in-depth examination of specific connection and commitment factors within a university's control would provide increased information that would help a university develop or redesign its alumni engagement programs and effectively allocate resources.

The study was conducted at the University of Lethbridge, which has its own unique culture. The scope of the study would need to be broadened to see if similar results would be found at another university in Alberta or elsewhere in Canada, or to determine if results would be similar for universities and colleges. Replicating the study would increase the level of confidence with findings and allow the researcher to validate

the nature of the data collected in order to understand if the results are not just a University of Lethbridge phenomenon.

The number of volunteers (119) represented in this study was relatively low in comparison to the number of donors (323). A future study utilizing interviews with volunteers would provide qualitative data that could shed additional light on the relationship of alumni volunteers with the University. It would also be helpful for the University to design a mechanism to track overall alumni volunteer activity, through a concerted effort between Alumni Relations, faculties, student groups, and other constituents on campus. Volunteer activity is evident outside of the formal alumni program. Knowledge of other alumni volunteer contacts and activities on campus would be valuable so that the University might recognize those alumni contributions and improve overall volunteerism.

Finally, knowing the dollar impact of certain variables would be of great value to the University. By linking variables to the size of alumni donations, the University would understand the impact of certain investments on its student and alumni programs. The research design would require predictive modeling, with questions constructed to determine which variable or group of variables would impact the size of the alumni donation. This information would be helpful in terms of allocating budgets and prioritizing institutional improvements.

Conclusion

This study has explored factors that affect alumni engagement, has provided useful information on alumni involvement, and supports previous findings regarding the alumni-university relationship. The study's findings clearly show that certain

demographic, student experience, and alumni relationship variables will influence alumni's connection and commitment decisions.

The University of Lethbridge is at a pivotal point in developing its alumni programs. In fall 2009, its student population reached 8,243, the highest number in its history (Zentner, 2009), and the alumni population surpassed 30,000. The University of Lethbridge will celebrate its 50th anniversary in 2017. Although this milestone anniversary may seem many years away from the 2009 timing of the alumni survey used for this study, a university can do much of the groundwork early that sets the foundation for reunion activity. Ongoing university advancement priorities must include conducting research to find missing alumni and continuing to strengthen alumni engagement through events, communications, and volunteer and donor opportunities.

As the University has grown and matured as a post-secondary institution, alumni's needs, expectations, and interests have changed as well. The earliest graduates have reached or are reaching retirement. While technology has increased communication options, not all alumni wish to communicate in the same way or to demonstrate their support in the same way. The University will benefit from incorporating diverse programs with sufficient options in order to maximize alumni involvement at all levels.

It is not possible to determine from these findings, particularly the qualitative data, whether certain contacts with students and alumni have been more accidental than intentional. For instance, in this study, the alumni who had been involved in student clubs were more likely to become donors. Based on this finding, the suggestion could be made that a university should design programs that ensure the institution's support is visible for student clubs. However, the finding may be related more to the type of students who join

student clubs, rather than the fact that a university shows its support for the club. In addition, the success of institutional research is often promoted in the media in ways that are often beyond the direct control of a university but that affect its image and consequently the way that alumni feel about their association with the university. Regardless, the study's results indicate that it is worthwhile for a university to support student activities that build student engagement, and to produce communications that impact organizational identification variables that build alumni engagement.

Alumni are seeking opportunities to interact with each other and stay connected to their alma mater. The alumni relationship starts with a university addressing the needs of its students, building links between students and alumni, and creating relevant programs for alumni, who in turn will be there when their university needs them. Students who feel valued and supported are more likely to become supportive alumni who feel valued by their university. By protecting and promoting the institution's brand, which is comprised of key organizational identification messages, a university is strengthening its alumni program and increasing the potential for future support.

The findings of this study relate specifically to the University of Lethbridge. However, the results may provide information of value to other universities regarding variables, many within their control, that impact the alumni relationship. In conclusion, numerous demographic, student experience, and alumni relationship factors have an influence on alumni connection and commitment.

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Appendix A. Web-Based Survey Instrument

Factors Influencing Alumni Connection and Commitment
Text of Web-based Survey Instrument
[SIGN IN PAGE]
SIGN IN
Thank you for participating in this U of L alumni survey.
The following sign-in information is required in order to validate that you are a U of L alumnus and to grant you access to the survey. Your identifying information will not be physically connected to the final data that you will enter.
Upon completion of the survey, you will have the option of entering your name/email in a draw for a Flip Video Camera.
<insert camera="" flip="" image="" of="" video=""></insert>
 Record, Connect and Share: One touch recording 2x digital zoom Instant playback and delete Launch built-in software Make custom movies Capture still photos from videos Watch instantly on TV Email videos and publish online
Current Last Name:
Preferred Given Name(s):
Email Address:
(If more than one U of L alumnus receive email at this address, the same email address

can be used to access an additional survey from this page. Only one completed survey is allowed per alumnus. Duplicates will be disqualified from the survey and draw.)

NEXT PAGE

[CONSENT FORM PAGE]

CONSENT

This research project entitled "Factors Influencing Alumni Connection and Commitment" is being conducted by Ruth Hummel under the supervision of Dr. Kris Magnusson of the Faculty of Education at the University of Lethbridge (U of L). The project is one of the requirements for Ruth Hummel to complete a Master's degree.

The purpose of this study is to gather information on factors present in the university experience – from the student experience to the alumni relationship -- that influence how alumni connect with their alma mater. It is anticipated that the results of this research project will benefit post-secondary populations by determining what factors have the most influence in enhancing the student experience and helping graduates feel a stronger connection to their university.

[SCROLL BOX TEXT]

Participant Selection: You have been selected to participate in this study because your name is on the list of U of L alumni who graduated during the U of L's first 40 years. Participation is limited to alumni who graduated with a U of L Bachelor's degree before December 31, 2007. Only one completed survey will be accepted from each alumnus. Student records at the U of L are confidential and, therefore, your student record will not be accessed for this study. However, within the actual survey, you will be asked to voluntarily provide information pertaining to the nature of the degree you achieved, when you achieved it, and whether you received a student award. Please be aware that in no way will this information be linked back to your student record. Because the data is aggregated across responses, individual anonymity will be maintained.

<u>Procedures</u>: The survey will normally require less than eight (8) minutes of time in order to answer thirty (30) questions about your experience as a student and as an alumnus of the U of L. It is not possible to save responses to a portion of the survey and return to complete the survey later, so please allow ample time to complete the survey when you first enter the questionnaire. You may elect not to answer any question for any reason, and to end your participation in the survey at any time. An option is also given in the event that you "prefer not to answer" a question. Should you complete the survey, as indicated by selecting "SUBMIT" on the final survey question page, your survey responses will be included in this study.

<u>Risks</u>: This project is not expected to involve any risk or harm to participants. Although it is not possible to identify all potential risks in any procedure, all reasonable safeguards have been taken to eliminate or minimize the potential risks.

<u>Benefits</u>: The study expands on literature regarding alumni relations and will provide information that can assist a university in improving its relationships with students and alumni.

<u>Data Collection and Storage</u>: All information provided will be kept confidential. Your identity will not be physically attached to the final data that are produced. Results will not be released or reported in any way that might allow for identification of individual participants. The data will be kept in a secure file accessible only to Dr. Kris Magnusson and Ruth Hummel. The data will not be retained longer than five (5) years upon completion of the thesis defence. Results of this research may be published or reported to scientific and/or educational groups, but participant names will not be associated in any way with any published results.

<u>Contact Information</u>: If you have any questions or would like any information regarding the process or outcomes of this research, you can contact Ruth Hummel at (403)329-2114 or her Supervisor, Dr. Kris Magnusson, at (403)329-2202. You may also contact the Chair of the U of L Faculty of Education Human Subject Research Committee at (403)329-2425.

I have read or have had read to me the preceding information describing this research study. Any questions have been answered to my satisfaction. I understand that my participation in this survey is completely voluntary and confidential, and I am free to withdraw from the research study at any time during the online survey. On the provision that I complete this survey, I have given my consent to participate in this research study.

I ACKNOWLEDGE THAT UPON SUBMITTING THE FINAL PAGE OF THE QUESTIONNAIRE, I HAVE GIVEN MY CONSENT TO PARTICIPATE IN THIS STUDY.

Yes	
No thanks. I'd rather not participate.	(http://www.uleth.ca)
PREVIOUS PAGE NEXT PAGE	3

["PREVIOUS PAGE" and "NEXT PAGE" used throughout survey until "PREVIOUS PAGE" and "SUBMIT" after final survey question.]

[SURVEY QUESTIONNAIRE]

GENERAL INFORMATION

Thank you for entering the survey. In order to maintain data integrity for this study, please select "Prefer not to answer" for any questions you wish to skip.

GENERAL INFORMATION

- 1. Age:
 - 24 or less
 - 25 to 34
 - 35 to 44
 - 45 to 54
 - 55 to 64
 - 65 or more
 - Prefer not to answer
- 2. Gender:
 - Male
 - Female
 - Prefer not to answer
- 3. What was your entrance method with regard to attending the U of L?
 - Entrance to U of L in fall or spring semester immediately after completing high school
 - Entrance to U of L after a period of one year or more after completing high school
 - Transfer to U of L after taking courses from another post-secondary institution
 - Entrance to U of L after completing diploma or degree program at other post-secondary institution
 - Prefer not to answer

-	Other (please specify):	
	4 1	

- 4. Did you live in student residence on the Lethbridge campus for part or all of your first year of attendance at the U of L?
 - Yes
 - No
 - Prefer not to answer
- 5. In what year did you complete your first undergraduate course at the U of L? [Drop down box with choice of years from 1967 to 2007, "Don't remember" and "Prefer not to answer"]

- 6. In what year did you complete your first undergraduate degree at the U of L? [Drop down box with choice of years from 1968 to 2007, "Don't remember" and "Prefer not to answer"]
- 7a. What was your first (or only) U of L Bachelor's degree?
 - Bachelor of Arts
 - Bachelor of Arts and Science
 - Bachelor of Education
 - Bachelor of Fine Arts
 - Bachelor of Health Sciences
 - Bachelor of Management
 - Bachelor of Management Arts
 - Bachelor of Music
 - Bachelor of Nursing
 - Bachelor of Science
 - Combined Bachelor of Arts/Bachelor of Education
 - Combined Bachelor of Arts/Bachelor of Management
 - Combined Bachelor of Fine Arts/Bachelor of Education
 - Combined Bachelor of Management/Bachelor of Education
 - Combined Bachelor of Music/Bachelor of Education
 - Combined Bachelor of Science/Bachelor of Education
 - Combined Bachelor of Science/Bachelor of Management
 - Prefer not to answer
 - Other (please specify):
- 7b. What additional U of L Bachelor's degree(s) did you obtain, if any? (Please check all that apply.)
 - Bachelor of Arts
 - Bachelor of Arts and Science
 - Bachelor of Education
 - Bachelor of Fine Arts
 - Bachelor of Health Sciences
 - Bachelor of Management
 - Bachelor of Management Arts
 - Bachelor of Music
 - Bachelor of Nursing
 - Bachelor of Science
 - Combined Bachelor of Arts/Bachelor of Education
 - Combined Bachelor of Arts/Bachelor of Management
 - Combined Bachelor of Fine Arts/Bachelor of Education
 - Combined Bachelor of Management/Bachelor of Education
 - Combined Bachelor of Music/Bachelor of Education
 - Combined Bachelor of Science/Bachelor of Education
 - Combined Bachelor of Science/Bachelor of Management
 - No additional U of L degree(s) obtained
 - Prefer not to answer

-	Other (please specify):	
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8. What academic degree(s) have you completed at any university in any year, since completing your first U of L degree?

(Please check all that apply.)

- Additional Bachelor's degree(s) at the U of L
- Additional Bachelor's degree(s) at another university
- Master's degree at the U of L
- Master's degree at another university
- PhD at the U of L
- PhD at another university
- No additional degree(s) obtained
- Prefer not to answer
- Other (please specify):
- 9. Where do you currently reside?
 - Alberta, Canada
 - Outside of Alberta, but in Canada
 - United States
 - Outside of Canada and the United States
 - Prefer not to answer
- 10. If you are currently employed, what is the population of the community where you work?
 - Less than 5,000
 - 5,000 to 49,999
 - 50.000 to 499.999
 - Over 500,000
 - Not currently employed
 - Prefer not to answer

STUDENT EXPERIENCE

11. Thinking back to your student experience at the U of L, how satisfied were you with each of the following?

[Scale: very dissatisfied, dissatisfied, satisfied, very satisfied, don't know, not applicable, prefer not to answer]

- Admissions process
- Variety of course offerings
- Availability of required courses
- Quality of instruction in courses
- Relationship with faculty
- Relationship with staff
- 12. How satisfied were you with each of the following during your student experience at the U of L?

[Scale: very dissatisfied, dissatisfied, satisfied, very satisfied, don't know, not applicable, prefer not to answer]

- Recruiting process
- First year advising
- Advising in major
- Career services
- Counselling or other student support services
- 13. While attending the U of L, did you participate in organized student activities in addition to those related to your degree requirements?

[Choices: yes, no, prefer not to answer]

- Student clubs
- Volunteer projects
- Pronghorn athletics
- Intramural athletics
- Extracurricular Fine Arts programs
- Non-credit classes
- Other organized student activities not listed above
- 14. Did you hold a leadership position with the U of L Students` Union?
 - Yes
 - No
 - Prefer not to answer
- 15. Did you receive a student scholarship while attending the U of L?
 - Yes
 - No
 - Prefer not to answer
- 16. Did you receive a student bursary while attending the U of L?
 - Yes
 - No
 - Prefer not to answer
- 17. At any time, from your registration at the U of L to your graduation from the U of L, did you receive recognition through an academic award of merit or distinction (such as medal, dean's list or other honor)?
 - Yes
 - No
 - Prefer not to answer
- 18. While you were a U of L student, to what extent were you aware of:

[Scale: to a great extent, somewhat, very little, not at all, prefer not to answer]

- the role U of L alumni played in the success of the U of L
- the role U of L volunteers played in the success of the U of L
- the role U of L donors played in the success of the U of L

- 19. As a U of L student, did you have opportunities to:
 - [Scale: never, sometimes, often, prefer not to answer]
 - interact with U of L alumni
 - interact with U of L volunteers, other than student volunteers
 - interact with U of L donors

ALUMNI EXPERIENCE

20. Since you graduated from the U of L, how frequently have you stayed connected with the U of L in any of the following ways?

[Scale: never, sometimes, often, prefer not to answer]

- Attended U of L events
- Attended U of L alumni-related events
- Networked with other U of L alumni
- Stayed in touch with U of L faculty or staff
- Served on U of L Board of Governors, Senate, Advisory Board or other university committee
- Volunteered services for U of L Alumni Association, Chapter, committee or event
- Donated to the U of L
- Other (please specify):
- 21. Have you maintained friendships with other U of L alumni?
 - Yes
 - No
 - Prefer not to answer
- 22. Have you had business relationships that included other U of L alumni?
 - Yes
 - No
 - Prefer not to answer
- 23. Which of the following have influenced (or might influence) your decision to stay in touch with the U of L or other U of L alumni?

(Please check all that apply.)

- Emotional ties, such as friendships or shared history
- Reunion events on Lethbridge campus
- Reunion events in my community
- Alumni gatherings on Lethbridge campus
- Alumni gatherings in my community
- Social networking web sites, such as Facebook
- U of L's web-based or emailed updates
- U of L's mailed publications
- None of the above
- Prefer not to answer

-	Other (please specify):	
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24. Which of the following have influenced (or might influence) your decision to give back to the U of L as a volunteer or donor?

(Please check all that apply.)

- Appreciation for the opportunities my U of L degree has afforded me
- Appreciation for the relationships I had (or have) with faculty
- Gratitude for the financial support I received as a student
- Desire to support students
- Desire to support research
- Awareness of U of L's needs for financial support
- Matching programs through my employer or professional association
- Matching programs through the government, such as the Province of Alberta's Access to the Future Fund
- Recognition by the U of L of my contribution as a volunteer or donor
- None of the above
- Prefer not to answer
- Other (please specify):
- 25. How would you rate the U of L, as a university, in the following areas? [Scale: extremely poor, below average, average, above average, excellent, don't know, prefer not to answer]
 - Reputation
 - Distinctiveness
 - Prestige
 - Ouality of programs
 - Contributions to research
 - Competitive excellence when compared to other universities
 - Accomplishments of students
 - Accomplishments of alumni
- 26. To what extent did your U of L Bachelor's degree prepare you for your chosen career after graduation?

[Scale: to a great extent, somewhat, very little, not at all, prefer not to answer]

- 27. Please rate your overall level of satisfaction in the following areas of your life? [Scale: very dissatisfied, dissatisfied, satisfied, very satisfied, not applicable, prefer not to answer]
 - Career
 - Employment opportunities
 - Primary job responsibilities
 - Household income
- 28. Please rate your overall level of satisfaction with your U of L undergraduate academic experience:

[Scale: very dissatisfied, dissatisfied, satisfied, very satisfied, prefer not to answer]

- 29. As a U of L alumnus, please rate your overall level of satisfaction with your alumni relationship with the U of L: [Scale: very dissatisfied, dissatisfied, satisfied, very satisfied, prefer not to answer]
- 30. (OPTIONAL) Please feel free to comment in any way about your U of L student experience or your experience as an alumnus of the U of L, or share any other thoughts you may have as a result of completing this survey: [TEXT BOX]

PREVIOUS PAGE SUBMIT

[THANK YOU PAGE]

SURVEY SUCCESSFULLY SUBMITTED

Thank you for taking the time to complete this survey.

Having successfully completed this survey, you are eligible to enter your name in the draw.

OPTIONAL ENTRY IN DRAW

If you wish to have your name entered into the draw for the Flip Video Camera, please re-confirm your contact information below. Your name/email will in no way be linked to the data gathered in the survey questionnaire. In order to maintain confidentiality, your survey data has been stored in a separate file.

ENTER DRAW	
Yes	
No thanks. I'd rather not partic	cipate. (http://www.uleth.ca)
Current Last Name:	
Preferred Given Name(s):	
Email Address:	
SUBMIT	
[DRAW ENTRY ACKNOWI	LEDGEMENT PAGE]
T11	

Thank you.

Only the successful entrant will be contacted.

Once again, thank you for taking the time to complete this survey.

[BOTTOM OF DRAW ENTRY PAGE AND DRAW ENTRY ACKNOWLEDGEMENT PAGE]

We would like to thank U of L University Advancement and the Alumni Relations Department for assisting in the distribution of this survey. (www.ulethbridge.ca/alumni)

Appendix B. Email to University of Lethbridge Alumni

U of L Alumni Survey 2009 **Subject:** From: "University of Lethbridge" <alumni.survey09@uleth.ca> Wed, June 10, 2009 1:44 pm Date: To: <U of L Alumni Distribution> **Priority:** Normal You are receiving this email because the email address < > was subscribed to our email list. SURVEY <U of L logo> Factors Influencing Alumni Connection and Commitment University of Lethbridge Alumni Survey You are being invited to participate in a research study of University of Lethbridge (U of L) graduates – specifically, alumni who graduated with U of L Bachelor's degrees during the U of L's first 40 years (1967 to 2007). Your input will be valuable in helping the U of L and other post-secondary institutions identify ways to improve the university experience for students and alumni. Alumni who complete the survey in its entirety will be eligible to have their name entered in a draw for a Flip Video Camera (details provided on SURVEY SIGN-IN page). Please respond to this survey by June 30, 2009. To participate in this study, please <u>click here</u>. ©2009 University of Lethbridge, 4401 University Drive W, Lethbridge, AB T1K 3M4 Unsubscribe from this newsletter.

Appendix C. Supplementary Data Tables for Student Engagement Variables by Volunteer Status

Table 24a. Student Clubs by Volunteer Status

		Volunte				
	Non-volunteer		Volunteer		Total	
Student clubs	n	%	n	%	n	%
Yes	445	39.6	69	6.1	514	45.7
No	564	50.1	47	4.2	611	54.3
Total	1,009	89.7	116	10.3	1,125	100.0

Table 24b. Student Volunteer Projects by Volunteer Status

		Volunte				
	Non-vo	olunteer	Volu	nteer	Total	
Student volunteer projects	n	%	n	%	n	%
Yes	736	65.6	57	5.1	793	70.7
No	271	24.2	58	5.1	329	29.3
Total	1,007	89.8	115	10.2	1,122	100.0

Table 24c. Pronghorn Athletics by Volunteer Status

		Volunte				
	Non-vo	olunteer	Volunteer		Total	
Pronghorn athletics	n	%	n	%	n	%
Yes	107	9.5	22	2.0	129	11.5
No	901	80.2	93	8.3	994	88.5
Total	1,008	89.7	115	10.3	1,123	100.0

Table 24d. Intramural Athletics by Volunteer Status

		Volunte				
	Non-volunteer		Volunteer		Total	
Intramural athletics	n	%	n	%	n	%
Yes	281	25.1	45	4.0	326	29.1
No	725	64.6	71	6.3	796	70.9
Total	1,006	89.7	116	10.3	1,122	100.0

Table 24e. Extracurricular Fine Arts Programs by Volunteer Status

		Volunte				
	Non-volunteer		Volunteer		Total	
Extracurricular fine arts						
programs	n	%	n	%	n	%
Yes	129	11.5	26	2.3	155	13.8
No	878	78.3	88	7.9	966	86.2
Total	1,007	89.8	114	10.2	1,121	100.0

Table 24f. Other Organized Student Activities by Volunteer Status

		Volunte				
	Non-volunteer		Volunteer		Total	
Other organized student						
activities	n	%	n	%	n	%
Yes	354	31.6	55	5.0	409	36.6
No	648	57.9	62	5.5	710	63.4
Total	1,002	89.5	117	10.5	1,119	100.0

Table 24g. Leadership Position with Students' Union by Volunteer Status

		Volunte				
	Non-volunteer		Volunteer		Total	
Leadership position with						
Students' Union	n	%	n	%	n	%
Yes	41	3.6	13	1.2	54	4.8
No	970	86.0	104	9.2	1,074	95.2
Total	1,011	89.6	117	10.4	1,128	100.0

Table 24h. Awareness of Role of Alumni by Volunteer Status

		Volunte				
	Non-volunteer		Volunteer		Total	
Awareness of role of alumni	n	%	n	%	n	%
Yes	565	50.1	81	7.2	646	57.3
No	444	39.4	38	3.3	482	42.7
Total	1,009	89.5	119	10.5	1,128	100.0

Table 24i. Awareness of Role of Volunteers by Volunteer Status

		Volunte				
	Non-vo	olunteer	Volunteer		Total	
Awareness of role of						
volunteers	n	%	n	%	n	%
Yes	649	57.6	85	7.6	734	65.2
No	358	31.8	34	3.0	392	34.8

Table 24j. Interactions with Alumni by Volunteer Status

		Volunte				
	Non-volunteer		Volunteer		Total	
Interactions with alumni	n	%	n	%	n	%
Yes	303	27.1	51	4.5	354	31.6
No	701	62.4	67	6.0	768	68.4
Total	1,004	89.5	118	10.5	1,122	100.0

Table 24k. Interactions with Volunteers by Volunteer Status

		Volunte				
	Non-volunteer		Volunteer		Total	
Interactions with volunteers	n	%	n	%	n	%
Yes	251	22.4	50	4.5	301	26.9
No	749	67.0	68	6.1	817	73.1
Total	1,000	89.4	118	10.6	1,118	100.0

Table 24l. Interactions with Donors by Volunteer Status

		Volunte				
	Non-volunteer		Volunteer		Total	
Interactions with donors	n	%	n	%	n	%
Yes	85	7.6	26	2.3	111	9.9
No	921	81.9	92	8.2	1,013	90.1
Total	1,006	89.5	118	10.5	1,124	100.0

Appendix D. Supplementary Data Tables for Alumni Relationship Motivation Variables by Volunteer Status

Table 33a. Appreciation for University of Lethbridge Degree by Volunteer Status

		Volunte				
	Non-volunteer		Volunteer		Total	
Appreciation for degree	n	%	n	%	n	%
Yes	436	38.6	68	6.0	504	44.6
No	576	50.9	51	4.5	627	55.4
Total	1,012	89.5	119	10.5	1,131	100.0

Table 33b. Appreciation for Relationships with Faculty by Volunteer Status

		Volunte				
	Non-volunteer		Volunteer		Total	
Appreciation for						
relationships with faculty	n	%	n	%	n	%
Yes	301	26.6	46	4.1	347	30.7
No	711	62.9	73	6.4	784	69.3
Total	1,012	89.5	119	10.5	1,131	100.0

Table 33c. Gratitude for Financial Support Received as a Student by Volunteer Status

		Volunte				
	Non-volunteer		Volunteer		Total	
Gratitude for financial support						
received as a student	n	%	n	%	n	%
Yes	124	11.0	23	2.0	147	13.0
No	888	78.5	96	8.5	984	87.0
Total	1,012	89.5	119	10.5	1,131	100.0

Table 33d. Desire to Support Students by Volunteer Status

		Volunte				
	Non-volunteer		Volunteer		Total	
Desire to support students	n	%	n	%	n	%
Yes	467	41.3	81	7.2	548	48.5
No	545	48.2	38	3.3	583	51.5
Total	1,012	89.5	119	10.5	1,131	100.0

Table 33e. Desire to Support Research by Volunteer Status

		Volunte				
	Non-volunteer		Volunteer		Total	
Desire to support research	n	%	n	%	n	%
Yes	244	21.6	40	3.5	284	25.1
No	768	67.9	79	7.0	847	74.9
Total	1,012	89.5	119	10.5	1,131	100.0

Table 33f. Recognition by the University of Lethbridge for the Alumnus' Contribution by Volunteer Status

		Volunte				
	Non-volunteer		Volunteer		Total	
Recognition for the alumnus'						
contribution	n	%	n	%	n	%
Yes	94	8.3	32	2.8	126	11.1
No	918	81.2	87	7.7	1,005	88.9
Total	1,012	89.5	119	10.5	1,131	100.0

Table 33g. Overall Level of Satisfaction with Alumni Relationship with University of Lethbridge by Volunteer Status

		Volunte				
	Non-volunteer		Volunteer		Total	
Overall level of satisfaction						
with alumni relationship	n	%	n	%	n	%
Very dissatisfied	18	1.8	1	.1	19	1.9
Dissatisfied	110	11.2	18	1.8	128	13.0
Satisfied	693	70.4	70	7.1	763	77.5
Very satisfied	50	5.1	24	2.5	74	7.6
Total	871	88.5	113	11.5	984	100.0

Table 33h. Organization Identification Variable of Accomplishments of Students by Volunteer Status

		Volunte				
	Non-volunteer		Volunteer		Total	
Accomplishments of students	n	%	n	%	n	%
Extremely poor	1	.1	0	.0	1	.1
Below average	24	2.5	6	.6	30	3.1
Average	394	40.7	39	4.1	433	44.8
Above average	305	31.6	40	4.1	345	35.7
Excellent	131	13.5	27	2.8	158	16.3
Total	855	88.4	112	11.6	967	100.0

Table 33i. Organization Identification Variable of Accomplishments of Alumni by Volunteer Status

		Volunte				
	Non-volunteer		Volu	Volunteer		tal
Accomplishments of alumni	n	%	n	%	n	%
Extremely poor	4	.4	1	.1	5	.5
Below average	47	4.2	5	.4	52	4.6
Average	292	26.2	30	2.7	322	28.9
Above average	418	37.6	53	4.8	471	42.4
Excellent	233	20.9	30	2.7	263	23.6
Total	994	89.3	119	10.7	1,113	100.0

Appendix E. Supplementary Data Tables for Student Engagement Variables by Donor Status

Table 49a. Student Clubs by Donor Status

		Donor				
	Non-donor		Donor		Total	
Student clubs	n	%	n	%	n	%
Yes	338	30.4	170	15.3	508	45.7
No	454	40.9	149	13.4	603	54.3
Total	792	71.3	319	28.7	1,111	100.0

Table 49b. Student Volunteer Projects by Donor Status

		Donor				
	Non-donor		Donor		Total	
Student volunteer projects	n	%	n	%	n	%
Yes	206	18.6	115	10.4	321	29.0
No	584	52.7	203	18.3	787	71.0
Total	790	71.3	318	28.7	1,108	100.0

Table 49c. Pronghorn Athletics by Donor Status

		Donor				
	Non-donor		Donor		Total	
Pronghorn athletics	n	%	n	%	n	%
Yes	70	6.3	57	5.2	127	11.5
No	721	65.0	261	23.5	982	88.5
Total	791	71.3	318	28.7	1,109	100.0

Table 49d. Extracurricular Fine Arts Programs by Donor Status

		Donor				
	Non-donor		Donor		Total	
Extracurricular fine arts						
programs	n	%	n	%	n	%
Yes	96	8.7	57	5.1	153	13.8
No	694	62.7	260	23.5	954	86.2
Total	790	71.4	317	28.6	1,107	100.0

Table 49e. Non-credit classes by Donor Status

		Donor				
	Non-donor		Donor		Total	
Non-credit classes	n	%	n	%	n	%
Yes	79	7.1	67	6.1	146	13.2
No	710	64.3	249	22.5	959	86.8
Total	789	71.4	316	28.6	1,105	100.0

Table 49f. Other Organized Student Activities by Donor Status

		Donor				
	Non-donor		Donor		Total	
Other organized student						
activities	n	%	n	%	n	%
Yes	266	24.1	134	12.1	400	36.2
No	523	47.3	182	16.5	705	63.8
Total	789	71.4	316	28.6	1,105	100.0

Table 49g. Leadership Position with Students' Union by Donor Status

		Donor				
	Non-donor		Donor		Total	
Leadership position with						
Students' Union	n	%	n	%	n	%
Yes	28	2.5	26	2.3	54	4.8
No	763	68.5	297	26.7	1,060	95.2
Total	791	71.0	323	29.0	1,114	100.0

Table 49h. Awareness of Role of Alumni by Donor Status

		Donor				
	Non-donor		Donor		Total	
Awareness of role of alumni	n	%	n	%	n	%
Yes	437	39.2	202	18.1	639	57.3
No	356	32.0	119	10.7	475	42.7
Total	793	71.2	321	28.8	1,114	100.0

Table 49i. Awareness of Role of Volunteers by Donor Status

		Donor				
	Non-donor		Donor		Total	
Awareness of role of						
volunteers	n	%	n	%	n	%
Yes	494	44.4	231	20.8	725	65.2
No	298	26.8	89	8.0	387	34.8
Total	792	71.2	320	28.8	1,112	100.0

Table 49j. Interactions with Volunteers by Donor Status

		Donor				
	Non-donor		Donor		Total	
Interactions with volunteers	n	%	n	%	n	%
Yes	191	17.3	106	9.6	297	26.9
No	592	53.6	215	19.5	807	73.1
Total	783	70.9	321	29.1	1,104	100.0

Table 49k. Interactions with Donors by Donor Status

		Donor				
	Non-donor		Donor		Total	
Interactions with donors	n	%	n	%	n	%
Yes	66	5.9	46	4.2	112	10.1
No	722	65.0	276	24.9	998	89.9
Total	788	70.9	322	29.1	1,110	100.0

Appendix F. Supplementary Data Tables for Alumni Relationship Motivation Variables by Donor Status

Table 50a. Appreciation for University of Lethbridge Degree by Donor Status

		Donor				
	Non-donor		Donor		Total	
Appreciation for degree	n	%	n	%	n	%
Yes	279	25.0	218	19.5	497	44.5
No	515	46.1	105	9.4	620	55.5
Total	794	71.1	323	28.9	1,117	100.0

Table 50b. Appreciation for Relationships with Faculty by Donor Status

		Donor				
	Non-donor		Donor		Total	
Appreciation for						
relationships with faculty	n	%	n	%	n	%
Yes	217	19.4	126	11.3	343	30.7
No	577	51.7	197	17.6	774	69.3
Total	794	71.1	323	28.9	1,117	100.0

Table 50c. Gratitude for Financial Support Received as a Student by Donor Status

		Dono				
	Non-donor		Donor		Total	
Gratitude for financial support						
received as a student	n	%	n	%	n	%
Yes	91	8.2	54	4.8	145	13.0
No	703	62.9	269	24.1	972	87.0
Total	794	71.1	323	28.9	1,117	100.0

Table 50d. Desire to Support Students by Donor Status

		Dono				
	Non-donor		Donor		Total	
Desire to support students	n	%	n	%	n	%
Yes	320	28.6	221	19.8	541	48.4
No	474	42.5	102	9.1	576	51.6
Total	794	71.1	323	28.9	1,117	100.0

Table 50e. Desire to Support Research by Donor Status

		Dono				
	Non-donor		Donor		Total	
Desire to support research	n	%	n	%	n	%
Yes	175	15.7	104	9.3	279	25.0
No	619	55.4	219	19.6	838	75.0
Total	794	71.1	323	28.9	1,117	100.0

Table 50f. Awareness of University of Lethbridge's Needs for Financial Support by Donor Status

		Dono				
	Non-donor		Donor		Total	
Awareness of University's						
needs for financial support	n	%	n	%	n	%
Yes	101	9.0	114	10.2	215	19.2
No	693	62.0	209	18.7	902	80.8
Total	794	71.1	323	28.9	1,117	100.0

Table 50g. Matching Programs through Government Funding by Donor Status

		Dono				
	Non-donor		Donor		Total	
Matching programs through						
government funding	n	%	n	%	n	%
Yes	74	6.6	46	4.1	120	10.7
No	720	64.5	277	24.8	997	89.3
Total	794	71.1	323	28.9	1,117	100.0

Table 50h. Recognition by the University of Lethbridge for the Alumnus' Contribution by Donor Status

		Dono				
	Non-donor		Donor		Total	
Recognition for the alumnus'						
contribution	n	%	n	%	n	%
Yes	69	6.2	53	4.7	122	10.9
No	725	64.9	270	24.2	995	89.1
Total	794	71.1	323	28.9	1,117	100.0

Table 50i. Overall Level of Satisfaction with Alumni Relationship with University of Lethbridge by Donor Status

		Dono				
	Non-donor		Do	Donor		tal
Overall level of satisfaction						
with alumni relationship	n	%	n	%	n	%
Very dissatisfied	16	1.7	3	.3	19	2.0
Dissatisfied	98	10.0	30	3.1	128	13.1
Satisfied	518	53.2	236	24.2	754	77.4
Very satisfied	39	4.0	34	3.5	73	7.5
Total	671	68.9	303	31.1	974	100.0