NDSU FACULTY TURNOVER STUDY

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ABSTRACT

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The purpose of this qualitative study was to explore the reasons behind faculty turnover from North Dakota State University (NDSU). A list of 45 faculty members who left NDSU between May of 2008 and March of 2010 was gathered from the NDSU Office of Equity, Diversity, and Global Relations. Potential participants were contacted with 20 completing phone interviews for this study. Interview questions sought to explore the reasons for faculty member departure, the impact of university policies/procedures on faculty, the NDSU working experience, and comparisons between their former NDSU positions and their current position. Six themes emerged as to why faculty members departed from NDSU. These themes included (1) campus climate, (2) lack of advancement/professional opportunities, (3) position requirement challenges, (4) weather/geographical location, (5) family reasons, and (6) salary. Patterns in turnover between STEM/non-STEM disciplines were explored. Gender differences emerged in participant responses in regard to campus climate, mentoring, salary, community climate, and experiences of non-STEM female participants at NDSU. Recommendations for future research, limitations of this study, and implications for practice at NDSU are discussed.

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+Thank you St. Helena.

DEDICATION

Dado, I finally got my paper done. So thankful you are here to see it.

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CHAPTER I.

INTRODUCTION

Background and Context

"The well being of the university depends on its ability to recruit and retain a talented professoriat. Our national well being depends on our ability to develop a happy, emotionally healthy, and productive next generation" (Hensel as cited in Hagedorn, 2000, p. 5)

The lives of many are disrupted when a faculty member decides to leave a university. While some faculty turnover is necessary and can be healthy, unnecessary losses hurt the university ("Faculty Retention," 2002). Bedeian (2007) believed that this is because "The achievements of a university's faculty, more than any other factor, determine its quality" (p. 10). Faculty members spend their lives working on behalf of students and public interest through their teaching, service, and research endeavors. Universities would be able to better serve all if these members were nurtured and received the "rewards and satisfaction [that] come from student learning and engagement, interaction with colleagues, earning tenure and rank, publishing research, service contributions, and disciplinary associations" (Rosser, 2000, p. 306). Leaving a university or academia all together disrupts this course for the faculty member and for the university, so efforts should be made that unwanted losses do not occur.

Some departure of faculty may be beneficial for a university because it may open up opportunities. Departures may also lead to new vitality within academic departments. Though positive outcomes may result from turnover, the causes can be negative.

Unfortunately, "turnover may represent potentially serious institutional problems such as faculty dissatisfaction, loss of talent, noncompetitive salaries, and a negative organizational

climate" (Zhou & Volkwein, 2004, p. 140). Alemu (2008) found in a multi-institutional study that almost two-thirds of faculty left not because of retirement, but for other reasons. He urged universities to look at the trends and issues impacting faculty turnover so that universities can be strategic about how to maximize their retention efforts as competition for labor increases. Xu (2008b) pointed out that research can provide answers to minimize unwanted losses. She believed it was critical for universities to learn the factors that were impacting the decision making process and causing unwanted turnover.

The issue of faculty retention has been analyzed through a variety of means and methods. There are many reasons why faculty may decide to leave a university. Personal reasons may cause an individual to depart. Quality of life and personal fulfillment are common reasons cited in faculty deciding to leave a university (Johnsrud & Rosser, 2002). Institutional and environmental factors may also play a role. Previous studies related to faculty retention have focused on a variety of aspects such as faculty satisfaction, morale, rewards, motivation, and organizational factors (Johnsrud & Rosser, 2002). Organizational theorists have looked at the issue of voluntary turnover and have found that structural, economic, and social psychological variables are all impactful (Johnsrud & Rosser, 2002).

A variety of theories regarding why some universities have higher retention rates than others exist and have been explored (Alemu, 2008; Jo, 2008; Matier, 1989; Xu, 2008b). Matier (1989) found working relationships with colleagues, rapport with department chair, opportunities for research, reputation of department, and salary as the most important factors influencing turnover. While these reasons were commonly explored and mentioned in turnover studies, the influences of weather and geographical location have been rarely addressed. One exception that looked at these factors took place at a

North Carolina university where Trotman & Brown (2005) found that campus location and environment were cited positively among faculty members along with enjoyment of the weather conditions in the state. Very few other researchers have mentioned any findings that identified regional or geographical issues (Ambrose, Huston, & Norman, 2005; Amey, 1992). Faculty turnover is not a simple or necessarily straightforward issue. Much of it depends on the individual, the institution, and the environment. Though complex, the reasons why faculty turnover occurs is an issue of value worth exploring.

In recent years, North Dakota State University (NDSU) has experienced tremendous growth. In 1999, the total enrollment was approximately 9,600 students (Chapman, 2009). In 2009 that number had grown to nearly 14,200. Furthermore, the number of doctoral programs increased from 18 to 44 in the span of those 10 years. Graduate student numbers more than doubled as did research expenditures which now exceed \$115.5 million (Chapman, 2009). In order to ensure that this upward growth can be maintained or continued, it will be necessary for NDSU to be a university that can recruit and retain high quality faculty.

Former President Joseph Chapman (2009) recognized the contributions and commitment of faculty towards this growth in his 2009 State of the University Address. In many situations unnecessary faculty turnover can be looked upon as a setback affecting the infrastructure of the organization and limiting the potential of the organization to reach goals. The establishment of a strong research infrastructure is necessary to gain research funding (Chapman, 2009). Thus, retaining quality faculty members is an important part of creating the strong infrastructure that NDSU desires as it moves towards becoming a world-class research institution.

The American Association of University Professors (AAUP) study on Faculty Gender Equity Indicators found that NDSU had 90.2% tenured male faculty members and only 9.8% tenured female faculty members (West & Curtis, 2006). NDSU's percentage of tenured female faculty was the second lowest percentage out of doctoral universities nationwide (West & Curtis, 2006). Interestingly, the University of North Dakota, which is comparable to NDSU in many aspects and only 75 miles away, had 28.9% tenured female faculty members which is almost three times as many as NDSU (West & Curtis, 2006).

In 2007, the *Chronicle of Higher Education* published an article by Wilson who responded to the AAUP's findings. Wilson (2007) interviewed six current and five former female NDSU faculty members about the reasons they felt led to turnover at NDSU. Harsh winters and a family-oriented community atmosphere that may be "lonely" for singletons were two reasons cited (Wilson, 2007, para. 6). Administrators who were cited in this article claimed they did not think money was behind faculty turnover. Wilson (2007) continued by stating there may be some gender specific concerns that need to be addressed on the NDSU campus. These concerns included a male-dominated environment, the university policy of unpaid maternity leave, and the lack of senior female leadership in departments.

Previous studies have uncovered that turnover, both voluntary and involuntary, is greater for female faculty members (Olsen, Maple, & Stage, 1995). Short (2006) found in her research that women are the most distressed group upon entering academia.

Uncertainties can play into high levels of stress which impact success of these female faculty members, leading them to be dissatisfied and possibly to leave (Short, 2006).

Wilson (2007) brought attention to gender differences at NDSU by pointing out the fact

that while the national average of female tenured faculty members was 31%, it was only 9.8% at NDSU. Because there are so few female faculty members being awarded tenure or staying once they have achieved tenure at NDSU, the reasons for women leaving is one that needs to be explored.

The assistant professor level is the largest grouping of female faculty members at NDSU, while "male full professors are the largest group on campus, 31.2% of total faculty" (NDSU FORWARD, 2008, p. 6). At NDSU, the rate of attrition for women upon becoming associate professors was 25% while the attrition rate for men at the same rank was only 5% (NDSU FORWARD, 2008). Due to the institution-specific concerns regarding the low number of tenured and full professor female faculty, questions arise about what gender differences are experienced by faculty members at NDSU and what, if anything, can be done to increase retention. Short (2006) noted that, "Female tenure-track faculty are more apt than their male colleagues to leave academe before a tenure decision. Through this revolving door, women are hired, stay a few years, become discouraged or are denied tenure, and leave" (p. 35). Why do these faculty members leave? Are the reasons given in previous studies comparable to reasons why faculty leave NDSU?

Within the female faculty member group, there is a sub-grouping of women in STEM (science, technology, engineering, mathematics) disciplines that may be of particular interest to NDSU. Women in these disciplines have traditionally been underrepresented (Xu, 2008a). At NDSU, female full professors made up only 1.5% of the entire STEM faculty while men of the same rank made up 33.3% (NDSU FORWARD, 2008). Based on Xu's (2008a) findings, some of the disadvantages believed to limit women in STEM fields include structural barriers, promotional barriers, lack of support, salary

inequities, isolation, and stereotyping. Unfortunately, there is insufficient research on the turnover of female STEM faculty (Xu, 2008a). Since women are underrepresented in these disciplines, extra attention should be paid to understanding their reasons for turnover (Xu, 2008a). In the present study, particular attention is paid to the reasons for turnover in STEM disciplines due to the disparity in attrition rates at NDSU.

In 2008, NDSU was awarded an ADVANCE grant from the National Science
Foundation (NDSU FORWARD, 2008). This grant funds NDSU FORWARD (Focus on
Resources for Women's Advancement, Recruitment/Retention and Development) which
focuses on improving climate, recruitment, retention, advancement, and leadership
opportunities across campus specifically for women in STEM fields (see Appendix A).
During the 2009-2010 school year, the researcher served as a graduate assistant scholar for
FORWARD. The intent of this research is to help advance the mission of NDSU
FORWARD by uncovering the reasons for faculty turnover at NDSU.

Realizing that many factors can play into faculty turnover, this study provides an opportunity to look into possible institution specific causes for turnover at NDSU. Previous studies (Alemu, 2008; Ambrose et al., 2005; Jo, 2008; Matier, 1989; Xu, 2008b) have addressed a variety of causes for faculty turnover. However, the question remains as to whether the reasons for faculty turnover at NDSU are comparable to findings from previous studies, especially considering regionally-specific characteristics of the university such as weather conditions and culture.

Purpose of the Study

The purpose of the study was to learn about the reasons faculty members leave NDSU by gathering data using phone interviews. Information gathered through these interviews led to recommendations for increasing retention rates and satisfaction for NDSU faculty members. Particular attention was paid to concerns of women and STEM faculty members. Ultimately, this study aims to help NDSU be an environment where quality faculty members want to stay and can be productive.

Significance of the Study

This study provides an opportunity for NDSU to explore institution-specific reasons behind faculty turnover. In 2007-08, the total percentage of all faculty at NDSU who were tenured men was 57% while for women it was 8.8% (NDSU FORWARD, 2008). Because of this imbalance between the percentages of tenured male and female faculty members, NDSU FORWARD is working to improve the retention rates of female faculty members. Through these interviews, faculty members were able to express their reason(s) for leaving NDSU. In addition, analysis of responses based on gender and STEM/non-STEM status were made. Recommendations were made based on the results of this study and allows NDSU to address areas of concern identified in the findings. This study also contributes to the overall body of knowledge on faculty retention.

Short (2006) pointed out the importance of this type of retention study. If female faculty members are not retained, female mentors may be lacking in the future. This absence may be viewed by faculty and students as creating an unfriendly or unsupportive environment for women. Short continued by recognizing that this lack of female faculty members could lead to a perpetuating cycle of fewer women entering higher education for

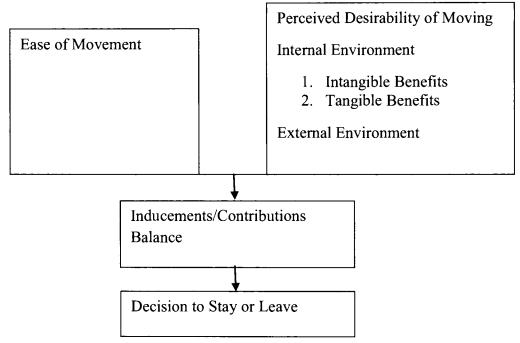
generations to come. Due to its importance, female faculty retention needs to be a focus of universities. This study allows NDSU to take a closer look.

Theoretical Framework

Using the push-pull theory, Matier (1989) developed a model to explain faculty turnover that has been used as a framework in multiple studies (Ambrose et al., 2005; Johnsrud & Rosser, 2002; Zhou & Volkwein, 2004). In this model, negative factors push faculty away while positive factors pull them to another job, be it in academia or elsewhere. In addition, "individuals are more likely to seek out and respond to outside offers because of dissatisfaction with their present employment situation than they are to be enticed to leave simply by greener pastures" (Matier, 1989, p. 5). Matier recognized that multiple factors play into the decision to stay in or leave a position and that these factors come from both within and outside of the workplace. He found that both push and pull factors came into play when considering whether to stay at the current institution or to move on to the job offering institution. He also realized that an understanding of the ease of movement away from the current position was a factor in decisions to leave. This consideration of the impact of relocation factors for faculty members is a unique and important part of this model.

Matier's (1989) framework looked at: "(a) the individual's ease of movement, (b) the perceived desirability of moving, (c) the inducements/contributions balance the individuals rationalized as their due based on the first two elements, and (d) the particular decision made by the individual to remain or leave" (p. 13). These factors are represented in Figure 1. (Matier, 1989):

Figure 1. Factors Influencing Turnover (Matier, 1989)



Ease of movement takes into consideration the following factors: (1) personal characteristics (age, marital status, spousal employment situation, dependent financial support, and length of service), (2) visibility in the academic community outside one's own institution (based on publishing, presenting, editing, and involvement in professional organizations), and (3) an individual's propensity to search for other employment opportunities (nominations to apply for positions, applications sent out, going to job interviews, offers made, and mobility of research) (Matier, 1989).

The perceived desirability of moving takes into consideration both internal and external environmental factors. The internal factors may be in the forms of intangible benefits or tangible benefits. Intangible benefits include such things as reputation of the individual and institution, autonomy, sense of belonging, and influence in the department and institution (Matier, 1989). The tangible benefits are things such as salary, fringe benefits, facilities, and work rules (Matier, 1989). In contrast, external factors which are

non-work related may include quality of life, family, friendships, and other non-work related financial considerations (Matier, 1989). These factors compound and become strong forces either keeping the faculty member at the university or causing them to leave.

Matier (1989) defined the inducements/contributions balance as, "an individual's perception of the desirability of leaving an organization, and the perceived ease with which the individual can successfully move to another organization" (p. 9). If an individual thinks that he or she is making more contributions than what he or she is getting in return he or she is likely to look into other options where the inducements received would be perceived as being higher. On the other hand, if the faculty member feels like the institution he or she is at has inducements that outweigh his or her contributions he or she is likely to want to continue his or her employment at that university. The faculty member must take into consideration if he or she feels justly compensated (Matier, 1989).

Job satisfaction is related to internal and external environmental factors that impact the possibility of turnover. When faculty members take these factors into consideration, their ideas about whether or not to start exploring other options and ultimately turning over begin to form. The seriousness of these factors influences the seriousness to which faculty members consider leaving. Faculty members who are likely to leave the university are those who are experiencing low internal and external benefits. Faculty members who are expected to leave the university have perceived experiences of low internal and external benefits in combination with ease of movement.

Other researchers have found this model to be a suitable framework for their studies (Ambrose et al., 2005; Johnsrud & Rosser, 2002). For example, Johnsrud and Rosser (2002) found that faculty members did not intend to leave positions where they were

satisfied, but that something about the situation they were in led them to explore other options. Ambrose et al. (2005) used Matier's (1989) model to analyze their former faculty. By determining the internal and external environmental factors, they were able to determine factors within the university's control that if looked at could improve retention rates.

In the present study, Matier's (1989) framework was not used in the initial coding of the data. However, it was used in the analysis of study results. This framework was used in the present study to compare and contrast its results with the findings from previous studies. In addition, Matier's framework was helpful in gaining a better understanding of the context in which faculty members make their decisions since this model takes into consideration ease of movement and the inducement/contributions balance. By comparing the current study's findings against Matier's framework, the researcher was also able to identify findings that were unique to NDSU.

Research Questions and Propositions

- 1. What will faculty who left NDSU identify as the reasons for leaving?
- 2. Do university policies/procedures have an impact on faculty members' experience at NDSU?
- 3. How will faculty who left describe their working experience at NDSU?
- 4. How will their current position compare to their former position at NDSU?
- 5. Will there be differences in participants' responses based on their academic disciplines?
- 6. Will there be gender-related differences in participants' responses?

Limitations of the Study

NDSU as an institution may not be comparable to other universities that have completed faculty turnover research. As Rosser (2005) recognized, previous faculty member research has generally been a "snapshot" (p. 82) of a particular time at a particular institution. The realization must also be made that contributing factors to turnover may have changed in the time since the faculty member left the university. A deficiency of this study is that departmental concerns may not be linked back to the departments due to confidentiality concerns, so specific problems may not be addressed.

Additional limitations include:

- Participants will be limited to faculty members whose contact information can be obtained.
- Only faculty willing and able to take part in the phone interview will be able to participate.
- 3. The data collection times may not accommodate all possible participants.
- 4. Participants may filter their responses through the phone because of anonymity concerns.
- 5. Perceptions of turnover causes may have changed in the time between employment at NDSU and the interview.
- 6. Researcher inexperience conducting qualitative research.

Definition of Terms

Faculty Turnover: "the departure of faculty members from their Institution voluntarily (initiated by the faculty member), involuntarily (initiated by the institution) or

naturally (due to health issues, timely retirement, death, or dismissal)" (Alemu, 2008, p. 12).

STEM: Science, Technology, Engineering, Mathematics

Tenure: "protects academic freedom, but it also provides sufficient job security to make the academic profession attractive to able men and women, thus reducing turnover for those who earn it" (Zhou & Volkwein, 2004, p. 140).

Worklife: includes areas such as "work and productivity, motivation and behavior, professional development, administrative relations and support, gender and minority issues regarding role modeling, mentoring, service and committee work, salary, and tenure and promotion, and instructional and learning technologies" (Rosser, 2005 p. 82).

Worklife Satisfaction: "the level of satisfaction individuals perceive to have experienced regarding their workplace" (Rosser, 2005, p. 84.).

Workplace Climate: rooted characteristics that distinguish one workplace from another which influence the behavior of the people who work there (Gicopoulos, 1998). Summary

Faculty turnover is an area of concern for universities. Many previous studies (Alemu, 2008; Ambrose et al., 2005; Amey, 1992; Bedeian, 2007; "Faculty Retention," 2002; Johnsrud & Rosser, 2002; Matier, 1989; McJunkin, 2005; Olsen et al., 1995; Rosser, 2000; Short, 2006; Trotman & Brown, 2005; Xu, 2008b; Zho & Volkwein, 2004) have determined the issue of faculty turnover to be an issue of importance that is worthy of research. Their research has determined causes for turnover and a variety of reasons have been cited. Due to variances between universities, it is often necessary for an institution to conduct individual research to identify specific causes for turnover among their faculty.

The purpose of this study was to learn about the reasons faculty members have for leaving NDSU. A 2006 AAUP report that looked at doctoral universities across the nation found NDSU to have the second lowest percentage of tenured female faculty members with only 9.8% (West & Curtis, 2006). In response to this finding, Wilson (2007) stated there may be some gender specific concerns that need to be addressed on the NDSU campus. The National Science Foundation awarded NDSU an ADVANCE grant because of the imbalance in the retention of male and female faculty members, specifically women in STEM fields. In recent years, NDSU has grown dramatically. Because turnover may be costly to NDSU's success, efforts should be made to identify and prevent these unwanted departures. The reasons why faculty members leave NDSU have been questioned, but no definitive data exists. Through conducting this research, the researcher explores the reasons why faculty have left NDSU and provides recommendations to improve faculty retention efforts at the university. Pertinent literature is reviewed in Chapter II.

CHAPTER II.

LITERATURE REVIEW

Faculty Turnover

According to the National Center for Education Statistics (NCES, 2009), 1.4 million faculty members were employed by colleges and universities in the fall of 2007. At public 4-year institutions, 68% were full-time faculty members (NCES, 2009). The faculty turnover rates at research universities ranged from 2-10% each year with the rates of turnover being higher for women than for men (Ambrose et al., 2004). Best estimates are that the average American changes jobs seven times (Jo, 2008). Academia can be a very transitory field as Hagedorn (2000) recognized that, "faculty tend to be quite mobile" (p. 11). With faculty members playing such an important role not only in the university, but in society, this mobility caused by faculty turnover has been the inquiry of many researchers (Ambrose et al, 2005; Amey, 1992; Dee, 2004; Jo, 2008; Johnsrud & Rosser, 2002; Matier 1989; Trotman & Brown 2005; Xu, 2008b; Zhou & Volkwein, 2004) who have found it to be a complex issue where a variety of factors impact faculty decision making.

Not only has faculty turnover been found to be a complex issue, but also an issue that is challenging to research. This challenge often results from faculty members being difficult to locate after they leave and a low return rate on surveys from departed faculty (Johnsrud & Rosser, 2002). Because of this, multiple studies have looked at turnover intent, which is the intent to remain in or leave a position (Dee, 2004; Johnsrud & Rosser, 2002; Rosser, 2004; Zhou & Volkwein 2004). Though Jo (2008) suggests studying turnover intent as being a limitation to understanding actual turnover, Johnsrud and Rosser (2002) have found "intent to leave was the strongest predictor of actual voluntary turnover" (p. 292). Other studies have focused on job satisfaction of faculty members (Gicopoulos,

1998; Hagedorn, 2000; Rosser, 2004, 2005; Terpstra & Honoree, 2004; Volkwein & Parmley, 2000) because of linkages found between satisfaction and turnover (Terpstra & Honoree, 2004).

Adding to the complexity of turnover are the multiple factors that faculty take into their decision making process. Zhou and Volkwein (2004) found that, "Typically, a carefully thought-out process occurs before a person's departure decision, in which the individual weighs career benefits and losses from such a career move" (p. 141). This balance takes into consideration that faculty may be pleased with some aspects of their work, but dissatisfied with other parts. What these faculty members weigh often comes down to much more than just satisfaction versus dissatisfaction. Ambrose et al. (2005) found that levels of satisfaction alone were poor predictors of faculty turnover and that broader issues must be examined as to why faculty members leave. Xu (2008b) supported the idea that satisfaction may be a poor turnover predictor, finding that faculty members sometimes leave universities where they are completely satisfied. Turnover may occur in this instance because professors who are productive and have a strong reputation are going to be more likely to have lucrative job offers come their way (Zhou & Volkwein, 2004). Faculty members have a lot to consider when looking at whether to continue employment at their current institution or to move someplace else. Considering all of the factors that can come into play, it is not surprising that Xu (2008b) noted that the findings of turnover studies are often inconsistent.

Though studies may differ on how they address turnover and its causes, studies in this area place a strong emphasis on institution-specific analysis of turnover causes (Ambrose et al. 2005; Amey, 1992; August and Waltman, 2004; Dee, 2004; "Faculty

Retention," 2002; Gicopoulos, 1998; Johnsrud & Rosser, 2002; Matier, 1989; Rosser, 2005; Trotman & Brown 2005; Volkwein & Parmley 2000; Zhou & Volkwein, 2004) because of contextual factors and perceptions that occur due to factors such as culture, location, mission, structure, student base, funding, size, teaching or research focus and other factors which may ultimately shape faculty decisions. These factors may help explain the inconsistencies that Xu (2008b) mentioned. Ambrose et al. (2005) were adamant about institutions gathering their own data because "Without such data, universities cannot effectively target their problems, identify their strengths, or fully understand where their own experiences intersect with or diverge from the experiences of other institutions" (p. 806).

Due to institution-specific variables, results of studies related to turnover have found varying causes. Burke (as cited in Amey, 1992) concluded that quality of life issues such as "intellectual isolation, intellectual incompatibility with senior colleagues and spousal employment, or lack thereof, were predominate factors" (p. 2) in faculty departure decisions. Matier (1989) recognized that congeniality of associates, rapport with departmental leadership, research opportunities, and reputation of department, institution and associates were the major reasons for faculty turnover in his study. Amey (1992) found in her 10-year study of the turnover at a public research institution that "salary, retirement, professional advancement and institutional issues were the most frequent reasons cited overall for faculty leaving" (p. 11). In a survey conducted by Brown (as cited in Zhou & Volkwein, 2004) another set of reasons for faculty turnover were "competency of administrators, research facilities and opportunities, teaching loads, salary, courses taught,

competency of colleagues, and congeniality of colleagues" (p. 142). Many of these themes emerged in multiple studies.

The variety of factors impacting faculty turnover lead to a variety of repercussions for the faculty member and for the university. The faculty member may be leaving the university voluntarily or involuntarily, thus making this a complex issue with both positive and negative impacts that are specific to academic life. Zhou and Volkwein (2004) pointed out that "Some faculty departure is a natural part of professional advancement within academia. Faculty mobility is accepted and approved by the profession 'because loyalty to discipline transcends loyalty to school and because teaching and research skills are readily transferable among schools" (p. 140). Length of service may also play into turnover decisions because junior faculty have higher levels of turnover intent than senior faculty members (Dee, 2004). The promotion and tenure process may impact these decisions. Amey (1992) recognized that junior faculty may not be as invested in a particular university as senior faculty members. Since these junior members are not as ingrained they may be more likely to move because of institutional concerns. If large numbers of junior faculty members are leaving, the proximity of tenure and promotion decisions should be examined (Amey, 1992).

Understanding the nature of academia is important for understanding the reasons why faculty may leave. In order to keep valued faculty members, universities need to be aware of the needs and motivations of their faculty. Amey (1992) suggested that administrators realize that some turnover will occur among senior faculty members. However, these administrators must make the effort to understand faculty motivations since administrators may be able to provide opportunities that could meet valued faculty

members' needs and prevent turnover (Amey, 1992). Piercy et al. (2005) also supported keeping in touch with faculty needs because

Faculty stay where morale is high; where they feel mentored; where they experience a sense of community; autonomy, and intellectual challenge; where institutional support is clear and pervasive; where they make a decent living, where the definition of scholarship is sufficiently broad to encompass their teaching and scholarship; and where they feel they have a voice and a chance to be part of the leadership. (p. 64)

Some universities successfully create an environment where faculty members are nurtured and want to remain. Unfortunately, this type of environment does not exist at all institutions. Alemu (2008) came to five conclusions about high turnover institutions in his study: (1) there is more likely to be dissatisfaction with authority; (2) minorities, women, and adjunct faculty are more likely to be treated unfairly; (3) faculty produce more peer-reviewed scholarly work; (4) faculty have larger thesis/dissertation workloads and spend more time doing research; and (5) these universities lose faculty despite higher salaries. An understanding of the university-related factors that influence turnover can help these institutions focus their faculty retention efforts.

Though some variables influencing faculty turnover may be within university control, others may not be. University variables such as "university control, mission, size, wealth, complexity, and quality" (Zhou & Volkwein, 2004, p. 143) have been suggested by researchers as influencing satisfaction and turnover. These factors may not be easily changed. Amey's (1992) study found that some factors of faculty turnover "may be outside the realm of institutional control" (p. 14). This claim is also supported by "Faculty

Retention" (2002), where findings concluded that there may be nothing an institution can do to prevent the loss of some faculty members.

Advantages of Turnover

In some instances, faculty turnover can be a positive occurrence for an institution. Ambrose et al. (2004) recognized that some faculty turnover is "both necessary and healthy" (p. 804). Some faculty may not be faculty that the university wishes to keep. They may not be a "good fit" to the profession or the institution ("Faculty Retention," 2002). In this type of situation, keeping the faculty member could be harmful to the institution because department morale and institutional reputation could be at stake.

Stagnancy can also occur if new blood with its fresh ideas does not occasionally come into the organization (Xu, 2008; Zhou & Volkwein, 2004). This stagnancy could result because, "Organizations are the people in them; thus, if the people do not change, there is no true organizational change beyond what is simply procedural" (Gicopoulos, 1998, p. 14). Some institutions even encourage faculty turnover initiatives such as early retirement or career change programs (Markham, 1991). Though not all turnover is encouraged, positive outcomes may result for a university in some situations.

Disadvantages of Turnover

There are many instances where the faculty member leaving is one whom the university would like to retain (Johnsrud & Rosser, 2002). Unwanted departures are one way universities can feel the loss of faculty members. Betts and Sikorski (2008) recognized that universities lose in several ways when faculty leave the institution: indirect costs, opportunity costs, and direct costs. Indirect costs often go unacknowledged as they relate to productivity and morale. Opportunity costs look at how resources and services are

impacted by turnover. Direct costs are the fixed and variable costs that go into recruiting, retaining, and losing faculty members (Betts & Sikorski, 2008). Total cost is ultimately hard to quantify or itemize.

Indirect costs that come from faculty turnover touch a variety of aspects of the university. Latimer (2002) identified lost productivity as a major cost and can show up in the form of (a) lost productivity of the leaving faculty member, (b) lost productivity in vacant position, (c) lost productivity in search committee members, (d) lost productivity of peers who take on displaced work, and (e) lessened productivity of a newly hired member while adjusting and going through new training. Dee (2004) also recognized that the costs of recruiting faculty and disruption of work significantly impact universities when turnover occurs. Due to these factors, effectiveness and productivity are diminished. Additional faculty productivity may be lost if the morale of the remaining faculty members drops as a result of the turnover and due to the increased responsibilities that often come along when a team member is missing (Betts & Sikorski, 2008; Jo, 2008; Wenger, 2003). In addition, productivity may also not be as high while new hires learn the ropes of the organization. Dee (2004) recognized that, "High rates of faculty turnover can be costly to the reputation of an institution and to the quality of instruction" (p. 593). Betts and Sikorski (2008) also pointed out that negative perceptions of the university may result from turnover and that negative legal repercussions could be mixed into the issue. If all this was not enough, additional hidden costs include the loyalties, contacts, and knowledge that the former faculty member takes with them (Betts & Sikorski, 2008). Plus, the newly acquired faculty member's skill may never quite measure up to his/her predecessor (Jo, 2008).

Student turnover can also be a repercussion of faculty turnover which should be of concern to universities. Dee (2004) added that student retention rates may be impacted because of untaught courses, unfinished projects, lowered morale, and decreased student-faculty interactions due to faculty turnover. Betts and Sikorski (2008) stated that graduation rates may drop. Faculty turnover also has implications for the socialization and mentoring of graduate students who may someday want to become professors or administration in academic fields (Rosser, 2000).

Recognizing the importance for socialization and mentoring of students leads to another important indirect cost impacted by faculty loss: the loss of diversity. Piercy et al. (2005) recognized that turnover rates are higher for minority faculty members. These losses become an issue for universities because "the quality and texture of the entire educational experience is diminished without racial diversity" (Piercy et al., 2005, p. 54). The exposure to different cultures and teaching methods will allow students to go out into a diverse world and succeed (Piercy et al., 2005). Campuses will ultimately have to focus on creating a climate where diverse individuals are valued in order for this dynamic type of learning environment to develop (Piercy et al., 2005).

Opportunity costs are also borne by the university when faculty members leave due to loss of potential business or students. New courses may not be available as options.

Grants and funding may not be attainable. When these faculty members leave they may take many valuable connections and contacts with them. These losses which inhibit growth may adversely affect the institution. Additionally, new programs may not be implemented due to turnover, course offerings may be limited, accreditation may be lost, students may decide to attend competing institutions, faculty members may leave for other institutions

with stronger program reputations, and the sense of community may suffer and with it donations and partnerships may decrease (Betts & Sikorski, 2008).

An institution can start expecting a variety of costs from the moment they learn a faculty member is leaving. Some of the costs may include severance pay, increased unemployment insurance rates, and possible legal grievances. Other negative implications that may be costly to the institution may include the direct costs of students leaving or following an advisor or faculty member with whom they had a positive experience.

Students may also leave because of a negative interaction with the former faculty member. These negative circumstances may include instances where legal action was pursued (Betts & Sikorski, 2008).

Money is also at stake when it comes to replacing the lost faculty member in the form of direct costs. It is estimated that some universities spend \$68 million per year on turnover (Jo, 2008). Each new hire is like an investment, and when faculty leave it represents a loss on that earlier investment (Zhou & Volkwein, 2004). For a university, faculty turnover can mean significant costs in terms of lost recruiting with its advertising and interviewing expenses, moving expenses, costs incurred while setting up lab and office spaces, training, socialization investments, and disruption and replacement costs (Rosser, 2004; Wenger, 2003). Monetary cost impacts the university at multiple levels. This can become expensive because of the loss of quality faculty member, lost productivity because of searches, and the loss of resources and costs of start-up packages which may be up to half a million dollars or more (Ambrose et al., 2004). Latimer (2002) identified, "A rule of thumb sometimes used is that it costs half a year's salary to hire a replacement" (p. 3). The money spent on hiring the new member could be expected to cover the costs and human

power that go into the recruitment and application process, incentive packages, relocation costs, orientation and training costs, professional development, technology training, and putting support systems and mentoring in place (Latimer, 2002). Replacing faculty members is big business. Hiring new faculty is also a big decision since, "The rising costs of recruitment, coupled with the increased dollar commitment associated with a positive tenure decision, has magnified the institutional impact and implications of each hiring decision" (Amey, 1992, p. 1). Ultimately, the costs of replacing faculty members are spread over several levels of the university and may be difficult to quantify (Betts & Sikorski, 2008).

Ease of Movement

Demographic factors and a person's propensity to look for other positions are factors that make up ease of movement (Matier, 1989). Voluntary turnover is unlikely to occur if ease of movement is not present (Matier, 1989). Though a vital part of the decision making process, ease of movement factors such as dual career hires, rootedness in the position/community, and life stage are rarely touched on in turnover literature. Mobley (as cited in Rosser, 2004) found that environmental organizational opportunities, routinization of job, age, and intention to go or remain directly determine faculty turnover.

How the economy impacts turnover decisions must be taken into consideration.

Jobs may or may not be available for the faculty member to consider which impacts the ease of movement. Zhou & Volkwein (2004) recognized the job market as impacting turnover. Amey (1992) predicted that increasing retirements and potential faculty shortages can be expected in the future.

The demand for faculty members is often related to their academic discipline. The demand within different disciplines will determine the opportunities and ease of movement for faculty members. Opportunities for movement may be available within academia and the private sector. Labor markets are segmented by academic discipline, and some academic disciplines do not have nonacademic options while others have opportunities both inside and out of academia in competitively growing fields (Xu, 2008b; Zhou & Volkwein, 2004). Matier (1989) recognized that there is already a shortage of faculty in some disciplines and that more shortages may occur especially in response to a large number of baby boomers who are coming to retirement age. With shortages comes competition not only between institutions, but also possibly with the private sector. These private sector jobs may be appealing to some faculty who want to eliminate the stress of writing publications and possibly make more money (Zhou & Volkwein, 2004). In her research, Xu (2008b) found that motivations vary for faculty members who switch academic institutions versus those who leave academia altogether. She also recognized that there are patterns of factors contributing to turnover that are specific to different academic disciplines which may warrant additional research.

Internal Environment

Intangible Benefits

Qualities of some institutions lead to a reputation of being a good environment in which to work. Some of these characteristics may include institutional factors such as class size, whether the institution is public or private, and unionization (Terpstra & Honoree, 2004). Xu (2008b) asserted that "An academic environment that nurtures individual faculty members is the only path to enhancing the reputation and development of an

institution" (p. 59). Rice and Austin (as cited in Johnsrud & Rosser, 2002) found that campuses with high morale shared similar characteristics of: "(1) distinctive organizational cultures, (2) participatory leadership (greater involvement of faculty in decision making), (3) a sense of organizational momentum, and (4) faculty identification with the institution" (p. 525). While universities strive to have good reputations, many factors impact these perceptions.

Workplace Climate

Gicopoulos (1998) identified five elements that combine to create organizational climate. These elements include (a) managerial support, (b) participative decision making, (c) trust towards management, (d) support of open communication, and (e) emphasis placed on high performance goals (Gicopoulos, 1998). "Faculty Retention" (2002) recognized that not all people in an organization will interpret elements the same and will have different perspectives on the culture and climate of the university. While positive environments encourage faculty members' feelings of belonging and decrease turnover intentions (Xu, 2008b), examples of how negatively perceived organizational climate can impact faculty turnover have been found by several researchers. Dee (2004) found that the strongest contributor to turnover intent was a lack of institutional support for innovation. Dee suggested that focusing on innovation and organizational change can help improve faculty retention. Universities may want to consider how climate is impacting their faculty.

Ambrose et al. (2004) talked about competition for scarce resources, which can create suspicion and resentment amongst faculty members. In their study, "A number of respondents reported that their department head 'played favorites,' or said their departments reeked of an 'old boys' network" (p. 815). Both male and female faculty

members identified this as being an issue, even if they were on the benefitting end (Ambrose et al., 2004). Bedeian (2007) found in his study, "universities that engender high levels of cynicism among their faculty can expect diminished organizational identification, lower levels of affective commitment, waning job satisfaction, and, ultimately, increased turnover among their faculty" (p. 25). Johnsrud and Rosser (2002) also realized that morale significantly impacts intent to leave. All these negative effects could be a result of a lack of trust. Working in an environment that does not have an established sense of trust may be detrimental to faculty members, as Gicopoulos (1998) identified trust as the most important part in creating a positive climate.

Another way to view workplace climate is McGregor's four dimensions of climate (as cited in Gicopoulos, 1998) which are: interpersonal relationships, hierarchy, nature of work, and focus of support and rewards. Interpersonal relationships within the environment may promote competition or cooperation, trust or mistrust, or feelings of "sink or swim" (p.8). Hierarchy considered how decisions are made and what differentiates heads from subordinates. The basis of nature of work looked at if the work is challenging or boring, flexible of rigid, and if appropriate resources were provided. The focus of support and rewards was achieved if goals were known and shared throughout the organization in an environment that provided rewards.

Faculty member autonomy within the workplace can be a big factor determining whether or not an individual decides to remain at an institution. Dee (2004) identified that faculty who felt autonomous had less intent to leave. Though not widely realized, "autonomy is related to lower levels of employee turnover and absenteeism, and to higher

levels of motivation and job satisfaction" (Dee, 2004, p. 596). Therefore, universities that recognize the importance of autonomy may increase their retention rates.

In addition to autonomy, relationships with co-workers are also very impactful. Volkwein and Parmley (2000) recognized that supervisors and co-workers play a role in job satisfaction. Due to this, "reducing interpersonal conflict and promoting teamwork should rate high on the list of priorities for academic managers" (Volkwein & Parmley, 2000, p. 113). In 99 of the 123 interviews conducted by Ambrose et al. (2004), collegiality stood out as the most cited issue for faculty dissatisfaction among current and former faculty members. Concerns for collegiality fell into three categories in the Ambrose et al. study: "lack of time and interest on the part of colleagues, intradepartmental tensions, and incivility" (p. 814). Dee (2004) found that faculty who felt there was openness within collegial communication were less inclined to leave. Hagedorn (2000) summed up, "In short, the labor relations and organizational theory research indicates that positive social and working relationships as well as satisfying working conditions are conducive to increased levels of job-related satisfaction" (p. 9).

Positive relationships may be especially important when looking at department chairs. Department chairs are in a position where they can help socialize and support faculty members. Several studies (Ambrose et al., 2005; August & Waltman, 2004; Jo, 2008) have emphasized this relationship and its impact on faculty turnover. Jo (2008) noted that "supervisory skills are the most critical element in dealing with high turnover" (p. 567) because half of her former faculty cited being "disrespected" (p. 573) by their former supervisor. If turnover is occurring because of negative relationships with supervisors, universities may find it necessary to target areas of concern.

Though some elements of workplace climate are under the control of the institution, other elements are harder or impossible to influence. The findings of the "Faculty Retention" (2002) study found that to a degree, "conflicts appear inevitable. It follows that some employees will accept employment elsewhere rather than remain in an environment they perceive as uncongenial and a certain amount of employee turnover is inevitable" (p. 16). Though workplace climate is a difficult factor to control, universities can seek to identify issues and assist with minimizing the negative impact.

Support

Support for faculty members can be provided in a variety of ways. It may come through resources such as materials or space, and from people such as staff members, graduate assistants, peers, or administration. Support is a factor that can influence faculty members' decisions to remain at a university or in academia altogether. Early faculty member experiences with support may be of significance. Chronister et al. (1991) asserted that productive faculty careers where tenure is secured are significantly influenced by positive early career experiences, while negative early career experiences can stunt faculty potential or lead them to abandon the profession. Amey (1992) identified that assistant professors were especially discouraged by the absence of peer support within their departments. These professors felt there was a lack of research support and collaboration, opportunities to pursue research interests, and a lack of balance between teaching and research (Amey, 1992). These issues made support the fourth leading reason for departure among assistant professors in Amey's research. Gicopoulos (1998) also recognized support as many faculty members in her study did not feel the support of teaching and research was adequate, while Dee (2004) found "organizational support for innovation had the strongest

effect on turnover intent" (p. 593) and faculty members who felt support for innovation had less desire to leave.

During interviews conducted by Ambrose et al. (2004), junior faculty members mentioned how frustrated they were that senior faculty members were too focused on their own endeavors and did not have time to provide them support. They also established that effective mentoring led to satisfaction while the absence of mentoring was cause for dissatisfaction (Ambrose et al., 2004). Junior faculty wanted advice about how to professionally network and politically navigate the department, and how to create balance at work and with their personal lives. In their recommendations for a successful faculty retention program, Piercy et al. (2005) identified "committed and sustained mentorship" and "the development of a supportive, collegial community" (p. 54) as important parts of keeping faculty.

Support that influences a faculty member to stay at a university can come in a variety of ways. Rosser (2004) pointed out the importance of providing faculty members with proper support services such as office support, library services and materials, and graduate assistants to help with gathering resources and conducting research. This support can improve worklife and job satisfaction. She also noted that technology support has become a very important factor in faculty worklife satisfaction (Rosser, 2004). Supporting faculty development may also be critical and consists of (1) time and resources to attend meetings and seminars, (2) release time for teaching, sabbaticals, and (3) funds to stay current with research (Rosser 2004; Trotman & Brown 2005).

Worklife Satisfaction

Chronister, Baldwin, and Bailey (1991) recognized in their research that both tenure-track and non-tenure-track faculty believed "their jobs superseded all other aspects of their lives and were a source of considerable strain" (p. 17). This strain may be considerable for new faculty members because "the early career years are a challenging time characterized by rapid learning, competing responsibilities, and considerable stress and strain" (Chronister et al., 1991, p. 3).

A worklife model proposed by Johnsrud and Heck (1998) looked at three areas of faculty worklife that may impact turnover. These areas included "the attack on their professional priorities, their lack of confidence in their institutions to support and protect their personal and professional interests, and the erosion of their quality of life" (p. 540). Other researchers have findings that fit into this model. Amey (1992) found that "professional quality of life issues" or "institutional issues" were cited by an overwhelming number of faculty who left a particular institution and warranted further investigation (p. 26). Barnes, Agago, and Coombs (1998) identified that the most important factors contributing to faculty decisions to leave were frustration with time constraints and lack of connection within the university. Out of these two factors the demands on their time outweighed other factors.

Rosser (2005) found that the "perceptions faculty members have of their worklife had a direct and powerful impact on their satisfaction, and subsequently upon their intentions to leave" (2005, p. 85). In addition, Rosser (2005) identified worklife quality as being extremely important to overall faculty satisfaction. Worklife satisfaction can be either positive or negatively perceived by the faculty member. Linkages have been found

between high levels of productiveness and participation, and an increase in job satisfaction, quality of work, and intent to remain in a position (Rosser, 2004). Rosser (2004) also recognized that correlations exist between faculty who experience high satisfaction with their students and with their overall high satisfaction with their work.

Internal Environment

Tangible Benefits

Compensation/Fringe Benefits

The importance of salary in faculty members' turnover decisions has been inconsistent across studies (Ambrose et al., 2005; Amey, 1992; Markham; 1991; Rosser, 2004; Rosser 2005; Xu 2008b). Salary was found to be the primary reason why faculty members leave their institutions in several studies (Markham, 1991; Rosser, 2004; Rosser, 2005). In Amey's (1992) research, 49% of male faculty and 27% of female faculty identified salary as the primary or sole reason for leaving the university.

These findings and numbers may lead one to believe that salary is the biggest factor behind faculty turnover. However, other researchers such as Xu (2008b) asserted there is a bit more to it such as quality of life and work satisfaction. In Ambrose et al.'s (2005) study of 123 faculty members, no one identified salary as the reason they left the university despite the fact that approximately 1/3 of them did not feel their salary was competitive. They found that salary was important to faculty. However, salary usually only served as an additional reason for turnover behind a more pressing issue. Burke (as cited in Amey, 1992) concluded "quality of life" (p. 5) issues outweigh money in retaining faculty.

Location, satisfaction, and other variables may all combine with salary to make up these "quality of life" issues which retain or dissuade faculty members. In a study on job

satisfaction, Terpstra and Honoree (2004) recognized that job satisfaction was not significantly related to national region, but did find that faculty from the Midwest were relatively satisfied when it came to pay. They went on to conclude that,

Universities that have overall salary levels that are externally competitive are more likely to have faculty members that are more satisfied with their jobs and with their pay. Such universities will also be more able to attract and retain high quality faculty. (Terpstra & Honoree, 2004, p. 538)

Faculty members also seek fair benefits compensation for their work. Salary, medical benefits, and retirement benefits are also to be taken into consideration when looking at the benefits of their position versus another offer (Betts & Sikorski, 2008; Rosser, 2005; Trotman & Brown, 2005). Universities need to stay in touch with faculty members' perceptions of benefits in order to stay competitive with other institutions who may want to entice them away.

Career Choice

Faculty members may or may not discover that they enjoy their subject matter once they join academia. They may also find that the teaching part of their position may not be a good fit ("Faculty Retention," 2002). Faculty may end up questioning if they made the correct vocational choice. This decision may have serious implications as, "The quality and vitality of the faculty in colleges and universities directly affects the health of American higher education" (Chronister, et al., 1991, p. 1). Research has found that when fit is missing, higher turnover occurs (Olsen et al., 1995). A 2000 National Opinion Research Center survey (as cited in Dee, 2004), "found that more than 40% of full-time faculty members had seriously considered switching careers" (p. 593). Amey (1992) also identified

that "an almost equal number of assistant professors went on to other academic institutions as went into the private sector" (p. 6). This movement away from higher education suggests that not only institutional fit, but also career choice impacts turnover decisions. Academia may not be a good fit for everyone.

Workload Satisfaction

Chronister et al. (1991) were quick to recognize that "Higher education is a labor intensive enterprise" (p. 1). During the beginning years of faculty membership a "reality shock" can occur when expectations of the job and reality are found to be quite different and can lead to high levels of stress for the faculty member (Short, 2006, p. 17). According to the National Center for Education Statistics (NCES, 2009), the break-down of teaching, research, and service were 58%, 20%, and 22% respectfully in 2003. The data on women and minority faculty members suggests that they accomplish less research, end up with more teaching, and have substantial service commitments (Olsen et al., 1995). This committee and service work can be detrimental to faculty job satisfaction as Rosser (2000) stated:

When these duties overwhelm faculty members' time, particularly those in the junior faculty ranks, committee and service duties can be more of a barrier than an enhancement to earning tenure and promotion. There is no other aspect of academic work than the service and committee work component that can quickly draw the life and time away from a faculty member. Although it is critically important to serve all aspects of academic life, the amount of time allocated to service and committee work can have positive and negative implications on faculty

members' work, satisfaction and whether they pursue other career alternatives, particularly to women and ethnic minorities. (p. 302)

Faculty members being drained by excessive committee and service work could be detrimental to their success at a university (Rosser, 2000). Zhou and Volkwein (2004) identified, "Both teaching and research productivity have been linked to faculty retention" (p. 142). Xu (2008b) also found that faculty members with strong research interests are less likely to turnover. Unfortunately, Rosser (2004) found research to be the first of the triad of research, teaching, and service to suffer. Amey (1992) supported this finding that "Among the associate faculty leaving this research university, concerns were most often noted about issues of research (research opportunities, support, collaboration, etc.), and the balance between teaching and research" (p. 6). Workload composition must be considered when looking at the reasons for faculty turnover.

Policies and Procedures

Institutions may have policies and procedures that lead to faculty turnover. Amey (1992) recognized that "assistant professors were especially disenchanted with institutional policies and practices" (p. 5). Some of policies and procedures noted as impacting turnover are serious illness and disability leave, stopping the tenure clock policies, and guidelines for faculty reassigned time (Trotman & Brown, 2005). Amey's (1992) findings suggested that "institutional decision makers may want to look more closely at policies and practices within various units on campus as they affect faculty at these ranks" (p. 12). She also realized issues vary by rank and gender making campus wide policies difficult to implement.

Promotion, Evaluation, and Tenure (PTE) Process

Trotman and Brown (2005) identified in their research at the University of North Carolina that "No other issue is more important to most tenure-track faculty members than the tenure and promotion process" (p. 7.). The utmost importance of the tenure and promotion process is also recognized by Markham (1991). Amey (1992) concluded that rank influenced attrition and that tenure was the primary reason junior faculty members left the university. This could be because, "Academic life without tenure is characterized by stress and uncertainty" (Chronister et al., 1991, p. DR). As Chronister et al. (1991) found in their review of research, there is a lack of security that comes with being untenured and this is a concern for faculty members early in their careers and continues as long as they have not achieved tenure. This lack of security could be what causes some to leave academia as Xu (2008b) concluded when the nontenured faculty in her study reported a higher intent of turnover. Faculty may also be pushed out of an institution if they fail to get tenure or reduce their possibility of turnover if they do (Zhou & Volkwein, 2004).

Achieving tenure is easier said than done. Rice et al. (as cited in Trotman & Brown, 2005) identified three factors influencing tenure-track faculty which included (1) unclear tenure process, (2) lack of collegiality among faculty members, and (3) difficulties of balancing professional and personal life. These factors have support from other findings. In Trotman and Brown's (2005) interviews, they learned that many faculty members felt the expectations for tenure were unclear and there was a lack of support throughout the process. Ambrose et al. (2004) and Jo (2008) found former faculty members were frustrated with how little feedback they were given by senior faculty members and how vague the promotion and tenure process was outlined by the department. During 2005-

2006, about half of full time faculty members had tenure, which is a decline from previous years (NCES, 2009). In that same year, 55% of males and 41% of female faculty members were tenured.

Earning tenure may be challenging for women in particular. Short (2006) recognized that women were more likely to find the components contributing to earning tenure did not include the job aspects they most enjoyed about their positions compared to men. Even though women are entering academia in greater numbers, their job dissatisfaction is preventing them from earning tenure as quickly as men. The women in Short's study, did not expect this dissatisfaction when they entered the faculty ranks and were more likely than men to depart from academe before a tenure decision was made.

Some questions still remain as to what roles the tenure process plays into faculty turnover. Amey (1992) posed the question in her research of whether faculty see themselves linked to a university once tenured or if they see it merely as a stepping stone for advancement to other institutions. She concluded that the second most important reason for leaving was for opportunities of professional advancement which may finally be attainable after earning tenure. Rosser (2004), on the other hand, believed that tenured faculty members are less likely to leave the institution or their field because tenure often brings with it resources, time, and status which faculty find rewarding. The prospect of having to go through the tenure process again can be a barrier preventing these faculty members from leaving. Matier (1989) fell somewhere in the middle when he stated that "full professors are less mobile than assistant professors, but more mobile than associate professors" (p. 5). A 2001 NCES study (as cited in Zhou & Volkwein, 2004) led one to question the significance of the turnover of tenured faculty by identifying "Among the

faculty who left their positions for nonretirement reasons in 1998, less than 14% were tenured" (p. 140). Yet taking this all into consideration, Amey recognized that, "Policy planners and decision makers may expect a certain degree of attrition among newly promoted faculty who have greater mobility as a result of being granted tenure" (p. 6). Unfortunately, they may fail to realize that this "out-migration" may actually be "a consequence of discouragement with institutional policies and practices" (Amey, 1992, p. 6). Faculty turnover remains a potentially complex and multifaceted issue.

External Environment

Personal Life

When looking at faculty turnover, Short (2006) noted, "One assumes that a faculty member experiencing stress or intending to leave his or her institution is dissatisfied, but in fact that may not be the case" (p. 15). Personal circumstances may be a specific reason or a culmination of all-encompassing reasons why some faculty members leave the university (Hagedorn, 2000). In Amey's (1992) research, personal issues were the second most important factors causing women to leave. Unfortunately, what contributed to this category was vague and may have been used by faculty members who wished not to elaborate on their reasons though some cited family concerns in her study. In fact, death, dual career couple issues, family issues, mental health, geography, culture, and anything else of importance to the faculty member could all be deemed personal reasons that may be cited for their turnover.

Amey (1992) recognized spousal/partner employment was an issue impacting more faculty members than expected and believed it was an important issue that needed to be investigated. She identified assistant professors were the most likely group to cite a dual

career dilemma as the reason for leaving. She also found that many associate faculty also left for this reason – especially men. Ambrose et al. (2004) stated, "several faculty members remarked that their spouses'/partners' ability or inability to find work in the city was highly influential in their decision-making" (p. 819). Several of these faculty members left because their partners could not find appropriate work within the area. They were frustrated that the university did not do more to help their spouse/partner and found their new universities were more helpful with this issue.

Ambrose et al. (2004) identified the weather and social conservatism as issues that contributed to attrition. They also found in their study that different lifestyles impact perceptions of wanting to stay in a community or university. Some of these lifestyle factors include being family-friendly or good for singles, and niches for diverse populations such as minorities and GLBTQ. Matier (1989) contributed "cultural, recreational and social opportunities" (p. 39) were other non-work related benefits that played into turnover.

Others factors of a personal nature may include such things as the availability of daycare facilities and support for family responsibilities such as flexible work schedules and help with family issues (Trotman & Brown, 2005). Hagedorn (2000) recognized "the birth of a baby, the death of someone close, marriage, divorce, illness, or another significant event occurring to oneself or to a significant other changes a faculty member's outlook on both life and the job" (p. 11). Burnout may also be the cause of turnover (McJunkin, 2005). Life stage could be another contributor where the faculty member feels the need for reexamination of where he/she is at and what he/she is doing midcareer (Hagedorn, 2000). In conclusion, "The rationalization of present realities on the job and in

the individual's world beyond the job needed to be considered as part of the decision making process" (Matier, 1989, p. 8).

Another reality of an individual's world is that of retirement. Though seldom mentioned in turnover literature, retirement does contribute to turnover numbers. In Amey's (1992) research, the second leading cause of faculty turnover was due to retirement with 23%. All of these considerations reveal once again the complexity of turnover rationale.

Professional Advancement

Hagedorn (2000) stated, "It is an unwritten but well-known truism among faculty that the fastest and most direct path to a promotion in rank or a substantial raise in pay may be an offer from another institution" (p. 11-12). This offer from another university may lead to turnover. In Jo's (2008) study, one third of the faculty brought up this issue and cited lack of advancement opportunities on campus as being their reason for leaving. Professional advancement was found to be an ever-increasing factor in attrition by Amey (1992). These promotions may include "promotions in rank, promotions to administrative positions, changes in career paths, etc." (p. 8). Professional advancement within academia or out in the business sector was the third most cited reason for faculty turnover, with 20% in her study. For men, professional advancement was the second most common reason for leaving. Most often these men left for positions deemed as promotions within the private sector (Amey, 1992).

Faculty members may decide to go into the business sector because of increased salaries, improved working conditions, and higher status (Markham, 1991). Professors with strong credentials have increased numbers of opportunities in or out of academia, as

recognized by Zhou and Volkwein (2004) who stated, "Higher income and reduced emphasis on publication may make nonacademic employment attractive to some Ph.D.s." (p. 140). Amey (1992) recognized that "For a public institution, there is always competition with private sector business and industry when it comes to salaries, research support, and certain professional quality of life measures" (p. 8). Yet Johnsrud and Rosser (2002) seemed cautious not to assume there were only pull factors in play because "it is more likely that there is something about the situation they are in that predisposes them to accept an offer from elsewhere" (p. 520). Zhou and Volkwein (2004) supported this by remembering "Others are "pushed" out of the institution because they fail to get tenure or because they have low research/teaching productivity" (p. 140). Both push and pull factors need to be considered when comparing academic and private sector positions.

Matier's (1989) Inducements/Contributions Balance

Rosser (2000) found that if a faculty member is satisfied with his/her position he/she will not be as inclined to leave as if he/she is experiencing job dissatisfaction if offered a job elsewhere that pays more. One theory of job satisfaction supports the idea of the inducements/contributions balance. Expectancy theory is where people "enter work organizations with expectations and values, and if these expectations and values are met, they will likely remain a member of the organization" (Dee, 2004, p. 595). Thus, faculty members will be less inclined to seek other employment and will stay with the university, decreasing the number of turnovers. Dee (2004) recognized that "Faculty members are more likely to continue their membership in an organization when their expectancies and values are sufficiently fulfilled" (pp. 603-604). If the position does not end up being what

the faculty member expects and if he or she feels he or she is contributing too much and not being compensated enough, a job search may occur.

Chapter Summary

This chapter presented multiple reasons attributed to faculty turnover and the complexities that contribute to this issue. The advantages and disadvantages to the university as a result of turnover were reviewed. How "Ease of Movement" impacts faculty turnover decisions was looked at for consideration. Factors that influence turnover decisions were categorized into internal environmental factors with intangible and tangible benefits, and external environmental factors. The inducement/contribution balance and how it impacts turnover decisions was also presented.

Chapter III describes the research process used in this study. It provides an overview of the qualitative nature of the study, research questions, participants, interview format, data collection, analysis, and trustworthiness.

CHAPTER III.

RESEARCH DESIGN AND METHODOLOGY

Qualitative Methods

The purpose of this study was to explore the reason(s) why faculty members left NDSU. In addition, the researcher explored whether STEM and non-STEM discipline-specific reasons for faculty turnover exist. The researcher also examined whether there are gender-related issues impacting turnover. As discussed in the literature review, there are a wide variety of reasons that alone or in combination can influence turnover (Ambrose et al., 2004; Matier, 1989). These reasons can be internal, external, or a combination of factors and perceptions. NDSU, because of its location, culture, and weather conditions, has some university-specific characteristics that may or may not be factors contributing to faculty turnover. Due to the complexity of faculty turnover and the exploratory nature of this study, qualitative methodology was found to be most appropriate.

Marshall and Rossman (as cited in Short, 2006) asserted qualitative methods are a particularly good match for "research that is exploratory or descriptive, that assumes the value of context and setting, and that searches for a deeper understanding of the participants' lived experiences of the phenomenon" (p.43). In this study, qualitative research is a good match as a deeper and more thorough understanding of the reasons for turnover will be explored. The possible complexity of the reasons behind turnover may not be presented or adequately covered in a quantitative survey or questionnaire. As Ambrose et al. (2005) pointed out, previous quantitative research "offered little insight into the complex interaction of events and experiences in the lives of individual faculty members that shape their perceptions and ultimately their decisions to stay or leave" (p. 805). The answers to why they decided to leave may not fit conveniently in "other" boxes of surveys.

However, it may be covered more thoroughly during the qualitative interview process. In addition, the participants' reasons for leaving may not have been previously covered in research, so new reasons for turnover may be uncovered through this process. The focus that qualitative research places on context and setting also will be of value to the specific university being examined.

In an effort to increase participant comfort and obtain uncensored responses, it may be of benefit to remove studies of this nature from direct university control. "Faculty Retention" (2002) found that their human resource exit interviews conducted with leaving faculty "may not capture the whole story behind a decision to leave" (p. 3). Additional information could be valuable for new insight into the nature of faculty turnover. In some cases, faculty members may not be comfortable sharing the reasons for their departures in exit interviews. This discomfort could include not being anonymous, not desiring recourse, not wanting to "burn bridges," and not wishing to disclose the whole story behind their turnover.

Research Framework and Questions

This study explored the reasons for faculty turnover at North Dakota State

University (NDSU). The push and pull theory of job turnover as modeled by Matier (1989) served as a guide to help put into context the factors that pushed faculty away from NDSU and the factors that were pulling the faculty elsewhere. Ease of movement, perceived desirability of moving, and the inducements/contributions balance were examined. By comparing the current study's findings against Matier's framework, the researcher was also able to identify findings that were unique to NDSU.

Internal and external factors that contributed to faculty turnover were identified.

Since internal environmental factors are within university control, they may be of specific interest to NDSU in an effort to increase faculty retention. The following questions guided this research:

- 1. What will faculty who left NDSU identify as the reasons for leaving?
- 2. Do university policies/procedures have an impact on faculty members' experience at NDSU?
- 3. How will faculty who left describe their working experience at NDSU?
- 4. How will their current position compare to their former position at NDSU?
- 5. Will there be differences in participants' responses based on their academic disciplines?
- 6. Will there be gender-related differences in participants' responses?

Participants

A list of 45 former faculty members who left NDSU between May 2008 and March 2010 was gathered from the NDSU Office of Equity, Diversity, and Global Relations. The list consisted of 29 male and 16 female faculty members from all academic areas who either left willingly or were terminated by the university. Contact information was not available for all of these faculty members upon their departure from NDSU, so their departments were contacted to see if they had forwarding information. Online searches took place for faculty members' new information if this information could not be gathered from their former departments. Five potential participants did not have current forwarding information or were unreachable.

In-Depth Interviews

In-depth interviews were used to gather the answers to the research questions. These interviews allowed for probing deeper into participants' answers and to ask follow-up questions about their responses in order to gain greater insight and clarity into why they left NDSU. Maxwell (as cited in Short, 2006) found that this type of interview allowed for understanding of "the meaning, for participants in the study, of the events, situations, and actions they [were] involved with and of the accounts that they [gave] of their lives and experiences" (p. 43). Since many reasons for turnover have been found to be multi-faceted and complex, interviews allowed for thorough exploration.

Interview Questions

- What originally drew you to NDSU?
- How would you describe your work at NDSU?
 - O Possible follow up (mentioning areas they did not discuss): Is there anything that you would like to add regarding teaching, research, or service?
 - What percentages of your time were devoted to teaching, research, and service?
 - o How did you feel about this breakdown?
 - What was satisfying about your position?
 - What was challenging about your position?
- Why did you leave NDSU?
- How open were you with members of your department about why you were leaving? Why or why not?

- O Possible follow up (only if chose to leave): What, if anything, would have influenced you to remain at NDSU?
- Could you tell me about your current position and major responsibilities?
 - How would you compare your current position with your position at NDSU?
- How do you currently feel about having left NDSU?
 - o Possible follow up: What makes this difference?
- How would you describe the workplace climate at NDSU?
 - Possible follow up: Is there anything you would like to add in regard to your department/college?
- What is your view of the support provided within your department/college?
 - Possible follow up: Is there anything you would like to add in regard to your department chair?
- Are there any policies or procedures that had an impact on your experience at NDSU?
- What are your views of the evaluation, promotion, and tenure process at NDSU?
- What are your impressions of the Fargo/Moorhead community?
- What would you tell a person applying for your previous position?
- Is there anything else you would like to add to our conversation?

Data Collection

In-depth phone interviews were the method of data collection used in this study.

Prior to these interviews, participants were contacted by phone or e-mail, depending on the forwarding information available after their departures. This initial contact was scripted

(see Appendix B) and disclosed the details of the study. Twenty faculty members agreed to participate, 10 declined participation, 10 did not respond to phone or e-mail contact, and five were unable to be contacted. Willingness to participate was established by setting up an interview time. Participants were asked if they would like to review the interview questions ahead of time. All participants who scheduled interview times were provided with the interview questions prior to the interview. Interviews were conducted with 12 male (five STEM, seven non-STEM) and 8 female (three STEM, five non-STEM) faculty members who left NDSU between May 2008 and March 2010. These conversations focused on the factors that contributed to their leaving the university. Interviews were conducted over the phone from a private residence in efforts to create some distance from the university setting. The interviews followed the outline of questions and ranged in length between 20 and 75 minutes.

Before the beginning of the interview, the purpose of the research, confidentiality issues, and informed consent regarding participation were reviewed with participants.

Participants were informed that they could stop the interview at any time and that identifying information (name and department specific information) would be eliminated from the findings. The order of survey questions was purposefully planned. General questions about reasons for turnover were followed by more specific questions pertaining to issues identified in previous studies.

Interviews were recorded using a speakerphone and digital recorder. The interviewer proceeded through the questions, yet allowed for elaboration and clarification of answers. Once each interview was complete, the interview was transcribed verbatim. All identifying information was removed from the transcripts. The transcribed interviews

served as the material for data analysis. Numbers were assigned to each of the interviewees. A table was created linking the transcript number to the interviewee gender and STEM/non-STEM status. Both the audio and the paper copies of the interviews were kept in a secure location.

Data Analysis

Creswell's (as cited in Creswell, 2005) recommended steps of data coding were used for analysis. Initially, the transcripts were read multiple times to create familiarity and to allow for initial notes to be made. Then, text segments were identified from each transcript and coded by words or phrases that described its meaning. Interview transcripts had four color codes based on whether the respondent was male or female and STEM or non-STEM discipline to allow for possible trends in responses to be seen. The Pettus (1990) method of data analysis was used to create categories using words and phrases based on the answers to each question. Sub-categories were determined. Codes were collapsed after coding was completed to create a list of themes. These themes are discussed in the analysis. Following the analysis, results were compared and contrasted with Matier's (1989) framework (Figure 1.). The model's categories of intangible-internal, tangible-internal, and external were used to organize the themes of this study.

Trustworthiness

Trustworthiness is the "believability of a researcher's findings" (Maykut & Morehouse, 1994, p. 64). In an effort to increase trustworthiness and credibility and decrease researcher bias, several techniques recommended by qualitative researchers (Creswell, 2005; Johnson, 1997; Maykut & Morehouse, 1994) were used. Clarifying and follow-up questions were asked by the interviewer during the interview in order to increase

interpretive validity by clearing up miscommunication (Johnson, 1997). Interviews were recorded so responses could be transcribed and checked for accuracy. Trustworthiness was gained through these low inference descriptors which quote respondents verbatim (Johnson, 1997). Johnson (1997) found that using quotations as low inference descriptors were "helpful so that the reader can experience the participants' actual language, dialect, and personal meanings" (p. 285). These transcripts provided "rich data" for analysis (Maxwell as cited by Short, 2006). This study was also externally audited through peer and committee review (Creswell, 2005). A "peer debriefer" (Maykut & Morehouse, 1994, p. 174) reviewed data analysis by checking the coding of 10% of the data. These efforts were made to ensure that the findings had limited researcher bias.

CHAPTER IV.

RESULTS

Analysis of participant responses was based upon the six research questions. These research questions sought to explore the reasons for faculty member departure, the impact of university policies/procedures on faculty, the NDSU working experience, and comparisons between their former NDSU positions and their current positions. The final two research questions explored whether there were differences in participant responses based on academic discipline area (STEM vs. non-STEM) and gender. These two questions were of special interest to NDSU FORWARD in their efforts to recruit and retain women in STEM disciplines. Recommendations provided by the participants are also included in this chapter.

In the analysis, the following abbreviations are used: NF = non-STEM female, SF = STEM female, NM = non-STEM male, SM = STEM male. For example, "NM3" is a non-STEM male who is the 3rd study participant.

Research Question 1

What will faculty who left NDSU identify as the reasons for leaving?

Six themes emerged when faculty were asked their reasons for leaving NDSU. The themes were divided into external factors outside of the university's control and internal factors under the university's influence. External factors included (1) weather/geographical location, and (2) family reasons. Internal factors included (1) salary, (2) position requirement challenges, (3) lack of advancement/professional opportunities, and (4) campus climate. Three of the faculty interviewed had a combination of external and internal reasons that contributed to their departure from NDSU.

External Factors

Weather/Geographical Location

Location impacted the turnover decisions of four (two SF, two NM) faculty members. Sub-categories of this theme include weather (n=2) and location/geographic preferences (n=2). In regard to weather, participant SF13 felt, "I think basically the weather is too much for me." She also felt that social isolation resulted from the weather because people tend to stay at home due to the weather in Fargo and do not interact with each other as much as other places in the country. Part of the reason why Participant NM10 left NDSU was because the weather could not be changed.

When asked why she sought out another job, participant SF6 stated that geography was "ultimately" the reason and that the job offer was from "somewhere else that I really wanted to be." When asked the same question, participant NM16 replied "a couple reasons, one would be geographic preference for where I ended up over NDSU."

Family Reasons

Four (one SF, one NM, two SM) faculty members left due to family reasons. Two of the male faculty members left because of spousal job opportunities. When participant NM12 was asked why he left, he replied that, "it had very little to do with NDSU as much as it had to do with the professional opportunities for my wife." For participant SM20, having both his spouse and himself be offered tenure-track positions at another institution led to the move. In his situation, he said if a permanent position had become available for his spouse at either NDSU or a neighboring university that they would have considered staying. For participant SF6, leaving was "the move that was best for my family." Part of

SM17's reason for leaving also concerned his family as he was moving to be closer to immediate and extended family.

Internal Reasons

Salary

Only two (NM) out of the 20 participants in this study mentioned salary as a reason for leaving NDSU. This finding is surprising, considering faculty members at public four-year institutions in North Dakota were the lowest-paid in the nation when compared to other states in 2003, and they earned on average \$48,252 per year (Christopher & Clery, 2003). Both participants who mentioned salary as a reason for leaving NDSU were males from non-STEM disciplines. Participant NM10 talked about how his department did not pay market salaries. He got an offer from a different university for "at least 35% more than what I made at NDSU." Later he mentioned that he did not get a counter offer from NDSU, so that sealed his decision to leave. In his view, NDSU has two weaknesses: salary and weather of which he said, "we cannot make the weather change, however at least NDSU can pay a market salary to keep the good faculties [sic]."

The other faculty member (NM12) who was impacted by salary left in part to his spouse's job opportunity. However, he also mentioned that if his salary had been better at NDSU, it may have allowed him to stay at the university. Specifically, he talked about how certain departments (specifically STEM disciplines) seem to pay better than his non-STEM discipline at NDSU. He said his position was "a great job" but because his salary was on the low end of the spectrum, he felt like his work was "a fair amount of volunteer [sic]."

Position Requirement Challenges

Struggles to meet the requirements of their positions were mentioned by five (two NF, one NM, two SM) faculty members who felt the struggles contributed to their turnover. Participant SM19 stated he was "just beating my head against a wall in terms of making real progress there." He added that he did not have enough research papers to satisfy the requirements. Because of this, he was interested in getting back to more of an "applied domain." Participant NM3 also mentioned that he struggled with the research publications component of his job. He said the tenure committee suggested that his appointment be switched to more teaching, but the department chair disagreed. He said, "I was never officially let go or had my contract not renewed but [department chair] basically encouraged me to look elsewhere." In participant NF5's experience, she also struggled with research, was encouraged to continue through the tenure process, but she "just didn't feel comfortable doing that."

In participant SM15's case, the decision to reduce his allotted lab space created an obstacle that could have limited his research productivity and ability to meet his position requirements. He said, "I would not have enough space even to maintain my equipment and there was not enough space in that room to keep my research running so I don't know what I'd do if I was to stay." This change in lab space ultimately influenced his decision to leave NDSU.

Participant NF9 taught both graduate and undergraduate courses. She found it demanding teaching at both of these levels because of the involvement required by the program at each level. This challenge influenced her turnover decision.

Lack of Advancement/Professional Opportunities

Out of the 20 study participants, six (two NF, three NM, one SM) cited lack of advancement/professional opportunities as influencing their decisions to leave NDSU. These advancement/professional opportunities included being offered administrative positions and having the prospect of program development. Looking at his options, participant NM11 wanted to move into administration and recognized, "sometimes if you're going to move up the ladder you have to be able to make a move somewhere and that is kind of where I was." When asked if anything would have influenced him to stay at NDSU, he replied that if administrative opportunities had been available at NDSU he would have been interested in staying.

Lack of advancement opportunities at NDSU was part of participant NF9's decision. She felt that "there were no opportunities at NDSU for me to take on new responsibilities" despite her job experience and excellent educational credentials. She ended up finding the type of advancement opportunity she was looking for after being recruited away by another (higher ranking) institution.

Participant NM4 found "an excellent professional fit" in his new position where there were others researching in the same area as him. He was also given the opportunity at his new institution to build a program "from the ground up." Having the opportunity to help launch a new program was appealing to participant SM17 and influenced his decision to leave NDSU.

Campus Climate

Leadership

Aspects of university and department leadership ended up causing job dissatisfaction and were push factors for eight (three NF, one SF, two NM, two SM) faculty members. Sub-themes include conflicts involving supervisors (n=5) and administration not listening to faculty (n=4).

Conflicts Involving Supervisors

Challenges arose with the arrival of participant SM15's new department chair. He described the time before the new department chair as "excellent," and he was "happy" in his position. However, after the new chair came, "all problems started" and "the climate worsened in the department." Participant SM15 ended up feeling like "it didn't make any sense to stay" because the chair was "trying to make my life miserable" and "trying to ruin my research" by cutting his salary and space. He began searching for a new position as a result of this leadership change.

Participant SM15 was not the only participant who left NDSU because of conflict with a supervisor. In two more instances, actions viewed as unsupportive by department chairs created cause for turnover. For example, participant SF13 commented that the chair was part of the reason for her departure. She talked about how the chair did not seem to support the junior faculty. In addition, she mentioned how other junior faculty members in her department were not happy with the chair and wanted to leave.

Transitions in leadership also proved to be causes of concern which lead to the turnover of four (two NF, one NM, one SM) faculty members. Leadership transitions in participant NF18's department led to a lot of uncertainty. Not knowing the direction the

department was going due to these changes in leadership influenced her decision to depart NDSU. Participant NM3 speculated that if the department chair who had hired him had remained chair he would still be at NDSU. He stated that the department chair who hired him wanted to see him do well and would have been more supportive. In addition, he felt that another three-year contract would have been offered to him. However, a new department chair was hired while participant NM3 was at NDSU. The new department chair gave participant NM3 the impression that he could be easily replaced rather than supporting him.

Administration Not Listening to Faculty

Four (two NF, one NM, one SM) faculty mentioned that they did not feel that NDSU's administration was listening to faculty. Participant NM1 voiced concerns that administrative decisions were made solely by and for the president without regard for faculty governance. Participant NM1 felt that "decisions were made without consulting faculty" and that "the administration did not care who they ran over to make those things happen." Later he stated that while he loved working at NDSU and thought his career could have been there he "did not feel like that was possible in that political environment." When asked if anything would have influenced him to stay at NDSU, he responded by saying that widespread administrative changes were needed. Participant SM8 also left NDSU over concerns about administrative decisions regarding personnel and programs that he believed were proven to be bad. When asked if anything would have influenced him to remain at NDSU, he said that if those administrative decisions had not been made he was certain he would still be at NDSU.

After describing a situation of concern that was brought up to administration and not addressed, participant NF2 said although administrators were sad about the situation, "sad wasn't doing anything about it." Administrative action was not taken, and she ended up feeling like nobody was paying attention to the situation: "I realized that not only were they not going to do anything but they just didn't care." After participant NF9 was asked why she left NDSU, she stated that the leadership was the primary reason. She went on to explain that the department chair had changed hands several times. She stayed, hoping things would get better, but they did not. She spoke about how she brought up concerns about possible chair candidates, but was dismissed. Amidst these leadership changes, she felt "there was no support for faculty" due to a lack of advocacy for faculty resulting in poor working conditions and climate.

Collegiality

Four (three NF, one SF) faculty members cited collegiality issues as reasons for their departure from NDSU. Participant NF7 talked about how her health had suffered from the stress of what she had gone through while working at NDSU. Unfortunately, she thought that there was no possibility of any changes. In her situation, "I was ready to leave academia to get out of NDSU because it was a toxic environment."

For participant NF9 deciding to leave NDSU was "very much a climate issue, and I don't know how to explain to you how bad it was." She also wondered how NDSU could continue to recruit qualified faculty if applicants came to campus and found the negative environment she experienced. She felt that unless things are fixed, NDSU could lose the qualified people they have and would have challenges recruiting the kind of people they want. She said she tried to bring attention to this problem until she was "blue in the face,"

but it never seemed like anybody wanted to deal with it. For her "there was no hope" and "it was that hopelessness that forced me out."

When asked why she left NDSU, participant SF14 responded that "it was making me sick." She "couldn't stand to get up every day and go into work" because she could not stand the fighting and the emotional and verbal abuse she felt in her department. After looking at her peers' work environments at other universities, she realized that what she was experiencing should not be happening. She was not willing to take it anymore and left. In regard to addressing the issue, she commented, "I had tried to address the issues of climate and how I had been treated in the department, and I was treated very badly for that." When seeking outside help, she said contacts were made with administrators, but "we were basically told that there wasn't anything that they could do about it" and "nothing really ever improved." She felt that if the men in her department were asked about climate one would be "told that there wasn't a problem for women in our department." In this participant's case, she left before she had another position secured because, "I just couldn't be there any longer."

Research Question 2

Do university policies/procedures have an impact on faculty members' experience at NDSU?

Participants spoke about policies and procedures that impacted their experiences at NDSU and shared many insightful views. The themes pertaining to NDSU policies and procedures that emerged are hiring practices, PTE process, and other policies/procedures.

Hiring Practices

Six (two NF, one SF, two NM, one SM) participants cited concerns with NDSU hiring practices in their interviews. These concerns related to the hiring procedure for either supervisors or colleagues and involved recruiting qualified candidates (n=3), considering unqualified candidates (n=2), and hiring without a national search (n=1). Participants were often concerned about NDSU being able to recruit qualified candidates and going through proper procedures while filling open positions. According to participant NM16, not paying market salaries for his discipline made it difficult to recruit and retain faculty members. In participant NM16's experience, potential faculty members would often turn down offers made to them by NDSU because "we were just not making competitive offers." If faculty members did accept NDSU's offers, they would only come and stay for a short time. Participant NM3 commented that when hiring a new chair his department did not have many people apply for the position. In participant NF9's experience, recruiting qualified chairs was a challenge that created issues within the department. In regard to one of these hires, she said, "They were pretty desperate and [new chair] was a live body so they took [new chair]." Participant SM15 felt that the new chair hired in his department did not fit the job description and was hired as a quick solution despite concerns expressed by the participant and others in the department. He believed personal relationships may have come into play with this decision.

Another participant, NM10, shared his concerns about the hiring process and said that he saw administrators find someone on their own or make an offer to someone they knew rather than opening the position up for a national search. Participant SF13 had similar concerns and stated, "sometimes they bring in people who are not actually very

qualified just because they know them" or because the person "was a student of the faculty here." What happened in participant NF2's experience was that despite having two strong candidates for a position, only one was brought to campus and was ultimately hired. She said the faculty wanted to have the opportunity to interview the second candidate, but administration said that was not needed because they were going to hire the first candidate. Participant NF2 added, "We weren't even sure that we didn't want to take that one. We just wanted to see the second candidate. I mean normally you bring in more than one candidate."

Promotion, Tenure, and Evaluation Process

One of the interview questions asked participants, "What are your views of the evaluation, promotion, and tenure process at NDSU?" in order to see if PTE policies or procedures had an impact on their experience. Eight (two SF, five NM, one SM) participants were positive overall when speaking about NDSU's PTE process, none of whom were non-STEM females. Participant NM4 thought "the expectations were pretty straight forward." He followed up by saying, "I don't think it was a secret in our department the kinds of things that you needed to do to work towards promotion and tenure." Participant SF6 agreed that efforts had been made to inform her about the process and that she felt pretty good about it. In participant NM11's experience, "I think it was a very fair process. It was, it was clear. I know at some institutions it doesn't always seem so clear (laugh) and there I felt like I had pretty good direction and guidance." Participant NM12 felt that it was a "very open process" and that his administrators would have let him know if they had any misgivings about his performance. Participant SM17 described the process as "rigorous" and saw "great improvements" made to clarify the expectations and

procedures while he was at NDSU. Participant SF13 responded, "I think they are reasonable" and added, "basically they are clear." According to participant NM16, the PTE process was "very fair and reasonable."

However, concerns about the PTE process were mentioned by nine (three NF, one SF, three NM, two SM) participants. Their concerns pertained to the following sub-themes: impact of personal relationships (n=7), clarity of the PTE process (n=3), and selection of PTE committee (n=2).

Impact of Personal Relationships

Seven (two NF, one SF, three NM, one SM) faculty members brought up how personal relationships impacted the PTE process while they were at NDSU. Participant SM15 said he continued to see people recommended for tenure based on their "brown nosing" and that if you did not have favor with the department chair "then you are not good no matter what you do." Participant NF7 saw the process full of bullying by senior faculty members who would lobby against junior faculty members at promotion and tenure time if the junior faculty member did not do what the senior faculty member wanted.

Unfortunately, she felt that administration had no control over the senior faculty members who did this.

Participant NM10 spoke about challenges to improve the PTE process because senior faculty members were opposed to these improvements, especially if they were associate professors trying to make it to full professor. Unfortunately, these variances in views made PTE changes "sticky, sticky stuff to bring up and to discuss about."

Clarity of the PTE Process

In regard to negative views of the PTE process, participant NM3 described the PTE process as "pretty vague." Two faculty members described the PTE expectations as being a "moving target." Participant NF5 mentioned that the promotion and tenure guidelines kept changing. Participant SM20 expressed similar concerns and stated that the promotion and tenure policies had changed several times during his time at NDSU. He found it frustrating to figure out what criteria would be used to evaluate him for promotion. Participant SM20 added that even if a faculty member had full support from their academic college for promotion, the faculty member may not be granted tenure from the provost's office due to the changes in PTE criteria.

Selection of PTE Committee

The concerns about the PTE process for participant SF14 pertained to not having a fairly represented PTE committee. She explained, "it's almost impossible to have a nice balanced tenure committee when all of the committee are the old boys' network who already have their opinions formed before they look at anything you give them." Participant SF14 added that because of these personal opinions, "if you made the mistake of annoying somebody somewhere along the way you were doomed." When asked about the PTE process, participant NF2 brought up her concern regarding distrust which resulted from the provost having a "hand-picked by him group of people advising him." She felt that if the provost wanted a group to advise him about tenure they should be a group elected by the faculty. This elected group would, in her opinion, provide a "much better cross section of the institution."

Other Policies/Procedures

A variety of concerns pertaining NDSU policies and procedures were identified by study participants. These concerns included policies hard to find, NDSU not enforcing policies, departmental decision making, lack of policies, performance evaluation measures, faculty debates, and travel grants. Four (two NF, two SF) participants, all of whom were female, mentioned that policies were hard to find. Finding information was a concern for participant NF18 who said her department did not have policies clearly laid out and that "it was hard to get answers to questions." Participant NF2 felt that university leaders treat faculty badly by not articulating policies and procedures or allowing faculty to be part of the running of the institution. Participant SF6 also commented that she felt NDSU had a problem with making information easily accessible. She felt this problem was due in part to having so many people who had been at NDSU for a long time and who just knew where to find the rules and regulations. As a new faculty member, locating information was a "really huge problem" for her. Unfortunately, "people who have been there for a long time just simply don't understand why it's difficult because they know the complicated system and they know where all these little bits of information are, but it takes a long time to learn all those things." When asked about policies that impacted her experience at NDSU, participant SF14 replied, "I can't really say that there are any that impacted my experience because they were so hard to find." She described how policies and procedures were "never really clear" and that she had to look everything up and then "finding somebody to explain it to me was very difficult."

Three (one NF, one NM, one SM) participant voiced concerns about the administration not enforcing NDSU policies. When asked about policies or procedures that

had an impact on his experience at NDSU, participant SM15 replied, "No, it was lack of adhering to the policies I would say." He then explained a scenario where inconsistent application of policies occurred. Participant NF9 expressed concerns over a situation where a colleague was retained even though this person was not performing at a satisfactory level specified by the university's policy. She was very unhappy about this situation because she incurred additional work because of this decision, and she felt that no one seemed to take responsibility for it.

Participant SF6 described how her department chair's decision making process had an impact on her work experience. Although it was policy that decisions be made with the consultation and vote of faculty, her department chair would "often times just make decisions on [chair's] own and not really tell the rest of the faculty until either until after the fact or kind of not at all." She was frustrated by this and how the chair encouraged decisions to be made ahead of meeting times so that at the meeting a rubber stamp would only be needed. Unfortunately, she felt that type of decision making "very much encourages this thing kind of an old boy network decision making" where you have to be at the "right lunches" or talking to people in the hallways at the "right times" or else be "totally excluded from that decision making process." As a result of this, she felt departmental conversations were stifled.

A lack of policies was mentioned as a concern by two non-STEM female faculty members. For example, participant NF2 stated that NDSU did not have bureaucratic protocols in place to handle a situation that involved her. As a result, nothing was done. Though it did not impact her personally, participant NF2 also brought up that NDSU does not have a university maternity leave policy which may negatively impact female faculty

members. Additionally, participant NF2 was concerned by the fact that faculty members at NDSU cannot appeal pay raises. Even though she received good raises while at NDSU, she did not like that she would not be able to do anything if she ever had a problem with her pay in the future. At her current university, the faculty members have a system in place with a "very clear appeals mechanism" that she appreciates. In participant NF18's experience, workload documents were lacking. She found the absence of these documents created uncertainty about job expectations which was unsettling.

A concern of participant SM19's was that faculty performance may not be evaluated accurately because of how evaluations are set up. He said that the metrics used on the evaluation forms do not really relate to what is supposed to be reported. He gave the examples that student learning is not measured by the student evaluation forms and research is only measured by the number of papers counted. Competitive appraisals were also of concern to this faculty member who felt that other faculty members could rank one another low despite performance.

Other policies and procedures of concern included participant NM1's concern that the administration was able to overhear debates in the University Senate. He wished that faculty issues could be "openly debated amongst faculty without fear that the administration is going to come back and punish the people that didn't argue the way they wanted things done."

Not all policies were viewed negatively by study participants. Participant NM11 mentioned that he liked the NDSU policy of giving faculty members the opportunity to apply for \$1,000 presidential travel grants each year. These \$1,000 grants were made available to faculty members to fund travel to professional conferences and scholarly

activities. Participant NM11 found these grants to be "really helpful." The grants also allowed him "to develop some skills and gain experience" which has really helped him throughout the course of his career.

Research Question 3

How will faculty who left describe their working experience at NDSU?

In regard to faculty members' work experience at NDSU, three themes emerged: workload, workplace climate, and support.

Workload

Over half of the 20 study participants (*n*=11: one NF, two SF, five NM, three SM) responded that they liked their workload percentage breakdowns of research, teaching, and service at NDSU. Participant NF2 mentioned that she was able to negotiate her percentages every couple of years and because of this she was happy with them. Participant NM1 acknowledged that he really enjoyed his teaching and research appointment. Participant NM4 liked that his position was about half teaching and half research. He acknowledged that his department protected him from having a significant service load. However, nine (four NF, one SF, two NM, two SM) participants reported that their actual workload percentages turned out to be different than their assigned percentages.

Research

When reflecting on their research experiences at NDSU, participants spoke about both successes and struggles. Six (one NF, one SF, three NM, one SM) participants mentioned successes in regard to their research while at NDSU. Participant NM10 stated that while at NDSU he had many papers published in good journals and that his discipline started recognizing him during his time at NDSU.

Research challenges were also brought up by 14 (four NF, one SF, four NM, five SM) participants. Four (one NF, two NM, one SM) faculty members felt that high quality research was not supported and/or valued at NDSU. Though participant NF18 was excited upon coming to NDSU, she found that "then as I got into it I realized that this is not a research healthy environment and I am not going to be able to grow in that area." In participant NM10's view, "NDSU is not a high quality research institution" and that a lot more focus was placed on teaching than on research. Participant NM16 felt that his department did not place much value on quality of research. He felt this was because some senior faculty had not kept up with research over time and their skills were not up-to-date and on par with junior faculty members.

Five (one NF, one SF, three SM) participants spoke about wishing for more time for research. When asked how she felt about her breakdown, participant SF14 said, "I needed a little bit more time for my research." This time would have been used to help her develop her research program and apply for funding in order to set the framework for future years and the tenure track. Two non-STEM females mentioned that their research requirements were higher than normal or allocated. Participant NF5 said that she had a hard time getting research done because of teaching requirements and committee work that sometimes took up a lot of her time. Because of this, she felt that assigning certain percentages to how faculty members were to spend their time was not necessarily realistic. Participant SM20 also mentioned that teaching took up a greater percentage of time than allocated which cut into his research time.

Lack of departmental research support concerned five (two NF, one SF, one NM, one SM) faculty members. Two (one NF, one NM) faculty members also mentioned that

they personally struggled with research. Not only did participant NM3 struggle with research, he did not feel supported by his department. In addition, he had a difficult time learning how to write academic papers and felt that more support could have helped him "avoid screwing up."

Six (two NF, two NM, two SM) faculty members mentioned that they struggled with being the only people in their departments researching in their specific areas. For participant SM20, being in a small department where faculty members had "very different research and teaching interests" did not leave room for much professional collaboration. In participant NF9's situation, she had a research program, but many others in her department did not have one. Because of this, she experienced a lack of support and infrastructure for identifying funding sources and developing proposals.

Only one participant, SM15, mentioned the challenges of balancing research and family. When asked what was challenging about his position, he responded that it was distributing "time between family and research, and I was always actively doing research."

Teaching

In regard to teaching, 15 (three NF, two SF, seven NM, three SM) faculty members enjoyed teaching or thought that working with students was a great or the best part of their job. Participant NM1 stated, "There is something very special about the student body at North Dakota State University." He continued by saying the students were very enjoyable to teach and advise which made working with students "by far the best part of the job". Participant SM17 expressed similar sentiments, saying he loved working with both undergraduate and graduate students. Working with graduate students was also an enjoyable part of participant NM11's experience. Six (two NF, one SF, one NM, two SM)

faculty members expressed enjoyment of working with phenomenal/talented students, like participant NF9 who said, "we had amazingly talented students in the program." Three (one NF, one NM, one SM) faculty members said they enjoyed being a mentor to students. Four (one SF, three NM) participants spoke of receiving good teaching ratings and other teaching recognition while at NDSU.

On the other hand, two (one NF, one SF) faculty members thought that teaching was challenging or overwhelming. For participant NF9, "I was straddling two programs. I was trying to teach an undergraduate and a graduate program which is difficult. Not, not impossible, but it's difficult to do both and do well." Two non-STEM female faculty members also described negative team-teaching scenarios such as having a co-instructor who would unexpectedly not show up for class or having a co-instructor position cut despite the need for this position. Seven (two NF, one SF, two NM, two SM) participants brought up that they taught in excess of their assigned teaching load. In participant NM1's situation he said he routinely taught well in excess of his budgeted appointment.

Struggles involving students that came out in the interviews included difficulties recruiting students (n=4), and having lack of support for graduate students (n=1). The challenges of recruiting students were addressed by four (two NM, two SM) participants. When asked about what was challenging about his position, participant NM11 responded that despite successes he found recruiting to be difficult because, "the population across the region was just a little thin, a little sparse." Participant SM20 looked at the recruiting from a graduate level perspective and found it difficult to attract top quality Ph.D. students, especially from outside of the region. Part of challenge was trying to convince graduate students that NDSU was a place worth considering for their graduate work. Unfortunately,

he felt that many good regional students would look to outside institutions before coming to NDSU. Participant SM19 had similar views, saying that "high powered graduate students" were hard to attract to NDSU because they were recruited by schools on the coasts or by Big 10 schools.

Service

When considering the service components of their positions, six (three SF, two NM, one SM) faculty members acknowledged that they had minimal service obligations.

Participant SF6 noted that her department protected faculty members from service during their first couple of years. Participant NM10 had a similar experience, saying how senior faculty members tried to protect junior faculty members from time consuming service.

One participant, NF7, recognized that she gained a lot of experience serving on committees. In addition, participant NF9 said she enjoyed her committee work because she met "wonderful people" from outside her department and "learned about the workings of the university." As a result, she found service work to be both "challenging" and "a real source of satisfaction" in her position.

Service ended up taking a lot of five (four NF, one NM) participants' time. For participant NM16, being in a small department led to service obligations that "started to consume an inordinate amount of time." For three (one NF, one NM, one SM) faculty members, service was expected but not allocated in their workload. Two (two SM) participants ended up feeling that administrative paperwork took up a lot of their time.

Workplace Climate

Participants were asked how they would describe the workplace climate at NDSU. Six (one NF, one SF, three NM, one SM) participants had only positive things to say about the workplace climate they experienced. An additional nine (one NF, one SF, four NM, three SM) participants brought up positive aspects of workplace climate in addition to challenges they experienced. Many of the positive comments about working in their departments were issued in regard to working with good/nice/friendly people (*n*=5: one NF, two SF, one NM, one SM) or saying that they loved/liked/valued/trusted their colleagues (*n*=6: one SF, three NM, two SM). Participant SM17 stated that he had "an excellent work environment" and was very complimentary about his department chair, fellow faculty members, and staff. When considering the position he ultimately took, participant NM4 said that he appreciated the very open conversations he was able to have with colleagues with whom he had built relationships and trusted. For participant NM11, the positive departmental connections to NDSU continue as he routinely calls people from NDSU to talk and ask for advice. For him, "they've all been great friends and very supportive."

For five (three NF, one SF, one SM) participants the workplace climate they experienced at NDSU was overwhelmingly negative. Additionally, nine (one NF, one SF, four NM, three SM) other faculty members brought up workplace climate concerns. Seven (two NF, one SF, three NM, four SM) talked about how there was a generational gap between junior and senior faculty that caused challenges in their departments. Participant NM10 described how the senior faculty members placed more emphasis on teaching and had not kept up on research while the junior faculty members focused more on research, which resulted in conflict. Participant SF6 also mentioned this gap being present in her department where there were only full professors and assistant professors, and no associate professors. As a result, "there was no one sort of in-between the tenure track and the

tenured professors." Because these full professors were tenured and had been at NDSU for so long she "felt like they didn't understand how difficult it was to be a tenure-track professor and they did not understand how vulnerable tenure-track professors sometimes feel." Participant NM1 found working with the generational gap to be the most challenging part of his job. This was because of perceived lack of acceptance towards people from outside of the area, differences in teaching and research methods and goals, and junior faculty members. When speaking about how senior faculty members treat junior faculty at NDSU, participant NF7 said, "it's very difficult to understand why junior faculty would want to stay there the way they're treated."

Six (two NF, one SF, two NM, one SM) participants spoke about feeling isolated in their positions. Participant NM4 stated it was a challenge being the only person researching in his particular area at NDSU and working with coauthors at distant universities. He felt that despite "all the marvels of modern technology" it is easier to be working with people at one own's university who are working on the same things. He felt that being more site specific "removes some of those barriers and enhances the productivity quite a bit." Since researchers with similar interests were not close to him at NDSU, some challenges occurred.

Five (one NF, one SF, one NM, two SM) faculty members described departments that were experiencing divisions of other types. A disagreement impacted the departmental climate for participant SM8, and the strong negative feelings between members of department made the climate at that time "unpleasant" for him. Participant NF18 described the workplace climate in her particular department as "kind of contentious."

Faculty meetings were also cause for concern to some participants (n=4, one NF, two SF, one NM). In participant SF14's experience, faculty meetings often made her "physically ill" and the stress from them "took hours to recover from." When asked what was so stressful about faculty meetings, she replied that her department chair was "an extremely difficult person to deal with" and that "more than once in faculty meetings I was verbally insulted." Participant NM1 also found faculty meetings to be a challenging time, describing them as "disgusting to be at" because of the "hostile environment" that had developed between senior and junior faculty members.

Having a lot of faculty turnover within their departments at NDSU was of concern to four (two NF, one NM, one SM) participants. Continually mentoring a revolving door of faculty members who would come to NDSU and stay for about two years and then leave was "certainly one of the challenges" of participant NF9's position. Senior faculty using junior faculty "almost like an assistant until they push them out" was a concern brought up by participant NF7. In her view, this treatment would make life so "horribly miserable" for junior faculty members that "they find whatever [job] they can as soon as they can to get out of there." She wished senior faculty would realize that "if everyone is treated better, the whole system improves, and if they work together the whole system improves instead of working against each other every day" because she feels this problem needs to be stopped. Unfortunately, she feels retirements may be the only solution.

Two (one NF, one SM) participants stated positive comments about their dean.

Additionally, two non-STEM male participants spoke positively about the university's former president; however, eight (four NF, one SF, two NM, one SM) faculty brought up aspects of dissatisfaction with the administration at NDSU. Administration sub-themes

include administration not listening to faculty concerns (n=4: two NF, one NM, one SM), dissatisfaction with dean due to lack of assistance in resolving departmental issues (n=4: two NF, one SF, one NM), poor leadership at the departmental or university level (n=3: three NF), and presidential control (n=3: one NF, two NM).

After investing a lot in his program, participant SM8 felt "as if the administration didn't listen to me at all" which ended up being the "final straw" for him. In regard to her dean, participant SF14 said that the dean "didn't stand up for faculty." Participant NF18 said that her department did not have good leadership because of leadership transitions. She later stated, "I would have stayed had it been had we had stronger leadership."

Fear of punishment for wanting to do things that were not administrator's ways was a concern of participant NF7 who felt, "there's a certain point when you realize that you have very, very little power and then people get scared because they don't want to speak up at anything." The result of speaking up was "then their name will get put on that black list" creating a junior faculty "who won't say anything because they're scared to say something" because they are "afraid they will be punished if they speak their mind...or even ask a question." In her experience, "people knew that they would lose their jobs if they did not follow what [president] wanted."

Participant NM10 also talked about how faculty were afraid to stick up for themselves because of administrators. He compared some happenings to being in a "third world country" or dictatorship where the president would ask people to step down the next day for having a different opinion. He also felt that people stopped speaking up because of fear of the president. In participant NM1's view, "the entire reason for the administration was to make sure one man's orders were followed and obeyed, period, and they forgot

what their goal, their reason for existence, is that they're there to work for the faculty, staff, and students and not the other way around." Having a different perspective, participant NM12 spoke positively about the upper administration, saying that upper administration trusted administrators down the line in a "hands off," non-controlling atmosphere that he thought worked "quite well."

Support

Participants were asked, "What is your view of the support provided within your department/college?" Their answers resulted in three themes of department chairs, resources, and mentoring. When asked about support, 11 (one NF, two SF, four NM, four SM) faculty members stated that they felt supported at NDSU. In participant NF5's situation, she stated that "everybody was very supportive" and specifically mentioned concern expressed by her dean. Participant SM17 also mentioned the positive support of his dean and his department chair and felt "very much like I was heard and listened to." Participant NM4 described the support he experienced at NDSU as "very solid" and specifically mentioned being provided with research resources and travel support. Special attention was brought to having positive staff support by four (one NF, one SF, two SM) participants. When comparing the staff members at NDSU to the staff at her current university, participant SF13 preferred NDSU's because "they are very efficient and very supportive."

Five (three NF, one SF, one NM) participants identified that they did not feel supported at NDSU. When asked about the support she received, participant NF2 said it was "non-existent" and this lack of support was once again due to transitions in leadership where faculty needs seemed to be overlooked. When asked what he would tell a person applying for his previous position, participant NM3 said he would tell the applicant, "basically don't expect to get a whole lot of help with research within the department. Other than that don't expect to get a whole lot of help with teaching either but that would be the biggest thing I think that a person would need to know." He hopes improvements in faculty support will be made in the future. When considering specific support that faculty

members felt lacking at NDSU, two non-STEM female participants mentioned not receiving help with applications.

Department Chairs

Participants were asked if they had anything they would like to add about their department chair/head in terms of climate and support. Eight (one NF, one SF, five NM, one SM) respected and enjoyed working with their department chairs and felt that he/she had their back. Though not asked specifically if their department chair had changed during their time at NDSU, it seemed from the interviews that all of the participants who enjoyed their chair only had one chair for the duration of their time at NDSU. This was the experience of participant NM4 who said he had been recruited by and worked with this same chair for the entire time he was at NDSU and described his chair as "fantastic," saying "we got along very well." For six (two NF, one SF, two NM, one SM) faculty members, they had a supportive department chair who left, and unfortunately they did not think the replacement was as good.

Scenarios or feelings about lack of support from department chairs were disclosed by seven (one NF, three SF, two NM, one SM) participants. Participant SF14 described her chair as "an extremely difficult person to deal with." In participant SF13's view, "basically NDSU has a good environment for the new faculty except the chair which is not very positive [sic]." Two non-STEM males felt like there was an attitude expressed by their chair that faculty members could be easily replaced. This was the case for participant NM3 who said his chair had the attitude that other, more ideal people could be recruited "instead of thinking well these are the people we have here, let's see if we can get the most out of the people we have."

Resources

Faculty members also brought up how resources had an impact on their positions. Their positions were impacted positively by adequate resource allocations and negatively by limited resource access. The positive resource allocation sub-themes included having adequate money provided for research and teaching resources (n=5: three NM, two SM), staff support (n=4: one NF, one SF, two SM), technology support (n=3: two NM, one SM), good pay raises (n=2: one NF, one SF), and travel support (n=2: two NM). Participant NM16 mentioned that he had good access to technology and software because money was made available by request. A similar experience was shared by SM17 who described the support he received as "very good" and went on to describe staff resources, custodians, equipment resources, and the ability to purchase equipment as needed through the use of student program fees.

Some of negative aspects of resource allocation included limited resources (n=2: one NF, one SF) and not having enough faculty members for the workload (n=2: one NF, one NM). According to participant SF14, her library budget was zero for several years so, "We couldn't get access to journals so we had nothing to teach with." She also expressed concerns about challenges to get resources to "make sure my students had what they needed in terms of resources and facilities."

Growth occurring at NDSU was a topic mentioned by several participants. Faculty members expressed positive and negative views of NDSU's recent growth. Four (NM) participants viewed NDSU's growth as being positive. Participant NM12 stated that with NDSU's growth "there was very positive energy," and though it sometimes felt surreal the long term trajectory of the department has done well. Looking back, participant NM11

also recognized that during his years at NDSU things were "go, go, go" "positive, positive" and "grow, grow, grow" with numbers and programs up every semester. He felt that there was "a positive kind of a frenetic climate sometimes" but also a "sense of real positive direction." Two non-STEM male faculty members were disappointed that their programs were not growing at NDSU.

On the other hand, four (two NF, two NM) participants felt that NDSU's rapid growth had some negative aspects. For example, participant NF2 felt that so much emphasis was placed on making the university bigger and having more graduate programs "without the necessary infrastructure and without the necessary financing." She believed this resulted in a "skeleton of a university" where "everything was coming off of people's hides." Her program expanded and no new faculty positions were added, "so all of a sudden we've got these huge responsibilities with no extra help." The growth impacted participant NF9 who talked about having more students with less time, few resources, and no co-teacher support. She felt her ability to provide her students with a "quality education" was compromised, and she ultimately left. Participant NM3 also shared concerns about the growth: "I mean it did seem kind of that we were putting a little bit too much emphasis on just getting big for its own sake."

Mentoring

Although a question about mentoring was not asked, mentoring was a theme that emerged within eight (three NF, one SF, three NM, one SM) participant responses. Four faculty members spoke about having good mentoring from within (two NM) or outside of their departments (two NF). Participant NM11 spoke about how NDSU mentors supported him, saying that the mentoring he received was "informal" but that a senior faculty member

was "really helpful to me through the years." He also added that his department chair was a good mentor who "really helped to me to develop the skills and experience I needed to be successful in this position that I am in now."

On the other hand, four (one NF, one SF, one NM, one SM) faculty members brought up that they were not mentored while at NDSU. Participant NM3 didn't have a mentor and said, "in my department people were sort of left to sink or swim on their own." Participant SF14 was actually assigned a mentor when she came to NDSU but, "I never even met her. I wouldn't know her if I tripped over her." She added that she saw others who received more support from their mentors, but thinks the mentoring system needs to be followed up on. She also said she wished she had cultivated more contacts outside of her department. Two non-STEM female faculty members talked about how they served as mentors to others while in their NDSU positions.

Research Question 4

How will their current positions compare to their former positions at NDSU?

The most common themes that emerged when participants compared their former positions at NDSU with their current positions were changes in position, increased research benefits, preferable geographical location, and increased salary.

Changes in Position

Administrative positions were obtained by five (two NF, one NM, two SM) participants. While the other participants who moved into administration wanted positions of this type, participant SM15 did not have the goal of becoming an administrator, but it was part of the position he decided to take. Four (one SF, one NM, two SM) participants left academia. Though leaving academia has been a "big change" for participant SM8, he

said he has "no regrets about it for sure" because he enjoys his new position and the different challenges it brings.

Research

Research was a topic of importance that many (*n*=8: three NF, two SF, two NM, one SM) faculty members mentioned when describing their experiences at their new institutions. Having collaborators close by was a benefit gained by four (one SF, two NM, one SM) faculty members. Participant NM4 pointed out the importance of having collaborators close in that, "we're able to leverage that kind of face to face time and leverage the personal relationships that grow through that I think to increase productivity on the research side." Participant NM1 acknowledged that he now works with some of the top scholars in his field. Switching universities has been a "good move" for him, in part because these colleagues are willing to work and share credit with him.

Working at a university now that is stronger in research was brought up by four participants (three NF, one SF). At participant NF18's new institution, "I get to do a lot of research and there was a start-up package so the first year I got \$17,000 for start-up and then with the grants and the things this next year I anticipate that I'll have about \$30,000 for the next year and that's just for research." She also talked about how her new university has been "extremely supportive" of sending her to research conferences to look at methods to incorporate in her research.

Participant SF13 noted that research at NDSU is not as active as at her current institution. Members of her current department are "more actively involved in writing proposals to get funding than my previous department at NDSU." Unlike participant NF9's experience at NDSU where she did not have many colleagues actively involved in

research, where she is now, "everyone has an expectation for scholarship." She also mentioned that her current college is "very clear about their expectations for faculty productivity in the area of scholarship, and they are consistent about the implementation of those policies" which is something she felt lacking at NDSU. She also added that at her new institution there is more support because the infrastructure is built up "so that feels very, very different." At participant NF2's institution, "they understand that scholarship takes money and time and so they provide me with both."

Two (one NM, one SM) faculty members who left academia spoke about how not having the pressure of publish or perish in their new positions was a positive change for them. Participant NM3 described his new job as "less stressful" because unlike writing academic papers, his new position is not "all or nothing". Participant SM19 pointed out that in industry, "there is more of a pull and a demand for what you are producing" which he appreciates.

Geographical Location

For seven (one NF, two SF, two NM, two SM) faculty members, geographical location was cited as a positive aspect of their current position. Participant SM15 said where he moved to is a "beautiful place" with lots of outdoor activities. Though he likes this aspect of moving, he did say, "I would not leave because of it." In regard to moving from Fargo, participant SM19 commented that in his new location it is a "luxury" having a full blown spring and fall. For one participant, SF13, moving to a location with a warmer climate was very important. She said that her current university is "pretty much the same as NDSU," but the difference is that it is warmer. This was important to her so she could "partake in other activities" in order to have a social life and meet other people.

Interestingly, 17 (four NF, two SF, six NM, five SM) of the 20 participants thought Fargo-Moorhead was a nice/great/good/wonderful place and/or liked/loved living there. These participants cited a variety of reasons such as access to amenities (n=7), nice/friendly people (n=6), family friendly environment (n=6), and good schools (n=3). The three participants who did not directly state that they liked living in Fargo-Moorhead all had positive things to say about the community. Although participants made positive comments about Fargo-Moorhead, they also brought up concerns about the community. Study participants mentioned the following concerns about Fargo-Moorhead: it was remote or isolated (n=5), it had a difficult singles scene (n=5), it was hard to come into from the outside (n=3), and it had flooding issues (n=3).

Salary

Throughout the course of the interviews six (one NF, four NM, one SM) participants mentioned that they had received pay increases when they went to their new positions. About his new position participant SM15 said, "it was a good move. I feel like I didn't lose anything, just my salary went up probably 30-40%." A "substantial raise" was acknowledged by NM16. Participant NM1 stated that his salary went up about \$20,000 and though that was not the reason he left, it "sure cushioned the move."

Other Comparisons

Three (one SF, two NM) participants identified that their current institutions have a stronger focus on teaching. Participant SF6 commented that she likes the commitment to teaching that her current institution has. When comparing NDSU to her current position she felt, "NDSU has some commitment to teaching, but I think that when you have people who have been teaching for 30 years a lot of times they can get very set in their ways and

just don't change." She appreciates being around people in her new position who are "really committed to making their teaching be really innovative and good."

Having a larger department at their current institution was of notable benefit to two participants (one NF, one NM). Two (one NF, one NM) faculty members also positively acknowledged the faculty governance at their current institutions. Participant NF2 mentioned, "I'm allowed, I'm encouraged to be very involved in governance at the institution so these are things that aren't just handed down from on high."

Two faculty members (one NF, one SF) commented on feeling more respected in their new positions. Participant NF2 said, "there's a huge amount of respect within the institution there which you know clearly I had found lacking at NDSU." When describing her new position, participant SF14 said she is treated "more or less with respect," which she appreciates, along with being "treated as if I am an expert in the field."

Faculty getting along better at their new institutions was brought up by three (two NF, one NM) faculty members. Participant NM1 stated that, "I really enjoy my job and I work in an environment that was the antithesis of the environment that I had there [NDSU]" in part because at his new workplace "faculty meetings are a bunch of people are sitting around and agreeing with each other rather than arguing with each other about every little thing."

Research Question 5

Will there be differences in participants' responses based on their academic disciplines?

Other than a comment where a non-STEM male addressed salary differences between STEM and non-STEM disciplines, there were not specific STEM/non-STEM

differences addressed by participants. However, further analysis based on academic disciplines was completed by looking at STEM/non-STEM color coding of participant responses.

When it came to describing their working experience at NDSU, facilities, specifically adequate lab space, was of concern for STEM faculty members. Two STEM faculty members (one SF, one SM) addressed the concerns not having adequate lab facilities and their struggles with trying to get and or keep their lab space. When talking about his lab, participant SM15 said, "it wasn't normal for a full time faculty with well running research to be squeezed into such a small space." In participant SF14's situation, "fighting to keep the little bit of space I'd been allotted was a permanent battle." She also said that, "I was promised some lab facilities that didn't materialize my startup funds were a grand total of \$3,000 which is what it costs just for the computer, and I had to beg to get money for the software that we needed. So yeah I was promised things for the start up of the lab that just never happened."

In terms of workload, some differences based on discipline appeared. Five (four non-STEM, one STEM) participants said that their positions were primarily focused on teaching. All five participants who said service took up a lot of time were non-STEM faculty members (four females, one male). Interestingly, all three female STEM participants responded that their service load was minimal. Based on these findings, there appear to be differences based on academic discipline in the amount of time faculty spent on teaching and service.

All of the respondents who spoke positively about being mentored were non-STEM faculty (n=5). Non-STEM faculty members were also the only ones who mentioned

mentoring others (n=2). On the other hand, STEM faculty (n=2) said they wished outside department contacts had been made. Interestingly, no STEM participants brought up university growth issues in the interviews. However, eight non-STEM participants discussed aspects of this issue, with four participants feeling that the growth was positive and four feeling that the growth had negative aspects to it.

As far as faculty reasons for leaving, two non-STEM participants left in part because of salary. Three of the four faculty members who left academia were formerly in STEM fields.

Research Question 6

Will there be gender-related differences in participants' responses?

Gender-related differences emerged in participant responses. While no male participants addressed gender-related concerns in the interviews, five of the eight female participants mentioned this type of concern. The gender-related differences included campus climate, mentoring, salary, community climate, and experiences of non-STEM female participants at NDSU.

Campus Climate

Participants were asked to describe the workplace climate, and throughout their responses gender differences emerged. Regarding campus climate, five (three NF, one SF, one SM) participants spoke only about having a negative working climate. Out of these five, four were females. Of the participants who had problems with stress and conflict at faculty meetings, three out of the four were female. Out of the six participants who expressed positive sentiments about their colleagues, only one was a female.

When asked how participant NF2 would describe her workplace climate at NDSU, she thought it depended on who you are. She felt that NDSU's climate was "very difficult" in regard to fitting in, especially for women who are "nontraditional in terms of either coming from different cultures or nontraditional in terms of not fitting traditional female gender roles." She felt "it's still very much the white old boys club up there." She continued by saying that if a woman were to not speak up too much in department meetings and not be too demanding of her students that she would be just fine. Unfortunately, she feels that women who stand up and speak out for themselves and their ideas have a "very hard time." When asked what she would tell someone applying for her job at NDSU, participant NF2 said, "I would say just don't do it." She continued, "especially if it was a woman, especially if it was a young woman, a single woman. I, my understanding is the singles scene in Fargo is pretty dismal."

Though participant SF14 felt gender issues needed to be addressed in her department, "I was told flat out by [colleague] that there is no climate issue for women in our department; there are no problems with gender imbalance, everybody is treated exactly the same and perfectly fairly." She later went on to say, "I think there are some huge issues with climate at NDSU. In particular for women and in particular for young women and in particular for ambitious young women."

Participant SF6 responded that she felt "pretty included" when speaking about NDSU's workplace climate, but she knew that "not everybody did and that was kind of a problem" which led to some discomfort. She went on to explain how that when gender issue concerns were brought up at NDSU, her department chair cited student numbers rather than faculty numbers to try to prove the department was a diverse place. Because of

this, she said, "I think it's pretty common knowledge amongst tenure track faculty that you try not to rock the boat and you try not to do anything that is going to be seen as rocking the boat, and I think bringing up gender as an issue in that department would have been seen as rocking the boat."

Three (one NF, two SF) faculty members talked about how they received negative messages about the value of women from their department chairs. For participant NF7, "basically the indication that I received was that why would anybody be interested in you" when discussing career advancement options with her chair. She thought this response was rather ironic considering that the university had been called out in regard to supporting the advancement of women faculty. She said she encountered "some in there that really do believe that females should not be in academia" and that though she had a number of comments of this type expressed "you just let them go."

Two female participants spoke about the limitations of having few female faculty members. In regard to the PTE process, participant SF14 said that because of few women, "it's almost impossible to have a nice balanced tenure committee when all of the committee are the old boys' network who already have their opinions formed before they look at anything you give them." Participant NF7 mentioned the limitations of having few females in regard to service because "we were expected as females to be on every single committee that they called us to be on" in order to be the "token females" because there were so few women to serve on committees. She did admit that in a way serving on these committees was "very good" because of gaining experience but on the other end "you got no credit for that, and you were actually counted down at promotion and tenure time because you did

too many things that were outside of what the old guard, I will call them, thought that you should be doing."

Mentoring

Having few female faculty members within departments may have also impacted mentoring, as both of the female faculty members who said they had mentors disclosed that these mentors were from outside of their departments while both of the males who talked about being mentored were mentored from within their departments. Looking back on their experience at NDSU, two STEM females stated that they wished they had made more contacts with faculty members outside of their department. Only two participants, both non-STEM females, spoke about mentoring other faculty members while at NDSU.

Salary

Only two participants, both non-STEM males, stated that they left NDSU in part due to salary concerns. Meanwhile, only two (one NF, one SF) participants brought up receiving good pay raises while at NDSU, both of whom were female participants.

Community Climate

When talking about the community climate, difficulties for women also emerged in the responses of three female participants. Two female participants expressed that they found it difficult being a single female and both specifically mentioned that Fargo has a difficult singles scene for women. Participant SF13 acknowledged that, "I know that you're supposed to go independently, but other than that there is no social life especially if you don't have a family and go there by yourself." She thought being a female by herself made it even harder. She continued by talking about how students have many other students whom they can hang out with, but faculty "basically are supposed to hang out with

faculty," and challenges arise if the other faculty members are married. Two female participants also brought up feeling traditional gender roles were expected based on regional culture.

Experiences of Non-STEM Female Participants at NDSU

The non-STEM female participants, as a group, disclosed some unique issues that were not mentioned by the STEM female participants or the non-STEM male participants. For example, none of the eight (two SF, five NM, one SM) participants who were positive overall about NDSU's PTE process were non-STEM females. Additionally, out of the eleven (one NF, two SF, four NM, four SM) participants who stated they felt supported at NDSU, only one was a non-STEM female. Meanwhile, three out of the five (three NF, one SF, one NM) participants who explicitly expressed that they did not feel supported at NDSU were non-STEM females. Only one of the eight (one NF, one SF, five NM, one SM) participants who were positive about their department chair was a non-STEM female. Also, only one of the 10 (one NF, two SF, four NM, three SM) participants who said they liked their workload while at NDSU was a non-STEM female. None of the six (one SF, three NM, two SM) participants who spoke about liking the balance between their research and teaching was a non-STEM female. Though six (three SF, two NM, one SM) participants spoke about having minimal service requirements, none of them were non-STEM females.

Recommendations

The participants not only provided interesting perspectives on their experience at NDSU, but also presented recommendations to improve university workings in the future.

Four themes of recommendations emerged from the faculty interviews. Their recommendations involved administration, PTE processes, resources, and climate/morale.

Administration

Having more faculty governance at NDSU was of importance to three participants. When considering faculty governance, participant NM10 pointed out that, "There is no faculty governance at NDSU." To address the lack of faculty governance, participant NM1 believes that NDSU should have a faculty senate instead of a university senate so that "issues can be openly debated amongst faculty without fear that the administration is going to come back and punish the people that didn't argue the way they wanted things done." Participant NF7 talked about wishing that administration would listen more because "it's not a dictatorship, it's a faculty and you know faculty are scholars or you at least would hope so since you hired them. They're smart people. Talk to them about their ideas." She feels this would lead to a "greater sense of ownership of and a better sense of being part of NDSU" for faculty members instead of feeling like "ok I did my time there."

Three faculty members believed that administration personnel changes would benefit the university. Participant NF2 believed, "There is a lot of ineffective leadership that has been there too long and I think I think whoever comes in as the new president should just fire everybody and start again and try and hire people with smaller egos or more willing to engage in dialogue." She also added, "I think some drastic cleaning house is the only thing that is going to make a lot of change." Participant NM10 had similar views and expressed that administrators staying in their positions for a long time is not good. He thought, "sometimes they need to have new blood. NDSU needed new blood basically." Other administrative recommendations made included the administration listening to and

addressing faculty concerns (n=3), having professional development for chairs (n=3), having more transparency by the administration (n=2), and having rotating department chairs (n=1).

PTE Processes

Faculty members also had a variety of recommendations about ways to improve PTE processes at NDSU. Some of the opinions were that post-tenure reviews should be strengthened (n=3), work to eliminate biases in the PTE process (n=2), stick to workload documents or evaluate PTE on what time is actually spent on (n=2), provide clear PTE expectations with stages/years to new faculty (n=2), adjust workloads to faculty strengths or else provide support for where they are struggling (n=2), keep the PTE guidelines you come in with (n=2), and improve student evaluation measures (n=1).

Strengthening the post-tenure review process was recommended by three (one NF, one NM, one SM) faculty members. Participant NM16 felt that there was room for improvement in order "to be sure it is impartial" and "conducted in a manner that is fair and reasonable to all involved." Participant NF7 agreed and felt this was because, "there are a couple of people they would never have a negative post-tenure review because honestly the administrators are scared of them too." In an effort to change this, she felt that department chairs need to be supported by upper administration and have the authority to stand up to what is not right.

Participant NF7 brought up the challenges of being judged on the workload percentages and not on actual work activity, saying the PTE process "needs to be tied to what the person is actually being required to do on the job." She described how an appointment can be very different than a faculty member's actual workload. Because of

this, promotion and tenure time becomes very difficult since "they don't really care what you've been doing; they look at your split and then they count journal articles." Despite the fact that additional teaching responsibilities may have been added, if the committee thinks more journal articles should have been published based on the paid appointment, promotion and tenure may not be granted. She feels, "there needs to be some type of understanding of the amount of teaching and how that impacts your ability to get your research done."

Participant NM3 wishes the PTE expectations were clearly laid out from the start, saying, "I think it'd be best to even like before someone is hired to spell out exactly what is expected of them at different stages. Sort of like by the end of your 1st year we expect you to have done this and in your 3rd year we expect that you'd've done this and in your 5th year we expect that you'd've done this." Because the expectations he received were "pretty vague." He also felt that it would be beneficial to adjust the teaching and research loads within departments to focus on faculty members' strengths in order to increase productivity.

Changes in the PTE guidelines frustrated participant NF5. She recommended that faculty members should be compared to the tenure and promotion guidelines that are in place when they are hired when they go through the process six years later.

Participant SM19 brought up an interesting point when looking at the measures of the student evaluation forms. He did not view them as an accurate measure of teacher performance because students may value things such as humor and rank a professor high because the professor is entertaining. Meanwhile, they may have a professor who takes an active learning approach and expects a lot of the students. This professor may be resented

by students for challenging them and consequently get low ratings. As the evaluation form is currently set up, "I don't think that we're measuring learning. I think that we're not even close to measuring learning."

Resources

Faculty also made a variety of recommendations with regard to resources. Two non-STEM male faculty members recommended that NDSU pay market salaries to their faculty members and make counteroffers when faculty have other opportunities presented in an effort to keep faculty members. Participant NM10 thinks that NDSU administrators "have to understand you know that if they want to keep good quality of the faculty they have to pay the market," otherwise they will not be able to compete with other universities. He recognized that some factors, such as the weather, are out of NDSU's control, but reasonable compensation of faculty members is something that can be changed.

The human resources aspect of having a more formal and proactive mentoring program that follows through and is not just on paper was a recommendation of three faculty members (one NF, one SF, one SM). Participant NF18 said that though a mentor was identified, the mentor did not have much to do with her and brought up that, "it's on paper but it's really not in practice." Participant SF14 had similar feelings, saying, "I do think the mentoring system needs to be followed up on." Participant SM20 also had recommendations for mentoring because he wished a more formal mentoring program for junior assistant faculty members had been present at NDSU. He said that though senior faculty members in his department had open door policies and were willing to give advice, he wished that he had someone proactively helping him and "identifying potential problems that the junior faculty doesn't necessarily, isn't necessarily even thinking about."

He felt that at times he did not know what kind of advice to ask about and that "somebody who is potentially going to have trouble with tenure doesn't even know some of the issues that they're up against." So having an assigned mentor who was familiar with challenges junior faculty face is something he wished he had had access to at NDSU.

Participant SM19 wished there were more resources for graduate students. Due to low budgets, few graduate students could be supported. The few graduate students who were provided aid did not receive very good financial support and health care was not available to them as is provided at some other universities. He felt that this lack of support for graduate students ultimately had a negative impact on the research that was going on in his department.

Climate/Morale

Faculty members also had some suggestions with regard to climate and morale at NDSU. Two (one NF, one NM) faculty members said to show faculty appreciation, one (NF) brought up departmental teambuilding, another (SF) wishes the university would organize activities for new faculty to get to know each other and become involved in the community. In regard to retention efforts, one (NM) participant wishes NDSU did more to keep good faculty members and another (SM) was surprised that the university did not conduct exit interviews.

Chapter Summary

This chapter analyzed the data collected through phone interviews with 20 faculty members who left NDSU between May 2008 and March 2010. The chapter began with a brief overview of the research questions that guided this analysis. Reasons for turnover were explored, with major themes of weather/geographical location, family reasons, salary,

position requirement challenges, lack of advancement/professional opportunities, and campus climate emerging. The impact of policies and procedures was discussed which includes hiring practices, the PTE process, and other policies/procedures. The NDSU working experience is reviewed with participant views on workload, workplace climate, and support. Participants were asked to compare their current positions with the former positions at NDSU. One research question sought to explore if there would be differences based upon academic disciplines. Differences in academic disciplines (STEM/non-STEM) were explored. Gender-related differences in participants' responses were also explored. Gender-related differences were found and are presented. Recommendations made by the participants throughout the interviews are offered at the close of this chapter. Chapter V will summarize findings and make recommendations for both university practices and for future research.

CHAPTER V.

SUMMARY, DISCUSSION, AND RECOMMENDATIONS

This chapter includes (1) the purpose of this study, (2) an overview of the methodology, (3) discussion of study results, (4) limitations of the research, (5) recommendations for future research, (6) implications for practice at NDSU, and (7) conclusions.

Purpose of the Study

The purpose of the study was to learn about the reasons faculty members left NDSU. This study also explored work factors and policies/procedures that impacted faculty members' work experience at NDSU. This information will be used to develop recommendations for increasing retention rates and satisfaction levels of NDSU faculty members. Particular attention was paid to retention concerns based on gender and STEM/non-STEM (Science, Technology, Engineering, Mathematics) disciplines. Ultimately, this study aims to help NDSU be an environment where quality faculty members can be productive and want to stay.

Methodology Overview

Due to the complexity of faculty turnover and the exploratory nature of this study, qualitative methodology was found to be most appropriate. In-depth phone interviews were the method of data collection used in this study. A list of 45 former faculty members who left their positions at NDSU between May 2008 and March 2010 was gathered from the NDSU Office of Equity, Diversity, and Global Relations. The list consisted of 29 male and 16 female faculty members from all academic areas who either left willingly or were terminated by the university. Participants were contacted with the details of this study by phone or e-mail depending on the forwarding information available after their departures.

Out of the 45 former faculty members, 20 faculty members agreed to participate, 10 declined participation, 10 did not respond to e-mail or phone contact, and five were unable to be contacted due to lack of current contact information. Interviews were conducted with 12 males (five STEM, seven non-STEM) and eight females (three STEM, five non-STEM).

The interviews followed a list of predetermined questions, and they ranged in length between 20 and 75 minutes. Interviews were recorded using a speakerphone and digital recorder. Each interview was transcribed verbatim and assigned a number. Identifying information was removed from the transcripts. Interview transcript numbers had four color codes based on whether the respondent was a male or female, and whether the respondent was from a STEM or non-STEM discipline. This coding system provided the opportunity to identify possible trends in responses. Sub-categories were determined. Codes were collapsed after coding was completed to create a list of themes. These themes are discussed in the analysis of the study.

In an effort to increase trustworthiness and decrease researcher bias, several techniques were used. Clarifying and follow-up questions were asked by the interviewer during the interview in order to increase interpretive validity by clearing up miscommunication (Johnson, 1997). Interviews were recorded so responses could be transcribed and checked for accuracy. Trustworthiness was gained through these low inference descriptors which quote respondents verbatim (Johnson, 1997). A "peer debriefer" (Maykut & Morehouse, 1994, p. 174) reviewed data analysis by checking the coding of 10% of the data. Codes were found to be consistent between researcher and peer debriefer. These efforts were made to ensure that the findings had limited researcher bias.

In the present study, Matier's (1989) framework was not used in the initial coding of the data. However, following analysis, the results were compared and contrasted with Matier's model. This model was chosen in order to help understand the context surrounding the factors that push faculty away from NDSU and the factors that are pulling the faculty elsewhere. By comparing the current study's findings against Matier's framework, the researcher was also able to identify findings that were unique to NDSU.

Discussion of Results

Research Question 1

What will faculty who left NDSU identify as the reasons for leaving?

Six themes emerged when faculty were asked their reasons for leaving NDSU. The themes were divided into external factors outside of the university's control and internal factors under the university's influence. External factors included (1) weather/geographical location and (2) family reasons. Internal factors included (1) salary, (2) position requirement challenges, (3) lack of advancement/professional opportunities, and (4) campus climate. Three of the faculty interviewed had a combination of external and internal reasons that contributed to their departure from NDSU.

External Factors

External factors were the sole contributors to the turnover of only two (one SF, one SM) of the 20 participants in the present study. The external factors disclosed were weather/geographical location and family reasons, which were factors outside of the university's control. A combination of external and internal factors led to the turnover of an additional three (one SF, one NM, one SM) participants. The internal factors identified by these three participants were unsupportive department chair, salary, and family reasons.

These findings are consistent with Matier (1989) who did not find external factors to have a significant impact on faculty members' decisions to leave their institutions.

Weather/Geographical Location

NDSU is located in Fargo, North Dakota which borders Moorhead, Minnesota. The Fargo-Moorhead area has developed a reputation for its harsh winter conditions and threats of spring flooding. In Wilson's (2007) article, it was speculated that Fargo's weather and geographical location may have played a role in faculty members' decisions to leave NDSU. However, Wilson's article only provided anecdotal observations so it was uncertain the true impact that weather and geographical location had on these decisions. In the present study, only two (one SF, one NM) participants cited the weather as a reason for leaving NDSU. Although ten (two SF, five NM, three SM) participants made comments about the cold weather and threats of flooding in Fargo-Moorhead, none of these participants stated that these factors contributed to their turnover. Overall, these faculty members had a "you just deal with it" attitude in regards to the weather. Though NDSU faculty members interviewed by Wilson (2007) felt that the weather caused their colleagues to "wear down" and leave, weather was not found in the present study to be a major contributing factor towards turnover from NDSU (para. 6).

In regard to geographical location, only two (one SF, one NM) of the 20 study participants stated that they left NDSU in part because they preferred other geographical locations. In Ambrose et al.'s (2005) study, almost a quarter of the participants indicated that the city in which their university was located was a source of dissatisfaction for them. In the current study, all 20 of the participants mentioned positive aspects of the Fargo-Moorhead community and 17 of the 20 participants acknowledged that they enjoyed living

there. In addition, seven (two NF, one SF, three NM, one SM) faculty members mentioned that they liked Fargo-Moorhead because they thought it was a family-friendly community. However, Fargo-Moorhead's family-friendly nature was also an issue for some participants. For example, five (one NF, two SF, one NM, one SM) participants commented on how the singles scene in Fargo-Moorhead may be difficult because the community was family-oriented with limited options for singles due to its size. Participant SF13 stated that "there is no social life especially if you don't have a family and go there by yourself." She continued explaining, "because of the weather people tend to stay at home then that makes it even harder for people who are new there."

Family Reasons

Family reasons are often external factors to which the university has no control. Ambrose et al. (2005) found that a few of the former faculty members in their study did not leave because they were unhappy with their positions but because they were pulled away for various reasons such as closer proximity to family and for a spouse's career. In the current study, family reasons were pull factors away from NDSU for four (one SF, one NM, two SM) participants. Moving allowed one (SM17) participant to be closer to family members and another (SF6) stated that the move was beneficial for family reasons. Two (NM12, SM20) of the male participants left because of spousal job opportunities. In both instances, their spouses' inability to find meaningful employment in the Fargo-Moorhead area impacted their decisions to leave NDSU. Had NDSU or neighboring colleges been able to provide meaningful employment in academia for his spouse, participant SM20 stated that he would have considered staying at NDSU.

Internal Factors

Findings from the present study support Matier's (1989) view that internal university factors significantly impact faculty turnover. Overall, 18 of the 20 faculty members left NDSU solely or in part because of tangible and intangible internal factors. Tangible internal factors identified in this study included low salaries, lack of advancement/professional opportunities, and position requirement challenges. In addition, the intangible internal factor of negative campus climate included leadership concerns and lack of collegiality. These strong internal pushes led faculty members to seriously consider opportunities outside of NDSU.

Salary

When compared to other states, North Dakota faculty members at public four-year institutions were the lowest-paid in the nation earning on average \$48,252 per year (Christopher & Clery, 2003). In the present study, only two (NM10, NM12) of the 20 participants mentioned salary as part of their reasons for leaving NDSU. Considering that North Dakota had the lowest average salary for faculty members, it was surprising that the number of participants identifying salary as a reason for leaving NDSU was not higher.

Previous findings (Ambrose et al.'s, 2005; Burke as cited by Amey, 1992; Xu, 2008b) suggested that salary is rarely the sole factor leading to a faculty member's turnover and is often joined by another strong source of dissatisfaction such as negative internal environmental factors within the university. However, only external factors were tied to salary concerns in the present study. In addition to salary concerns, these two (NM10, NM12) participants also identified weather and spousal employment opportunities as influencing their decisions to leave NDSU. This study revealed that although salary was a

concern impacting two faculty members' decisions to leave NDSU, more prevalent issues within the university's control exist.

Position Requirement Challenges

Five (two NF, one NM, two SM) faculty members, none of whom were STEM females, mentioned that struggles to meet the requirements of their positions contributed to their turnover. Challenges in meeting the requirements to earn tenure were concerns of three (one NF, one NM, one SM) participants. All three of these participants expressed struggles in regard to research productivity expectations. Due to her teaching and service responsibilities, participant NF5 struggled with not having enough time to dedicate to her research. In addition, she felt that her teaching, service, and research workload percentages were unrealistic. Participant NM3 indicated that he did not feel he received the help or support he needed to write quality papers that would be accepted by journals. In the case of participant SM19, he struggled with being awarded grants and having papers accepted in his field of study. Additionally, he felt that there was a lack of graduate research assistant support at NDSU and commented that graduate research assistants could have aided in his research efforts.

A change in the lab space for participant SM15 impacted his decision to leave NDSU. Due to this change, participant SM15 felt he would not have had adequate room to keep his research running at NDSU. Regrettably, he perceived this reduction in lab space as an act of retribution taken by his department chair resulting from him voicing concerns about unfair decision making. The struggles incurred by teaching both graduate and undergraduate courses led in part to the departure of participant NF9. She was the only faculty member in her department who "straddled" both programs and found the

involvement required for curriculum planning at both levels to be demanding. Despite the university's growth, she taught at both of these program levels with no additional faculty support lines. In addition to this teaching responsibility, she was trying to maintain a program of research and many service commitments.

Lack of Advancement/Professional Opportunities

Jo (2008) found lack of opportunity for advancement to be the second leading factor in faculty turnover following dissatisfaction with supervisor. In the present study, lack of advancement/professional opportunities was also the second leading factor and influenced the departures of six (two NF, three NM, one SM) faculty members. Two non-STEM male participants left NDSU because of lack of professional opportunities. Both of these participants obtained positions that had more opportunities for growth and had strong focuses in their areas of interest with close collaborators. Though participant NM4 stated that he felt he could remain at NDSU and be happy, the position he was offered had a "dream job" quality.

Administrative advancement opportunities provided by other universities led in part to the departure of three (two NF, one NM) faculty members in the current study. On the outside, it may appear that attaining a higher level position at another university was a pull factor away from NDSU. Upon further examination, however, opportunities for advancement may not have been available at NDSU and the absence of career advancement opportunities may have actually been a push factor for faculty to look for opportunities elsewhere. It leads one to question whether there are steps NDSU can take in order to provide more advancement opportunities for faculty members.

Campus Climate

Issues of negative campus climate were brought up by 10 (four NF, two SF, two NM, two SM) participants in this study as causes for their departure from NDSU. Issues pertaining to campus climate were the leading reason for participant turnover from NDSU. Leadership and collegiality emerged as sub-themes.

Leadership

In the present study, issues with university and departmental leadership were internal factors that impacted the decisions of eight (three NF, one SF, two NM, two SM) participants to depart NDSU. Jo (2008) suggested that when there was high turnover in a department, there were often times supervisory issues. Jo linked turnover with conflicts involving supervisors. In the current study, five (two NF, one SF, one NM, one SM) of these eight participants left NDSU in part because of conflicts involving their supervisors. Four (two NF, one NM, one SM) of these eight participants also mentioned that they left the university in part because they did not feel listened to by administration. Similar results were also found by Jo (2008) where conflict and ultimately turnover resulted from faculty members not being involved in important decision making. Based on the present study's findings, it appears that increased efforts to improve the dialogue between faculty and administration, and to increase the transparency of decision making need to be made at NDSU.

Collegiality

Four (three NF, one SF) participants stated that lack of collegiality was the reason they left NDSU. It should be noted that all four participants who left because of collegiality were female. In other words, half of the female participants in this study left NDSU due to

issues with collegiality and also expressed very strong statements about the university. When asked what she would tell someone applying for her previous position at NDSU, participant SF14 responded by saying, "Run. Run the other way as quickly as you can." Participant NF2's response to the same question was, "Don't take it. The department is still f---ed up." Participant NF7 said she "was ready to leave academia to get out of NDSU because it was a toxic environment." For participant NF9, deciding to leave NDSU was "very much a climate issue, and I don't know how to explain to you how bad it was." Lack of collegiality as it pertains to gender-related issues is further analyzed in Research Ouestion 6.

Additional Findings

Upon further analysis, interesting differences emerged when comparing the interviews of participants who left NDSU exclusively for external reasons with participants who left exclusively for internal reasons. The interviews of faculty members who left for external reasons were shorter than those who left for internal reasons. The interviews regarding external reasons averaged 30 minutes in length while those the interviews concerning internal reasons averaged 40 minutes which is a difference of 10 minutes. Often the internal reasons for turnover were more complex to explain, and generally had multiple layers and examples. Internal reasons for turnover seemed to illicit strong emotions from several participants. In some instances, the interviews became uncomfortable for the interviewer because it seemed as if the participants needed comforting. In two (one NF, one SF) interviews, participants apologized for "dumping" all of their negative stories onto the interviewer and/or possibly scaring the interviewer away from a career in academia.

said, "It's probably a nightmare kind of interview for you. I'm sorry." Although these individuals struggled at NDSU, they still saw the potential in the university. Through their participation, they hoped to be a voice in an effort to make NDSU better for their former students, for their friends who are still there, and for the future.

Research Question 2

Do university policies/procedures have an impact on faculty members' experience at NDSU?

Study participants discussed a variety of policies and procedures that impacted their experiences at NDSU. Hiring practices and the PTE process at NDSU were the two most mentioned topics by participants.

Hiring Practices

Previous studies (Ambrose et al., 2005; August & Waltman, 2004; Hagedorn, 2000; Jo, 2008; Johnsrud & Rosser, 2002; Rosser, 2004; Volkwein & Parmley, 2000) which focused on faculty job satisfaction did not mention in their findings that hiring practices impacted faculty turnover or faculty satisfaction. In the present study, six (two NF, one SF, two NM, one SM) participants expressed concerns about hiring procedures for either supervisors or colleagues which involved recruiting qualified candidates (n=3), considering unqualified candidates (n=2), and hiring without a national search (n=1).

Three (one NF, one NM, one SM) of the four faculty members who left NDSU in part because of departmental leadership changes brought up concerns about hiring practices. Conflicts arose for these participants when concerns about potential new department chairs were expressed and not acknowledged, and/or when individuals they perceived to be unqualified became their bosses. Staw (1980) stated, "the higher the level

of the position to be filled the greater is the potential for disruption" (p. 256). It is not surprising that faculty might experience some apprehension or frustration over the hiring of a department chair since the chairperson plays a pivotal role within a department.

PTE Process

In regard to NDSU's PTE process, eight (two SF, five NM, one SM) of the 20 participants were positive overall about it. Their comments included that the process was made clear (n=6), the process was fair (n=3), and that the process was reasonable (n=2). However, nine (three NF, one SF, three NM, two SM) participants mentioned concerns about the process. For example, seven (two NF, one SF, three NM, one SM), participants of both genders and all disciplines discussed the impact that personal relationships could have on the PTE process. Participant NF7 spoke about how senior faculty members would try to get junior faculty members to do their work. If the junior faculty members tried to stand up for themselves, then the senior faculty members "will go behind your back and talk about you and basically go around and do what they can to get votes against you at promotion and tenure time." Participant SM15 also described the pressure to stay in the good graces of the PTE committee. He specifically mentioned how he felt his chair sent the message that to do well in the promotion process, faculty members had to be "nice" to the chair. Additionally, two (one NF, one SF) participants brought up concerns about the selection of the PTE committee members at NDSU. These concerns pertained to their perceptions that the "old boys" network controlled the selection process and biases resulted.

In Ambrose et al.'s (2005) study, the PTE process was the issue that received the most negative responses because of lack of feedback and lack of clearly outlined criteria. In

the present study, three (one NF, one NM, one SM) participants described how changes in the NDSU's PTE guidelines created uncertainty as to which criteria would be used for evaluation purposes. It should be acknowledged that participants in the present study left at varying points during their PTE process which may have influenced their views.

Additional Policies/Procedures

Additional issues pertaining to university policies, university senate, student evaluation procedures, and travel funds were also brought up during the interviews. Four (two NF, two SF) participants, all of whom were female, mentioned that university policies were hard to find, and they had difficulty finding someone who could help them locate and/or explain these policies. Three (one NF, one NM, one SM) participant voiced concerns about the administration not enforcing NDSU policies. Two non-STEM female participants felt that NDSU lacked policies which included policies pertaining to maternity leave, pay raise appeals, and workload documents. Participant NM1 felt that having a university senate prevented faculty discussions from being open due to administrative influences and that the university would benefit from the creation of a faculty senate. Evaluation measures, such as the student course evaluations, were of concern to participant SM19 who thought that these measures did not accurately measure teacher performance. Participant NM11 spoke about how he found the \$1,000 presidential travel grants to be "really helpful" for his career. These issues are addressed further in the "Recommendations for NDSU" section.

Research Question 3

How will faculty who left describe their working experience at NDSU?

In regard to faculty members' work experience at NDSU, three themes emerged: workload, workplace climate, and support.

Workload

Participants were asked to describe their work in terms of their experiences and amount of time spent on the areas of research, teaching, and service. Participants were then asked how they felt about the breakdown of their workloads. Over half of the participants (*n*=11: one NF, two SF, five NM, three SM) responded that they liked their workload percentage breakdowns of research, teaching, and service at NDSU. However, nine (four NF, one SF, two NM, two SM) participants reported that their actual workload percentages turned out to be different than their assigned percentages.

Research

Six (one NF, one SF, three NM, one SM) participants brought up successes in regard to their research while at NDSU in the forms of awards, recognition, and publication. On the other hand, 14 (four NF, one SF, four NM, five SM) participants reported that they experienced research challenges. These challenges included being isolated from research collaborators (n=6: two NF, two NM, two SM), wishing for more research time (n=5: one NF, one SF, three SM), feeling lack of departmental research support (n=5: two NF, one SF, one NM, one SM), perceiving NDSU as not valuing/supporting high quality research (n=4: one NF, two NM, one SM), researching demands exceeding allocation (n=2: two NF), having adequate research space (n=2: one SF, one SM) and struggling personally with research (n=2: one NF, one NM).

Four (one NF, two NM, one SM) participants spoke about how they perceived that NDSU did not value/support high quality research. In addition, three (two NM, one SM) of these participants felt there were differences in the research expectations for junior faculty members and senior faculty members. In addition, these three participants felt that senior faculty members at NDSU had not kept up on research and that senior faculty members' research efforts/standards were not as rigorous as the standards junior faculty members were required to meet.

Teaching

When speaking about their positions, 15 (three NF, two SF, seven NM, three SM) participants stated that they enjoyed teaching and/or working with students while at NDSU. On the other hand, two (one NF, one SF) female participants thought that teaching was challenging and/or overwhelming for them because of the lack of preparation time. In addition, two non-STEM female participants described negative team-teaching experiences such as having a co-instructor who would unexpectedly not show up for class or having a co-instructor position cut despite the need for this position. Seven (two NF, one SF, two NM, two SM) participants brought up that they taught in excess of their assigned teaching loads.

Service

When considering the service component of their positions, six (three SF, two NM, one SM) participants acknowledged that they engaged in minimal service activities.

Interestingly, this limited service includes all three STEM female participants and none of the non-STEM female participants. For five (four NF, one NM) participants, service ended up being time consuming for them due to various reasons such as being part of a small

department, having colleagues (specifically male) who would miss advising meetings, and serving as a "token" female representative. Three (one NF, one NM, one SM) participants indicated that service was expected but not part of their assigned workload.

Workplace Climate

Participants were asked to describe the workplace climate at NDSU, and both positive and negative responses were given. Positive comments were made by 15 (two NF, two SF, seven NM, four SM) of the 20 participants with six (one NF, one SF, three NM, one SM) sharing only positive views. Many of the positive comments about working in their departments were saying that they loved/liked/valued/trusted their colleagues (n=6: one SF, three NM, two SM) or related to working with good/nice/friendly people (n=5: one NF, two SF, one NM, one SM). Challenges with climate were brought up by 14 (four NF, two SF, four NM, four SM) participants with five (three NF, one SF, one SM) sharing only negative views. Seven (two NF, one SF, three NM, one SM) participants specifically talked about how there was a gap between junior and senior faculty that caused challenges in their departments. Six (two NF, one SF, two NM, one SM) participants spoke about feeling isolated in their positions because they were the only ones in their department with a specific focus. Additionally, five (one NF, one SF, one NM, two SM) other participants brought up departmental divisions of various natures due to differing views on issues. Faculty meetings were also cause for concern to four (one NF, two SF, one NM) participants as was having high turnover within departments (n=4; two NF, one NM, one SM).

When speaking about their college and the university as a whole, two (one NF, one SM) participants stated positive comments about their dean and two (NM) participants

spoke positively about the former president. Meanwhile, eight (four NF, one SF, two NM, one SM) participants stated their dissatisfaction about the administration at NDSU. Their dissatisfaction was related to administration at all levels not listening to faculty concerns (n=4: two NF, one NM, one SM), dissatisfaction with dean due to lack of assistance in resolving departmental issues (n=4: two NF, one SF, one NM), poor leadership at the departmental or university level (n=3: three NF), and presidential control (n=3: one NF, two NM).

Barnes, Agago, and Coombs (1998) found that a limited sense of community within the university and time constraints were the two factors most predictive of faculty members leaving. While participants in the present study mentioned factors related to a limited sense of community within the university as reasons they left NDSU, frustrations with time constraints were not brought up as turnover factors. Five (one NF, one SF, three SM) faculty members spoke about wishing there had been more time for research and four (three NF, one NM) said service took up a lot of their time. Because departmental conflicts and campus climate issues were reasons for turnover from NDSU, it is suggested that these factors be further examined in future retention efforts.

Support

The themes of department chairs, resources, and mentoring emerged as participants spoke about the support they received at NDSU. When the participants were asked about their view of support provided within their departments and/or college, eleven (one NF, two SF, four NM, four SM) faculty members stated that they felt adequately supported at NDSU. However, five (three NF, one SF, one NM) participants identified that they did not

feel supported at NDSU. Out of these five participants, all four of the female participants indicated that they left NDSU because of lack of collegiality.

Department Chairs

Participants were also asked about the support provided by their department chairs. Eight (one NF, one SF, five NM, one SM) participants stated that they felt that their department chairs had their back and enjoyed working with them. However, seven (one NF, three SF, two NM, one SM) participants disclosed scenarios or feelings about unsupportive actions by their department chairs. Interestingly, all three of the STEM female participants expressed concerns about their department chairs. In addition, two non-STEM female participants felt that their chair/head was not qualified. Ambrose et al. (2005) found that a department's cohesiveness can quickly break down as a result of department chairs who lack the skills to manage and communicate effectively in their positions. On the other hand, effective department chairs managed conflicts well and created a sense of collegiality within the department by being fair, consistent, supportive, responsive, and communicating well by providing feedback and mentoring their faculty members (Ambrose et al., 2005). In this study, conflicts were experienced in departments that had chair/head turnover and departments where the faculty felt the chair was ineffective. These results highlight the importance and impact of leadership on faculty turnover. In addition, chairs/heads should pay special attention to gender and diversity issues within their departments.

Resources

When asked about the support they were provided, many participants' responses involved resources. Resource allocation impacted study participants' views of support they

received. The participants who felt supported spoke about having adequate money provided for research and teaching resources (n=5: three NM, two SM), staff support (n=4: one NF, one SF, two SM), technology support (n=3: two NM, one SM), good pay raises (n=2: one NF, one SF), and travel support (n=2: two NM). Support was found lacking by faculty members who felt that they received limited resources (n=2: one NF, one SF) or did not have enough faculty members to cover their department's workload (n=2: one NF, one NM). One participant, SM19, felt that support for graduate students at NDSU was lacking which impacted research productivity. In his situation, one graduate student was shared by multiple faculty members.

NDSU's recent rapid growth is a unique aspect of the university that influenced participants' perceptions of resource allocations in both positive and negative ways. Four non-STEM male participants viewed this growth as positive because of expanding academic and sports programs. However, four (two NF, two NM) participants viewed this growth as negative and felt the university lacked the sufficient resources to support the new programs. Without increasing the number of graduate assistantships, hiring new faculty, or improving laboratory facilities and research, some faculty felt the growth created new challenges that needed to be addressed by the university.

Mentoring

Mentoring was a theme that emerged within eight (three NF, one SF, three NM, one SM) participant responses. Four (two NF, two NM) of these eight faculty members spoke about having positive mentoring. Two of these four participants, both males, mentioned they received good mentoring within their department. Interestingly, the two other faculty members, both females, who mentioned good mentoring, received this mentoring from

outside of their departments and left NDSU due to negative climate issues. This finding leads one to further question whether or not mentoring was even made available within their own departments. In addition, four (one NF, one SF, one NM, one SM) participants brought up that they were not mentored while at NDSU. Out of these four participants, three left for reasons within NDSU's control. Taking these results into consideration, one may question whether or not mentoring could have positively impacted these participants' experiences.

Research Question 4

How will their current positions compare to their former positions at NDSU?

Participants were asked to compare their former positions at NDSU with their current positions. Five (two NF, one NM, two SM) participants went on to obtain administrative positions and four (one SF, one NM, two SM) left academia. The most commonly mentioned differences between participants' former positions at NDSU and their current positions were increased research benefits (n=8: three NF, two SF, two NM, one SM), preferable geographical location (n=7: one NF, two SF, two NM, two SM), and increased salary (n=6: one NF, four NM, one SM). Many of these factors may be seen as pull factors of the subsequent institutions. However, from another perspective, they may also be viewed as push factors away from NDSU. One may question if these faculty members would have stayed at NDSU if there had been more advancement opportunities, more internal research collaboration, and more salary increases.

Study participants also brought up internal intangible benefits that were gained in their current positions. For example, three (two NF, one NM) participants spoke about faculty getting along better at their new institutions, and two (one NF, one SF) participants

commented on feeling more respect in their new positions. Also, two (one NF, one NM) participants praised the faculty governance at their current institutions. In all of these instances, these were things that the participants felt were lacking from their experiences at NDSU.

Research Question 5

Will there be differences in participants' responses based on their academic disciplines?

Xu's (2008b) findings showed patterns in turnover that emerged amongst disciplines based factors such as research funding, collaborative networks, and advancement opportunities. A pattern emerged in the present study in regard to advancement opportunities. Five of the six participants who indicated that they left NDSU due to lack of advancement or professional opportunities were from non-STEM disciplines (*n*=6: two NF, three NM, one SM). A pattern also emerged in relation to salary where both of the participants who left NDSU in part because of salary concerns were non-STEM males. Participant NM12 was the only participant who directly addressed differences based on discipline when he spoke about salary differences between STEM and non-STEM faculty members at NDSU. When describing their working experience at NDSU, two (one SF, one SM) STEM participants expressed concerns about not having adequate lab space. They also mentioned how they struggled to get and/or keep their lab space. For participant SM15, the challenges with his lab space contributed to his turnover.

Analyzing the impact of academic discipline was more challenging than expected because academic discipline appeared to be intertwined with gender-related issues.

Additional findings related to discipline and gender are explored in Question 6.

Research Question 6

Will there be gender-related differences in participants' responses?

Upon further analysis, gender differences emerged in participant responses. These differences included campus climate, mentoring, salary, community climate, and experiences of non-STEM female participants at NDSU.

Campus Climate

According to August and Waltman (2004), one of the most significant predictors of satisfaction for female faculty members was departmental climate. Ambrose et al.'s (2005) study found that approximately half of the male and female faculty members who chose to leave their positions left because of a lack of collegiality. This lack of collegiality was described as being a lack of support from senior faculty members, intradepartmental tensions created by an "old boys' network," and incivility characterized by outright hostility or back-stabbing (Ambrose et al., 2005, p. 815). However in the present study, no male participants mentioned lack of collegiality as a reason for their turnover while four of the eight female participants (*n*=4: three NF, one SF) in this study left NDSU because of climate concerns related to collegiality. This finding is significant in that it makes up half of the female participants in this study.

Interestingly, both male and female faculty members in Ambrose et al.'s (2005) study brought up the issue of an "old boys' network" (p. 815). In Ambrose et al.'s study, male participants acknowledged the benefits gained from such a network. In the present study, no male participants addressed the benefits of a male-dominated workplace but two (one NF, one SF) female participants spoke about the limitations of having few female faculty members in their departments. There may be several possible reasons that male

participants did not bring up the presences of an "old boys' network" in the present study such as not wanting to address issues, or not wanting to admit to the benefits gained. Also, these men may not have been aware of that type of network. The departmental divisions the male participants experienced may have been viewed as being between senior and junior faculty members, but since NDSU has a large number of senior male faculty members they may not have realized possible gender implications. Therefore, gender-related issues may not have been adequately addressed.

Gender-related concerns have been brought to attention previously at NDSU. Two (one NF, one SF) female participants in the present study spoke about the AAUP study by West & Curtis (2006) and Wilson's (2007) article in *The Chronicle of Higher Education*. One of these participants was NF7 who talked about how her chair discouraged her from pursuing career advancement opportunities for reasons she perceived as being due to her gender. She felt that this discouragement was rather ironic considering how NDSU's promotion of women had been called into question by these articles. Participant SF6, who also mentioned the articles and could see the impact of gender issues within her department, said the men in her department did not feel that gender was an issue that they needed to address. Two additional STEM female participants, who did not bring up these articles, also talked about how they received negative messages about the value of women from their department chairs.

Though West and Curtis's (2006) study, and Wilson's (2007) article were published before the participants left NDSU, none of the male participants mentioned either one, and only one male participant brought up a gender-related issue. Although participant SM15 did not specifically address gender issues, he did speak about the mistreatment of a female

colleague. Compared to the findings of Ambrose et al. (2005), there seems to be a lack of acknowledgement of gender-related issues by male participants at NDSU. This finding leads to the question of how gender is addressed on NDSU's campus and what improvements can be made to positively impact campus climate.

Mentoring

Participant responses in regard to their experiences with mentoring while at NDSU may lead one to question how the availability of mentors impacts faculty perceptions of campus climate. Having few female faculty members within certain departments may have impacted mentoring. Both (two NF) of the female faculty members who said they had mentors disclosed that these mentors were from outside of their departments while both (two NM) of the males reported mentorship from within their departments.

Salary

According to NCES (2009) during the 2007-2008 academic year, the average U.S. salary was \$76,935 for men and \$63,347 for women. Despite the difference in pay based on gender, none of the female participants indicated that they left NDSU because of low salaries. However, two non-STEM males stated that they left NDSU in part due to salary concerns. Surprisingly, the only two (one NF, one SF) participants who mentioned receiving good pay raises while at NDSU were females. This may lead one to question perceptions of salary based on gender and if the female participants had lower pay expectations.

Community Climate

Three (NF2, SF13, SF14) female participants spoke about the difficulties they experienced with regional and community gender expectations. These expectations

influenced their perceptions of community climate. None of the men who participated in this study commented on these types of challenges. All three of these participants, brought up that Fargo-Moorhead may have a difficult singles scene for women. Participant NF2 said her perception of Fargo-Moorhead's singles scene was that it was "pretty dismal" especially for young women. Participant SF14 felt that some of the challenges women faced while dating in Fargo-Moorhead resulted from men in the area having issues with "powerful," "ambitious," and "intelligent" women. In addition, two (one NF, one SF) female participants brought up how gender roles were influenced by regional culture. Participant NF2 talked about how she did not "fit Midwestern gender roles" which then made her feel "very alien to a lot of people" and not "what the Fargo-Moorhead community really saw as a good female professor model." Participant SF14 got the impression that "you should be married. You should have a spouse like every normal person. You shouldn't be single. Single people were not welcome and divorcees were perhaps also not so welcome." Both of these women found that these messages impacted their relationships with the people around them.

Experiences of Non-STEM Female Participants at NDSU

Through further analysis, the sub-group of non-STEM female participants were found to be overrepresented in some codes such as disclosures of negative climate, and underrepresented in other codes such as being protected from service. The non-STEM female participants, as a group, disclosed some unique issues that were not mentioned by the STEM female participants. Also, some differences in experiences emerged between non-STEM females and males. For example, none of the eight participants who were positive overall about NDSU's PTE process were non-STEM females, while two of the

three SF participants and four of the seven NM participants were positive about this process.

Additionally, out of the eleven (one NF, two SF, four NM, four SM) participants who stated they felt supported at NDSU, only one was a non-STEM female. On the other hand, three out of the five (three NF, one SF, one NM) participants who explicitly expressed that they did not feel supported at NDSU were non-STEM females. This lack of support may be attributed to negative experiences with collegiality and leadership on campus. In addition, only one of the eight (one NF, one SF, five NM, one SM) participants who were positive about their department chair was a non-STEM female. Further investigation is needed to determine whether it is the lack of perceived support that is ultimately impacting the campus climate for these participants, or whether the campus climate is impacting their perceptions of support. Non-STEM female participants also mentioned additional concerns pertaining to their workload. Only one of the 10 (one NF, two SF, four NM, three SM) participants who said they liked their workload was a non-STEM female who said she got to regularly negotiate her percentages. Though six (one SF, three NM, two SM) participants brought up liking the balance between their research and teaching, none were non-STEM females.

Though six (three SF, two NM, one SM) participants spoke about having minimal service requirements, none of them were non-STEM females. Meanwhile, all three of the STEM female participants spoke about how they had limited service obligations. In fact, four of the five (four NF, one NM) participants who said that service took up a lot of time were non-STEM females. These findings bring up some concerns about the working

experiences of non-STEM females at NDSU. Future research focusing on the differences across disciplines for female participants may be warranted.

Limitations

Limitations of this research included:

- 1. Contact information was not available for all potential participants.
- 2. Scheduling conflicts may have prevented some interviews from taking place due to the short time frame of interviews. The time frame of interviews may have also created conflicts as it occurred at the end of spring term/the beginning of summer.
- 3. Participation may have been limited due to the sensitive/personal nature of the study where fear of identification may have prevented participation.
- 4. Participant perceptions may have changed since leaving NDSU.
- 5. Tape recording may have inhibited some respondents.
- 6. Participants may have been reluctant to talk about their actual reasons for leaving.
- 7. Researcher inexperience in qualitative research.
- 8. Research being institution specific may be dissimilar to other institutions and therefore cannot be generalized.

Recommendations for Future Research

1. Research should be conducted in the form of exit interviews. Due to the challenges of locating former faculty members post-departure and in an effort to have a higher response rate, it is suggested that this type of research be continued as more of an exit interview. It is, however, recommended that the interviewer be external to the university or in a position that is separate from departmental workings in an effort to increase interviewee comfort and disclosure.

- 2. Revisions are suggested for the survey instrument. Participants should be asked in the interview whether they had another position lined up when they departed from NDSU. If so, probing questions about what influenced them to take the position should be asked. This will allow for a better understanding of the inducements that pull the faculty member away from the university. Whether the participant sought out the position or was recruited for it should also be asked as a follow up. This will serve as a gauge for how proactive the faculty member was in leaving the university.
- 3. Future analysis should be based on both gender and STEM/non-STEM status. It is suggested that these two areas be analyzed simultaneously to see if there are special interests addressed by any of the four groups (NF, SF, NM, or SM) based on their gender and academic field. This is suggested after observing in this research that NF participants seemed to be a sub-group that was overly present or absent from some themes. Further research specific to the non-STEM female sub-grouping is warranted.
- 4. Gender should be added as an internal, intangible factor to future turnover models.
 Gender is included in the job satisfaction models of Hagedorn (2000) and Olsen, Maple, and Stage (1995). However, gender as a factor has not been explicitly addressed in models of turnover though it can be implied as an internal, intrinsic factor. This research found that gender-related differences do impact faculty turnover decisions.
 Because of this, it is proposed that gender-related differences be added as an explicit element of future turnover models.
- 5. Turnover studies should be institution-specific. Ambrose et al. (2005) asserted that institution-specific research should be conducted. This research supports this claim as institution-specific themes such as NDSU growth, specific policies/procedures, and

responses related to the geographical location of the university emerged that would not be relevant for other campuses.

Recommendations for NDSU

The findings of this study have led to recommendations for NDSU.

- 1. Conducting Job Satisfaction Surveys. It is critically important to look at issues that are impacting the satisfaction of faculty members who have not left. These faculty members may be staying because of high external benefits such as connections to the community. In addition, lack of mobility may cause a faculty member to stay despite feeling low internal benefits within the university. Since these faculty members are still at the institution they are often not seen as a retention problem. but their presence can be detrimental to the university environment by impacting their colleagues' morale and ultimately the retention rates of others (Ambrose et al., 2005). Jo (2008) noted that the economy impacts employment options and decisions and when the economy is tight, faculty may be less inclined to leave their positions. Given the state of the current economy, there may not be as many job opportunities to induce faculty members to leave, thus causing unsatisfied employees to remain. The university should consider conducting job satisfaction surveys to determine if there are factors that are impacting the current faculty body who may be less mobile in the current job market. Improvements could then be made from the faculty recommendations to try and improve their satisfaction so that they do not have factors at NDSU pushing them to seek other positions.
- 2. Conducting Exit Interviews. In addition to surveying current faculty, exit interviews may be of value to the university. By interviewing faculty members as they leave,

the university may be able to get a higher response rate and find out the factors influencing faculty members while their NDSU experience is fresh in their minds. Jo (2008) suggests monitoring turnover rates by unit and conducting analysis to identify reasons so that potential problems may be targeted and addressed. Unfortunately, one drawback of doing the interview at time of exit is that the faculty member would not be able to compare NDSU to their next employer. In this study, three faculty members believed that administration personnel changes would benefit the university. A new university president was hired while interviews for this study were being conducted. Additionally, the provost and a dean stepped down in the fall of 2010. In future exit interviews, it will be interesting to hear faculty members' views of the new administration and if the changes in leadership had positive impacts in regard to the concerns brought up by faculty members in this study.

3. Increasing Faculty Governance. Having more faculty governance at NDSU was of importance to three participants, along with the recommendation that administration listen to and address faculty concerns (n=3). Rice and Austin (as cited in August & Waltman, 2004) found, "Morale is highest when faculty members participate in governance and decisionmaking" (p. 179). In an effort to increase faculty satisfaction and retention it is suggested that efforts are made to increase faculty participation/representation in university decision making. A recommendation by participants of this study was for NDSU to have a faculty senate instead of a university senate so that faculty can debate without administrative interference.

Since the participants in this study left NDSU, the university has transitioned from

having a University Senate to having a Faculty Senate. Listening groups were also were implemented at NDSU in the fall of 2010 to start dialogues and engage the campus community. Efforts should be made to increase faculty member involvement in major departmental decisions in order to garner additional viewpoints and to help create investment.

- 4. Strengthening Post-Tenure Reviews. Three faculty members felt that post-tenure reviews needed to be strengthened. Strengthening these reviews could help promote overall productivity and departmental relationships between junior and senior faculty members.
- 5. Improve Student Evaluation Measures. Improving student evaluation measures was another suggestion made by a faculty member. He suggested reevaluating the student evaluation forms so that assessment focuses on teacher performance and student learning rather than subjective variables. NDSU is currently planning to pilot a new set of questions that contain less bias when assessing instructor performance.
- 6. Creating a Collegial Atmosphere. Reducing conflict and promoting teamwork should be priorities of department chairs because work relationships with colleagues and supervisors have a major impact on job satisfaction (Volkwein & Parmley, 2000). Highest priority should be placed on the university improving internal issues such as creating a collegial atmosphere (Ambrose et al., 2005). Because departmental climate/conflicts and leadership actions/changes are internal intrinsic factors that influence morale and were found to impact turnover, it is suggested that actions be taken to address these concerns. Hiring

administrators/department chairs who are committed to creating positive working environments and assisting department chairs in creating positive departmental climates should be a priority to the university. Faculty members suggested that this be done by having professional development for chairs (*n*=3), through departmental teambuilding (*n*=1) or by having a rotating chair system (*n*=1). In response to the findings of this study, it may be of value that some of their chair/heads trainings focus on best practices for supporting faculty members, creating a positive work environment, and addressing climate issues. These actions could benefit morale and lead to greater job satisfaction amongst faculty members. FORWARD had a series of department chair trainings that was implemented in the fall of 2010 that addressed some of these issues. One of these trainings included conflict resolution and effective communication.

7. Providing Resource Support. Another specific focus for chairs/heads that may be addressed is how to work with faculty members to assess their resource needs and discuss allocation possibilities and challenges. Rosser (2004) acknowledged that providing funding for faculty members' professional development can be an important factor leading to their retention because of increases in satisfaction and morale that these professional activities provide. Providing adequate support services can also increase morale and job satisfaction. These services may include office support, material availability, and additional graduate assistant support (Rosser, 2004).

One faculty member also mentioned appreciation of the \$1,000 yearly travel grants provided by the university. Unfortunately due to financial constraints, this

travel award program ended in January of 2010. Because of the positive benefits of this type of grant to both the faculty member and the university, it is recommended that support of these grants be reestablished if financially possible. Additional types of support that could be considered in order to increase research productivity may include having additional staff members dedicated to helping faculty members obtain grants, increasing graduate assistant support, and reducing service and teaching requirements. Increasing student recruitment support may also be a valuable benefit that NDSU can consider providing faculty members since four faculty members brought up struggles they encountered in this area.

8. Providing Mentorship. Mentoring was an area that several faculty members mentioned was lacking at NDSU. Four female faculty members in this study spoke about how they felt NDSU policies/procedures were hard to find. Mentors may have assisted these faculty members in locating the information they were seeking. Taking a look at how the mentoring system is structured could greatly help some of the challenges described by faculty members who did not feel mentored.

FORWARD has implemented a cohort mentoring program for all incoming faculty. This program is comprised of three new faculty members and two senior faculty members who meet as a group. It is a structured mentoring program with materials and topics provided to the facilitators. Formerly, the program was set up as a one-on-one program lasting six months, but now is a three year cohort program. The program is assessed yearly, and changes are made based on feedback.

9. Assist Networking. NDSU could help increase faculty members' satisfaction by providing opportunities for campus and community networking. One faculty

member suggested that the university organize activities for new faculty members to help them get to know each other. Currently, FORWARD has plans to initiate a networking program. Other suggestions that were similar to findings by Ambrose et al. (2005) were helping with job placement for spouses/partners and assisting faculty members in finding opportunities to become involved in the community. Due to the possibility of challenges with spousal hires in academia, it is suggested that NDSU develop alliances with nearby universities to help attract and keep faculty in the area.

- 10. Provide Competitive Compensation. Two non-STEM male faculty members recommended that NDSU pay market salaries to their faculty members.
 Counteroffers may help the university retain faculty members who are considering other opportunities. NDSU should continue to be diligent about their lobbying efforts at the state level to ensure competitive salaries.
- 11. Enact a Maternity Leave Policy. Though the policy did not directly impact her, one female faculty member brought up the need for a maternity leave policy at NDSU. Due to the potential impact on faculty members of both genders, it is suggested that this type of policy be examined and pursued. Currently, the Commission on the Status of Women Faculty is looking at creating a university-wide policy regarding maternity leave and modified duties. Modified duties may apply to instances such as being physically impaired, caring for a family member, and being home before school-aged children.

Conclusion

As Xu (2008b) pointed out, turnover studies such as the present study are not a means of eliminating turnover, but rather a means of promoting ways to create a healthier university environment, enhance the reputation of the institution, and minimize the cost of losses for both individuals and the university. Some faculty members will end up leaving despite experiencing high internal and external benefits in their positions. These departures often take place when an offer that is too good to turn down is made or family reasons mandate a move (Ambrose et al., 2005). When this occurs, faculty members leave with positive memories of the institution and share those impressions with others which help create a healthy flow of faculty among universities (Ambrose et al.). Unfortunately in the present study, 18 participants left solely or in part because of intangible internal factors within NDSU's control. Most notably, half of the female participants (n=4) said they left because of climate issues. Taking these findings into consideration, NDSU should continue to explore ways to improve faculty members' experiences that are within the university's control. By focusing on improving internal benefits, NDSU may be able to increase faculty member satisfaction and retention.

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APPENDIX A.

FORWARD OVERVIEW

NDSU Advance FORWARD

Focus On Resources for Women's Advancement, Recruitment/Retention, and Development

An Institutional Transformation Project Funded by the National Science Foundation

The Advance FORWARD project, funded by NSF beginning in Fall 2008, was developed in response to 1) research on the campus climate conducted at NDSU over the past several years; 2) the compilation and analysis of institutional data on the recruitment and retention of women faculty, and 3) the obvious scarcity of women in academic administrative roles. The research results and institutional data are available on the FORWARD web site along with the complete proposal.

The five goals of Advance FORWARD address the findings of this research and institutional data analysis:

- Improve the climate across the campus;
- Enhance recruitment of women faculty in STEM disciplines by employing targeted recruitment strategies;
- Increase retention of women faculty in STEM disciplines through the probationary period and the promotion/tenure process;
- Promote/advance women associate professors in the STEM disciplines; hire women at advanced rank to build a critical mass of senior women in STEM departments; and
- Create leadership opportunities by promoting and hiring women into academic leadership positions.

Advance FORWARD includes three major components:

Campus Climate

Advancement/Leadership

Research

http://www.ndsu.edu/forward

The Advance FORWARD organizational structure reflects the relationship of these three components to the overall project:

To achieve the project goals, the campus climate and advancement/ leadership components provide professional development mentoring for women faculty - both junior and mid-career, workshops for academic administrators and faculty on climate issues, and the development of men as advocates and allies. Within all three of these components there are specific, funded incentives to support change efforts. The project also includes the creation of a Commission on the Status of Women Faculty, appointed by the Provost who is also a member. This group will monitor measures of change and propose policies to support the goals.

The **research** component is a particularly significant aspect of the project designed to assess if and how the incentives and programs lead to the achievement of the goals and, ultimately, to institutional transformation.

ndsu forward@ndsu.edu

Implementation Group R. Craig Schnell Academic Deans, Department Provost/P! Chair Chairs/Heads Commission on the Status of Women Faculty NDSU Advance FORWARD i FORWARD SÜLCUS Project Staff Internal Advisory Board **External Advisory Board** Executive Steering Committee Campus Climate Advancement/Leadership Research · Faculty recruiter Mid-career mentoring Unstructured spaces Allies/advocates program program · Interventions into climate Gender/equity awareness Cohort mentoring program · Programs to recruit, retain, Professional development education/training for and advance grant programs Academic administrators · Role of critical mass in Course release Faculty Lean · Grant programs Gender and productivity Leadership development Climate/gender equity Travel Mentoring and reverse research mentoring · Department climate initiative Women in leadership. Dissemination Activities FORWARD Team NDSU Administration External to NDSU External Evaluator FORWARD Administrati

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North Dakota State University, Fargo

APPENDIX B.

SCRIPTED INITIAL CONTACT

"Recruitment Phone Script"

My name is Rachel Benz. I am a	graduate student in the Counselor Education program at

Hello Dr.

NDSU. I am conducting research for my thesis on the reasons why faculty members leave NDSU. The purpose of this study will be to see if there are things within the university's control that could increase faculty retention. Is this a good time to talk?

I would like to invite you to participate in this research study. Interviews for this research will take place by phone and will be digitally recorded. To help ensure confidentiality of participants, interviews will take place from a private residence. The audio interview files and original transcripts will be securely stored in this residence. It will take approximately 20-60 minutes to answer my questions.

I will be the only person who has access to the recording of your interview and once I create a written record or transcript of the interview I will delete the audio file. All identifying information will be removed from interview transcripts except for your gender and STEM/non-STEM status.

Your verbal agreement will indicate your consent to participate in this interview. Your participation is entirely voluntary, and you may stop the interview at any time or chose to not answer a question. Reports created to summarize this research project will include themes and the themes will be illustrated by quotations from the interview transcripts. All quotations will not contain identifying information beyond your gender and STEM/non-STEM status.

If you would like to review the interview questions ahead of time please let me know. I cannot offer any compensation, but your participation will be helpful in understanding the reasons for faculty leaving NDSU.

If you have any questions about this project, please contact me at 701-388-6143 or at Rachel.Benz@ndsu.edu or Dr. Carol Buchholz at 701-231-7103 or Carol.Buchholz@ndsu.edu. If you have questions about the rights of human research participants or to report a problem, contact the NDSU IRB Office at 701-231-8908.

I would appreciate a response of participation or decline by <u>DATE</u>. If you are willing to talk with me, will you please let me know the best time(s) to get in touch with you? What is the best phone number to contact you at? Would you like me to send you an electronic copy of the information covered in this phone call? If so, what is your e-mail address? Do you have any questions regarding participation in this research?

Thank you for you time!

"Recruitment E-mail"

North Dakota State University School of Education Dept. 2625 1919 N. University Drive, SGC C120 P.O. Box 6050 Fargo, ND 58108-6050 (701) 231-7103

NDSU Faculty Turnover Study

Dear	Dr.	

My name is Rachel Benz. I am a graduate student in the Counselor Education program at NDSU. I am conducting research for my thesis on the reasons why faculty members leave NDSU. As a former faculty member you will able to provide insight into these reasons. The purpose of this study will be to see if there are things within the university's control that could increase faculty retention.

I would like to invite you to participate in this research study. Interviews for this research will take place by phone and will be digitally recorded. To help ensure confidentiality of participants, interviews will take place from a private residence. The audio interview files and original transcripts will be securely stored in this residence. It will take approximately 20-60 minutes to answer my questions.

I (Rachel Benz) will be the only person who has access to the recording of your interview and once I create a written record (i.e., transcript) of the interview I will delete the audio file. All identifying information will be removed from interview transcripts, except for your gender and STEM/non-STEM status.

Your verbal agreement will indicate your consent to participate in this interview. Your participation is entirely voluntary, and you may stop the interview at any time or chose to not answer a question. Reports created to summarize this research project will include themes and the themes will be illustrated by quotations from the interview transcripts.

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I would appreciate a response of participation or decline by <u>DATE</u>. If you are willing to talk with me, will you please let me know the best time(s) to get in touch with you and the best phone number to contact you at?

Thank you for your consideration, Rachel Benz