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Work life balance and job satisfaction among faculty at Iowa State University

by

Farah Mukhtar

A dissertation submitted to the graduate faculty in partial fulfillment of the requirements for the degree of DOCTOR OF PHILOSOPHY

Major: Education (Educational Leadership)

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Ames, Iowa

2012

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ABSTRACT

This study utilized the existing database from the Iowa State University 2009-2010 COACHE Tenure-Track Job Satisfaction Survey Report to explore faculty work life balance and job satisfaction among academic disciplines at Iowa State University. The articulation of work and life, cast as work life balance, has become a key feature of much current government, practitioner and academic debate (Eikhof, Warhurst, & Haunschild, 2007). It is believed that balancing a successful career with a personal or family life can be challenging and impact on a person's satisfaction in their work and personal life's roles (Broers, 2005).

This research sought to determine if: (a) work life differs by academic discipline group: (b) job satisfaction differs by academic discipline, and (c) there is a relationship between faculty work life and job satisfaction and whether this relationship differs by academic discipline group, and (d) if academic discipline has a unique effect on faculty work and life balance. In addition to exploring academic discipline, job satisfaction, and work life balance, this study used gender, age, salary, race, rank and professional experiences as control variables. The study employed exploratory factor analysis (EFA), confirmatory factor analysis (CFA), *t*-test and multiple regressions. Participants for this study included 143 tenure-track faculty members.

Results indicated that the work life balance and job satisfaction has no significant among academic disciplines at ISU. However, the results indicated that there is a significant relationship (r = .595) between work life and job satisfaction. When controlling for demographic and professional experience, the result also indicated that age and climate, and culture were significant predicators for work life balance. The results also showed that

female faculty have lower job satisfaction. Age and climate, culture, and collegiality were also found to be predicators for job satisfaction. The results also indicated that the level of job satisfaction was lower for hard pure disciplines as compare to soft pure disciplines.

The findings of this study provide valuable insight for educators and policy makers who are interested in factors that contribute to work life and overall job satisfaction among academic disciplines at a large research institution in Midwest. Limitations, conclusions, and recommendations are discussed.

CHAPTER 1. INTRODUCTION

In every workplace, the metrics of quality and performance are usually developed according to the potential of each individual or team, which are ultimately translated as their association, dedication or passion for the work or the incorporating workplace. However, this might not be the case at all when the way each individual performs his or her activities depends primarily on how he or she creates a balance between the household and workplace, while also facilitating the factor of quality within both premises and domains. In real working environments, however, the later perception is rarely maintained, which is the reason human resources are rarely utilized effectively.

This viewpoint and its surrounding theories have long allured researchers and investigators from both academic and corporate domains who have conducted extensive research to find or confirm a link or bond between the performance of an individual and performance of his/her organization along with the relationship of the balance that he/she has created between corporate and social life. Taking this concept to a higher level, it is yet to be verified how working individuals react when the size and type of organization changes (i.e., factors which are proportional to the significance [or value] of each individual decreases, increasing the competition and elevation of performance threshold associated with each individual). More specifically, when the workplace is more of a non-profit organization with a large human resources infrastructure and less concentration on financial productivity, these metrics do vary greatly.

In modern Western society, the concept of work life balance is an often discussed, yet frequently elusive, ideal. Typically, many individuals assume balance is a gendered concept



(Aburdene & Naisbitt, 1992; English, 2003; Goode, 1960; Stephens, 1994) that applies only to women. Recently, several studies have revealed that the construct applies to professionals of both genders and at various levels of their professional careers (Armour, 2003; Blair-Loy, 2003; Byalick & Saslow, 1993). For many individuals—women and men alike—work life balance has become the proverbial "brass ring" for which they strive in their efforts to balance family, work, and personal interests. Nevertheless, work life balance is not simply essential for the health and well-being of individuals, but is also cost-efficient and stability-enhancing for institutions and work-environments (Perrons, 2003).

Work life balance has always been a concern of those interested in the quality of working life and its relation to broader quality of life (Guest, 2002). The concept of work life has been abstracted from the job satisfaction level of an employee, which is an extrinsic factor of job satisfaction. It aimed to provide quality of life for an employee at the same time retaining the productivity levels of an employee at the work place.

The balance work life score provides an organization with a productive and innovative employee (Greenhaus, 2003), whereas disparity in the work life balance tends to develop depressed and dissatisfied staff (Kofodimos, 1993). Hammig and Bauer (2009) investigated and discovered that when work-life imbalance and mental health issues developed in males as well as females, they tend to develop further issues such as negative emotions, depression, low energy, pessimism, fatigue and sleep disorders. August and Waltman (2004) identified that the job satisfaction of female employees is related to the environmental condition, departmental climate, and demographics of the organization in which they used to work. Carlson, Derr, and Wadsworth (2003) investigated the effects of internal career orientation on multiple dimensions of work-family conflicts. Their study

identified that the employees who had vast experience working in their careers tend to have had more work-family conflicts. The idea of work life balance may be approached directly with tips and tricks to improve multitasking or with suggestions to shave needed minutes from often-mundane responsibilities (Blanchard, Blanchard, & Edington, 1999; Fanning & Mitchener, 2001; Johnston & Smith, 2001; Merrill & Merrill, 2003).

According to Hagen (2002), universities are the largest "knowledge-based" institution in the region; hence they are urged by the industry and policy makers to transform their traditional roles of teaching and research by adding an additional pivotal role in economic regional development. This means that university academics are expected to aid economic regeneration by disseminating their knowledge and expertise through industry linked partnerships. However, each party (e.g., government, policy makers, university management and society) should know that too many demands on academic staff could contribute to uncertainty in terms of academic roles and work conflicts among them. Multiple workplace roles by university academics alongside organization and community pressures are likely to be viewed by the academics as significant triggers that influence their state of perceived work-life balance satisfaction which in turn influences their occupational attitudes such as job satisfaction, organizational commitment and intention to leave the organization.

Statement of the Problem

The articulation of work and life, cast as work-life balance, has become a key feature of much current government, practitioner and academic debate (Eikhof, Warhurst, & Haunschild, 2007). It is believed that balancing a successful career with a personal or family life can be challenging and impact on a person's satisfaction in their work and personal life's

roles (Broers, 2005). Dundas (2008) argued that work-life balance is about effectively managing the juggling act between paid work and all other activities that are important to people such as family community activities, voluntary work, personal development and leisure and recreation. The ability to balance between workplace's needs and personal life's needs is perceived as an important issue among workers globally and academics in higher education institutions were not excluded (Mohd Noor, Stanton, & Young, 2009).

Work life balance has been studied within the context of business, for-profit organizations (Blair-Loy, 2003; English, 2003; Stephens, 1994). It has also been explored within higher education organizations (Johnsrud & Rosser, 2000). Work life balance is even a weekly column in *The Chronicle of Higher Education*. Within higher education, many distinct subpopulations might be explored through a work life balance lens: from adult students to tenured faculty members, student affairs professionals to student athletes.

When identifying a subpopulation through which to explore the work life balance phenomenon, consequently, I selected college tenure-track faculty; that is, people who are the college faculty on the tenure-track who are affected by their perception of the values and rewards in their workplace, and the supportive environments promote faculty satisfaction. This study sought to identify how work life balance is achieved or not achieved in their lives and how higher education and the development profession can help to minimize competing demands on them and increase their job satisfaction among academic disciplines.

Not all higher education institutions display the same characteristics regarding size, governance, and myriad other criteria. As will be apparent in the literature review, a number of studies have been conducted concerning work life balance within large, multi-dimensional organizations. Consequently, it is determined that exploring work life balance in multi-

dimensional higher education organizations would enable the researcher to utilize and draw upon the existing literature base. Using the Carnegie Classification of Institutions of Higher Education system developed by the Carnegie Foundation for the Advancement of Teaching, Iowa State University was selected as one of the Research Extensive Institutions (formerly referred to as Research I Institutions) as they were determined to be the most complex organizational type (Carnegie Commission, 2005). Additionally, as there are fundamental differences in development work between public and private institutions of higher education, this study focused solely on one public institution. Therefore, this research project focused on the work life balance of college faculty member and their job satisfaction at public Research Institutions across academic disciplines.

Purpose of the Study

The purpose of this study was to investigate the relationship of work life balance and job satisfaction of tenure-track faculty. The ISU 2009-2010 COACHE Tenure-Track Faculty Job Satisfaction SurveyTM was used to explore the relationship among variables such as demographic and professional experiences among academic disciplines at Iowa State University.

Research Questions

The following research questions guided this quantitative research study:

- 1. To what extend does the faculty work life balance differs by academic discipline?
- 2. To what extend does the faculty job satisfaction differ by academic discipline?
- 3. What relationship exists between work life balance and job satisfaction among faculty at ISU?



- 4. After controlling for demographic and professional experience, does academic discipline have a unique effect on faculty work life balance?
- 5. Controlling for relevant variables, are there any differences in terms of job satisfaction on faculty life balance (WLB) across academic disciplines?

This research sought to determine whether work life differs by the academic discipline group, whether job satisfaction differs by academic disciplines, if there is relationship between faculty work life and job satisfaction, and if this relationship differs by academic discipline group, and whether academic discipline has a unique effect on faculty work and life balance. In addition to exploring academic discipline, job satisfaction, and work life balance, this study used gender, age, salary, race, rank and professional experiences as control variables.

Theoretical Framework and Perspective

Theoretical evidence supports the relationship between work life benefits and commitment to the organization. Both Frederick Herzberg's (1987) motivation-hygiene theory, discussed in a reprint of his original 1968 article, and George Homans's (1958) social-exchange theory helped to explain the relationship between nonmonetary benefits and organizational commitment. In the practical application of both motivation-hygiene theory and social-exchange theory, organizations that provided nonmonetary benefits may experience outcomes such as reduced turnover or greater employee commitment.

Herzberg's (1987) motivation hygiene theory of job satisfaction offered a rationale as to why employees may be more productive, creative, and committed to their employer when they work in an environment that promotes job satisfaction. Guided by the two premises that



the opposite of job satisfaction is not job dissatisfaction, but rather no job satisfaction, and similarly the opposite of job dissatisfaction is no job dissatisfaction, Herzberg developed a that employed a list of factors he believed are inherent to either job satisfaction or job dissatisfaction.

Research Model

To conceptualize the research questions in this study, a conceptual model was developed (see Figure 1). The model illustrates the hypothetical relationship between academic disciplines, job satisfaction, and work life balance. "A" represents the influence work life balance has on job satisfaction, "B" represents the influence academic disciplines have on job satisfaction, and "C" indicates the influence academic disciplines have on work life balance. In sum, the model assumes academic disciplines directly and indirectly influences work life balance and job satisfaction.

Delimitations and Limitations

The internal and external validity threats to the COACHE Tenure-Track Faculty Job Satisfaction Survey are those common to most standardized survey and include events occurring before or during the survey administration, the instrument itself, and the experimental procedures. Of particular concern, and a threat to internal validity, was the sheer size of the survey, which included nearly 51 questions or sub-questions and took about 30 minutes to complete. The length of the survey and time required to complete it had the potential to influence how participants reacted to the task and could have influenced their responses.

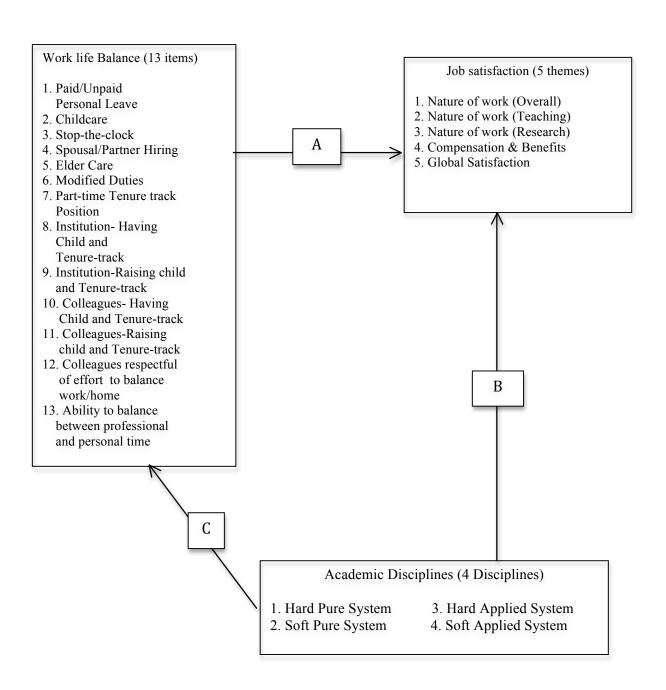


Figure 1.1. Conceptual model of the interplay among work life balance, job satisfaction, and academic disciplines

Another limitation is the cross-sectional design of the analysis. The COACHE survey examines job satisfaction of pre-tenure faculty at a specific time and does not necessarily capture how their satisfaction with the variables includes changes over time. A longitudinal study would capture this evolution.

While there are always potential threats to the validity of a study, this study utilized a secondary analysis of existing data. The reliability and validity of the survey and survey administration were assumed based on the reputation of the researchers who designed the instrument and the institution they represent.

Significance of the Study

The significance of this quantitative research project is notable since little research exists concerning work life balance among faculty at higher education institutions. This research may also yield some discoveries concerning individuals' abilities to achieve work life balance while managing a career as an institutional advancement professional. This information may encourage changes in policy and practice within their workplaces or those of other institutions. Additionally, as turnover of staff in the advancement profession continues to be a problem (Collins, 2002), it was hopeful that the study of university faculty identifies reasons why staff leave their positions and reveals some strategies to reverse the trend.

Several groups may be interested in the results and conclusions of this research study. They include institutional such as Collaborative on Academic Careers in Higher Education (COACHE) and the university Institutional Research (IR), individual advancement offices interested in achieving higher levels of employee retention, institutional advancement hiring

officers, and other development professionals who are striving to achieve work life balance in their lives. Further, this research study may be of interest to those exploring work life balance dimensions and theory.

Definitions of Key Terms and Acronyms

This section provides definitions for key terms and acronyms used in this study. Some terms are used interchangeably throughout the dissertation, and these are also noted here.

COACHE: Collaborative on Academic Careers in Higher Education, Harvard School of Education.

Job satisfaction: directly linked to an individual's happiness, and there is a positive relationship between job and life satisfaction (Kornhauser, 1965).

Work life balance: the degree to which an individual is able to simultaneously balance the temporal, emotional, and behavioral demands of both paid work and family responsibilities (Hill et al., 2001).

Dissertation Organization

Chapter 1 provided a background of the study. Chapter 2 explores in greater depth the literature on faculty work and life balance, job satisfaction in higher education. Chapter 3 outlines the research design, presents research model, describes the study's data and variables in depth, outlines the data analyses used, and presents limitations to the study's design. Chapter 4 provides details of the results of the statistical analyses for each of the study's research questions. Finally, Chapter 5 summaries the findings and discusses implications of the study.



CHAPTER 2. LITERATURE REVIEW

This chapter identifies available and relevant literature from a variety of sources. The review begins with a discussion of literature that relates to the various factors that contribute to work and life balance. Next is a discussion of faculty work and life balance and how it can contribute to the overall faculty job satisfaction and organizational commitment. Last is a discussion of the impact of organizational and academic culture at different academic disciplines.

Introduction

Work life balance is the phenomenon of striking an ideal balance between the professional life of an individual and their personal life with all of their respective associations (Clark, 2000). The level of importance being given to this phenomenon these days is because of the harmful results brought about because of the severe lack of this phenomenon. According to the research paper, *Is Happiness Relative?* an effective work life balance makes a person happier and more content (Veenhoven, 1991). This contentment leads people to maintain the level of hard work they put in their respective careers and remain satisfied. While the researcher does not imply that working harder to achieve more milestones or the thirst to advance is harmful, through careful observations it has been revealed that in their higher ambitions to achieve more, people put forth extreme efforts which reduces the level of satisfaction they used to experience before because their working time has increased and they have lost a health work life balance. Coupled with the increase level of stress experienced by the majority of professionals in every field according to the latest studies (Beehr & Newman, 1978), the need becomes evident there is a need to want to

know what is the importance of integrating work life balance into our lives. Thus it is widely accepted that considering maintaining work life balance in all of one's affairs is the current need of the hour. To paint a more attractive picture, the various benefits of work life balance are provided in the next section.

Work life Balance

To provide a more appropriate context to place work life balance, the U.S. Bureau of Labor Statistics (Clarke, 2001) categorized five key trends that will affect individuals and workplaces during the 21st century. Among these trends was the movement to accomplish work life balance. The Bureau of Labor Statistics asserted that the changes in traditional gender roles, coupled with dual career families and single heads of households, have exacerbated the lack of balance. Among the statistics cited were that 87% of individuals would work harder for companies that would assist with work/family issues. Recent census statistics show two career families are 64% of the population, and single-parent families account for 27%. Two career families and single parent families accounted for 91% of the U.S. workforce.

The issue of work-life balance has been a constant topic of debate in both academic and professional circles for the past three or four decades. However, according to Kersley et al. (2005) the issue has not been integrated fully or correctly in most of the major corporate circles due to the ever-changing business dynamics of these days. The concept of work-life balance deals with finding the ways of balance that an individual creates between competing demands of work and home, i.e., how individuals do or should fulfill their employment-related and personal responsibilities in such a way that an overlapping situation is not created

(Konrad & Mangel, 2000; Estes & Michael, 2005). Since it is a very wide domain of study, therefore, researchers have tried investigating it under different scopes, including information systems (Frolick et al., 1993), gender-based study paradigms (Nelson et al., 1990; Wayne & Cordeiro, 2003), business management (Konrad & Mangel, 2000), psychology (Hegtvadt, et al. 2002), sociology (Glass & Estes, 1997) and most notably in human resource management area (Hill et al., 1989; De Cieri et al., 2005). More importantly, since technology has paved ways for telecommuting and freelancing modes of employment, which literally has proven many earlier assumptions as invalid related to this area of human sciences (Rapoport et al., 2002).

Additionally (like other subjects dealing closely with human activities), there is no one universal definition of what constitutes or develops a work-life balance practice for an employee and the term usually refers to either benefits given by employers, remote working or flexible working options, over-time options, leaves and vacations, job-sharing options, employees' family health options, and other benefits or bonuses that are additionally given by employers to make sure of employee's mental, spiritual and physical well-being (Estes & Michael, 2005; Perry-Smith & Blum, 2000). The rationale for supporting such activities is usually linked with the assertion that there is a link or relationship between work-life balance of an employee and organizational effectiveness and workplace dynamism (Allen, 2001; Shepard et al., 1996).

Some of the investigations suggest that work-life balance of an employee's induces an element of performance within their respective organizations; however, there is no particular generalization presented yet about how this is done (Allen, 2001). For example, it has been found that work-life balance of employees contributes positively towards reducing

work load per head within the organization (Allen, 2001), increased productivity of workforce (Clifton & Kruse, 1996; Wise & Bond, 2003), and helps developing an aspiring and motivational organizational culture where workforce is not exhausted and extra work is not considered as 'load' (Allen, 2001). Similarly, in contrast to ideal settings, a work-life conflict arises when an employee is not able to make justice with either or both domains of his/her life i.e. work and home. The resulting situations in this case include (but not limited to) lower job satisfaction or contempt (Burke & Greenglass, 1999), less dedication and commitment towards work and organization (Frone, Yardley, & Markel, 1997), random schedule and absenteeism (Allen, 2001; Anderson et al., 2002), decreased workplace performance and contribution (Wayne et al., 2004; Estes & Michael, 2005), biological dysfunctions and psychological stress (MacEwen & Barling, 1994) and lower socialization trends (Frone et al., 1996; Taussig & Fenwick, 2001). These results reflect a negative contribution in organizational performance, which slows down and disturbs the process of development within workplace.

In a broad integration of theory, practice, and circumstance, as well as the multiple angles through which the problem can be viewed, Thompson et.al. (1999) also examined the concept of work life balance. They articulated the main definitions of the concept and discussed the inherent role conflict of managing multiple roles. Thompson et al. outlined three main types of conflict: "(a) time-based conflict—which priority, work or life, receives the most attention, (b) strain-based conflict—the personal understanding and emotional (internal) strain between work and life, and (c) behavior-based conflict—the process of choosing one type of priority over the other" (p. 182). In addition to the conflict theories for work life balance, they recommended coping strategies for achieving balance by "modifying

the stressful situation, changing the meaning of the stressful situation, managing the symptoms of stress, reactive coping (trying to do it all), and obtaining support from friends, family, co-workers, and others" (p. 182). Thompson et al. also presented strategies for policy development for companies including time-based strategies, information-based strategies, money-based strategies, and direct services. In addition, they discussed information concerning both the formal and informal barriers to work life policy within organizations and the strategies to overcoming these barriers.

Although these are assumptions from practical studies (apart from mere theory) but there also exists a school of thought, which asserts that work-life balance is not always associated with positive organizational performance. For example, according to Judge et al. (1994) increased work-life balance may contribute to the organization much more than it contributes to the life of an individual, and as a result of this, the performance level of the working employee remains stagnant and static. This is definitely not the perceived goal of any organization practicing work-life policies, and every management requires an everincreasing performance outputs from their employees. Similarly, researchers like Galinsky et al. (1993) and Premeaux et al. (2007) failed to reveal a significant relationship between work-life balance of employees and performance of their respective organizations. These studies were conducted in almost identical settings, which reflected a positive relationship between two phenomena, e.g., compare research settings of Premeaux et al. (2007) and Allen (2001). Similarly, studies conducted by Frye & Breaugh (2004) and Goff et al. (1990) yielded same results, i.e., no relationship between two phenomena. These assertions indicate that the issue of work-life balance is not always applicable and verifiable under the light of

organizational performance, but one generalization is quite resonating that it definitely works towards increasing employee satisfaction, contempt, and positive job attitude.

According to McGinnis (1997), there are various benefits of maintaining a healthy balance between one's work and life. When all aspects are given attention they receive their due importance, and this exchange provides us with a feeling of fulfillment, which culminates in overall satisfaction. As revealed through the work of Motowidlo, Packard, and Manning (1986), it is a common sight that unsatisfied employees have trouble maintaining the quality of their work since they lack fulfillment of purpose. This increases their levels of stress as well as anxiety. On the contrary, a satisfied individual is likely not to be stressed out by work that also helps them in maintaining its quality. Thus satisfaction can be referred to as an effective benefit of work life balance in place.

Academics

The difficulties of balancing between work and family have become one of the issues among the scholars. In order to balance work and family life, women and men have developed ways to navigate the spheres of work and family. Much of this literature focuses on the difficulties of balancing both work and family. As Hertz's (1986) study revealed, contemporary dual-earner couples have challenges different from the traditional ideal marriage. "Work and its rewards still shape a couple's life chances; but instead of being a single career or job defining marital roles, there are two careers, qualifying each spouse as a breadwinner" (p. 31).

Faculty members' professional and institutional work life and satisfaction can be examined through various theoretical and substantive conceptualizations, and there is a

substantial amount of research that presents numerous definitions and aspects that comprise faculty members' work and what satisfies them. These varying aspects of faculty members' work life and satisfaction can also be perceived and interpreted differently by researchers, as well as the faculty within the institutions and disciplines they work.

Many men and women have developed ways to navigate the sphere of work and family. There are several studies focused on these arrangements. Many have found a gender difference in work/family balance issues. As Reynolds (2005:1326) contended:

Women prefer to work fewer hours whether their personal or family lives interfere with their paid work or paid work interferes with their personal or family lives. Men in contrast, only want to increase or decrease their work when work interferes with their family lives. These results may help explain why women are more likely than men to actually reduce their work hours to accommodate family responsibilities. (p. 1,326)

Colbeck's (2006) study of "13 faculty members from two research extensive universities" (p. 37) from varying departments also found a gender difference in how men and women balance work/family issues. Colbeck found that "male participants spent somewhat more time on work and less time on personal activities than the female participants, [for women] their work and family roles were not mutually exclusive" (p. 45).

Although both men and women have to balance work and family, Philipsen (2008) contended that women "are asked to make choices, furthermore, their male counterparts hardly ever have to make, namely the choice between family and work" (p. 33). Altucher and Williams (2003) noted, "Although most people say they want children, more and more women are remaining childless or postponing having children" (p. 51). They also posited:

Structural lag in the hidden infrastructure of work and career paths is most evident among those struggling to have a family because of institutional arrangements have failed to accommodate the realities of women and couples in the work forces. These people are attempting to find individual solutions to



something that is not easily addressed on an individual level. Because as a society we tend to view family as a private matter to be resolved by each family alone, a lag occurs between public conceptions of what the family could be and the existing realities with that each family must struggle. (p. 58)

Apart from the aforementioned revelations, timing of having children is an important issue for academics, especially for the tenure-track faculty. Mason (2009) asserted:

The fear of failure influences many female academics to delay starting a family until after they have earned tenure. That same fear influences other women to avoid the tenure track entirely and decide that they must choose family over career. (p. 1)

Some women found waiting until after tenure was problematic as one faculty member commented that "the timing of the tenure clock is just 'really crappy for a woman's biological clock" (Philipsen, 2008, p. 51). As Patterson (2008) explained, "time and biology are the uncontrollable culprits" (p. 16). If the tenure clock is seven years, once tenured for a women "the risks associated with pregnancy become higher" and their chances of getting pregnant are reduced (Moghadam & Burbrink, 2009, p. 3).

Based on the literature, the structure of the academy has not evolved to accommodate family and work responsibilities. Reconciliation between work and family demands will continue to be challenging and the relationship between job satisfaction and family issues needs to be addressed when considering factors that affect job satisfaction. Many universities have adopted "family friendly policies," such as paid parental leave, tenure clock stoppage, and onsite childcare. Mason and Ekman (2007) commented on the benefits of such policies:

The structure of the workplace—be it a corporate office or university research lab—can be altered. In our experience at Berkeley, these reforms have improved our competitive edge and allowed us to attract the best talent to our institution. Other universities are taking similar steps as they compete for the best candidates. Ultimately family-friendly policies will become the accepted norm. (p. 23)



Therefore, work/family issue will continue to be problematic until there is a change in societal norms that instill these values.

Job satisfaction

Generally, job satisfaction describes how content employees are with their current job. Researching literature, a variety of very similar definitions describing job satisfaction has been found. The most popular is the one by Loche from 1976, which describes job satisfaction as a pleasurable or positive emotional reaction to a person's job experiences (Locke, 1976, as cited in Milkovich & Boudreau, 1997). Job satisfaction can be defined as the collection of feelings and beliefs about a current job (Jones, George, & Hill, 2000), as a positive attitude that is believed leads to high performance (Daft & Marcic, 2001), or as a reflection of an employee's feelings about various aspects of work (Stone, 2005). Observing job satisfaction, it is very important to note two different expressions which are equally used in literature, i.e. job satisfaction regarding solely the task itself or the crucial activity of one's regular work, and job satisfaction in general which includes a range of different elements, such as satisfaction with pay, co-workers, supervision or working conditions (Bakotić, 2009).

Job satisfaction has been an area of interest for many researchers over the past several decades (Hackman & Oldhman, 1980; Herzberg et al., 1959; Holland 1973; Locke & Latham, 1990; Maslow, 1955). In fact, job satisfaction has been one of the most researched concepts in organizational psychology (Doman & Zapf, 2001). The interest in job satisfaction stems from its relationship with an employee's effectives and long-term success (Naumann,1993). Kornhauser (1965) noted that job satisfaction is directly linked to an individual's happiness, and there is a positive relationship between job and life satisfaction.

There has been interest in job satisfaction because it can affect a worker's productivity, absenteeism, turnover, and effectiveness (Mottaz, 1985). "Not only have hundreds of studies on job attitudes attempted to outline the determinants of job satisfaction, but theories about how individuals respond to work have been centre of some of the most controversies in organizational research" (Staw, Bell, & Clausen, 1986, p. 56).

Being satisfied with the work place is one of the most important constituents of organizational behaviour reflected from the employee's side. According to Van Dyne et al. (1995) and Podsakoff et al. (2000), this factor is simply the satisfaction and gratification with the type of work allotted to a particular employee, which results in ever increasing performance of the employee. This is quite true and valid in all working environment, because excellence in any type of work is only possible when the nature of work is accepted and welcomed by the working individual.

Two important research studies have been cited by Vallas, Finlay, and Wharton (2009) that occurred in the 1920s and the 1930s which changed our understanding of the factors that affect productivity. First, was the Hawthorne experiment, which started in the "mid-1920s, [by] Elton Mayo" (Vallas, Finlay, & Wharton 2009, p. 95). In the 1930s, there began a series of experiments called the Hawthorne Research. The legacy of the research has become known as the "Hawthorne effect" (p. 55). The researchers found that their initial hypothesis, that workers' fatigue cause fewer supervisors work oversight, was that the supervisors became more lax; yet, with more control over their work, employees' productivity actually increased.

A second study was the Bank Wiring Room Observation (Vallas, Finlay, & Wharton 2009, p. 97). These researchers found that those workers who were part of a dominant group

had higher productivity, unless members of the group were criticized. Those workers had decreased productivity. Furthermore, the highest producer was the one worker who did not belong to the group and was not bothered by the opinions of the dominant workers in the group. These two early studies elucidated the effect of a worker's attitude on productivity. These studies assumed the "happy/productive worker thesis," which suggests "happier people will be more productive" (Zelenski, Murphy, & Jenkins 2008, p. 522).

In the 1960s, Herzberg (1966) published his duality theory, or the "motivation-hygiene theory" of job satisfaction. His theory introduced the concept of categorized factors that can affect not only satisfaction but also dissatisfaction. "Motivators" are factors that influence satisfaction, and "hygiene" is factors that influence dissatisfaction. The results of his analysis:

The factors that led to satisfaction [motivators] (achievement, recognition, work itself, responsibility and advancement).... Conversely, the dissatisfies [hygiene] (company policy and administration, supervision, interpersonal relations, working conditions and salary) contribute very little to job satisfaction, (p. 77)

Before Herzberg, other theorists understood the phenomenon of job satisfaction and job dissatisfaction under one continuum. They were the opposite ends of the spectrum. This means that the greater the job satisfaction, the less dissatisfaction and vice versa. This is the operating context on the earlier theories of job satisfaction. For example, the fulfillment theory claimed that the degree of response a worker gets is directly proportional to his or her job satisfaction. If an employee does not get a positive response, job dissatisfaction will be more likely. Discrepancy theories deal with the needs and wants of the employee. If employees are not fulfilled the greater the dissatisfaction with their work (Harris,

Winskowski, & Engdahl, 2007; Herzberg et al., 1959; Michalos, 1991). However, Herzberg's theory continues to have an enduring influence on contemporary scholars.

Job satisfaction research in the 1970s indicated that it was a decade of distress for employees. Unsubstantiated reports indicated that the majority of Americans were dissatisfied with their jobs (Rothman 1987). Firebaugh and Haley (1995) claimed that the alarm in the 1970s had to do with "cohort-based views of the age-satisfaction association, the assumption being that the lower job satisfaction in the 1960s and 1970s generations (relative to their elders) signaled and unprecedented discontent that would remain with those generations throughout their work careers" (p. 89). Due to this concern, there was a profusion of job satisfaction research. During this time period, Kalleberg (1977, p. 126) introduced his "work values and job rewards" theory of job satisfaction. Central to Kalleberg's theory is the interaction of characteristics, both work and non-work, of the worker, and the relation to rewards. Kalleberg asserted that there is "variation in job satisfaction in terms of both perceived job characteristics and differences in work values...[and there are] variations in job satisfaction that influence workers' attainment of job rewards" (p. 141). Kalleberg's theory remains an important contribution to the study of job satisfaction.

There are different factors that have an influence on an employee's job satisfaction. Some of them can be described as individual factors (personality, education, marital status, age); certain categories can be individually affected while social factors (co-workers, team work, supervision) and organizational factors (company size, formal structure, management, politics and procedures, technologies) are less likely to be individually affected. In recent studies, many of the stated factors have been researched with the majority of them concentrating on the influence of individual and social groups of factors on job satisfaction.

Gender, age, and experience are the most frequently used demographic characteristics for measuring their influence on specific facets of job satisfaction or overall job satisfaction. For example, gender, experience and working conditions were related to different facets of job satisfaction (Koustelios, 2001). The influence of gender in relation to work, pay, promotion, supervision and co-workers was researched (Okpara, 2006; Okpara, Squillance, & Erondu, 2005). The relationship of age, gender and position was related to a number of facets of job satisfaction such as supervision, colleagues and relationship, working conditions and responsibility (De Nobile & McCormick, 2008). Last, but not the least, the influence of gender, age and tenure (Wickramasinge, 2009) was investigated, as well.

A study conducted by Moyes, Shao, and Newsome (2008) concentrated on, apart from the demographic characteristics, a company's characteristics that can be observed according to the specificities of US laws and accounting regulations. The study provided accounting graduates' opinions concerning how different important factors may influence their level of job satisfaction. The paper reported on the differences regarding benefits received from their employers, but distinguishing respondents by the size of their employers. This research also concentrated on accounting professional differences (possession of certain accounting certificates) and on different accounting professional groups regarding their satisfaction with their performance, job importance or chances for promotion.

Analysis of variance (ANOVA) was used to test whether the demographic variables had an impact on job satisfaction (Liacqua & Schumacher, 1995). Individual ANOVAs were also run to determine if job dissatisfaction was related to any of the demographic variables.

The results revealed that demographic factors (age, gender, degree) have little or no impact

on job satisfaction. In contrast, the results indicated a relationship between selected demographic factors and job dissatisfaction.

According to Firebaugh and Harley (1995), there was a shift in job satisfaction research during the 1980s wherein the research focus examined demographics such as age, race, gender, and type of occupation as factors of job satisfaction that has continued on for the last two decades of job satisfaction research. This body of research complemented the development of organizational models and how work/family issues affect job satisfaction, and was augmented by socio-cultural changes in the workforce, such as the influx of women into the workforce. Furthermore, the lack of a distinct line between work and family, which advanced the study of work and occupations as the labour force, became highly specialized.

Changes in hiring practices and economic hardships in the past two decades have reintroduced the prominence of nonstandard employment, such as such as part-time, temporary work, temporary agencies, and contractual work (Kalleberg, 2000). This is not new to the U.S. workforce, but had not been the loci of job satisfaction research; however these changes ignited a concern for scholars (Kalleberg). Other recent studies combine the major theoretical frameworks for a more holistic perspective of job satisfaction, which includes "family friendly policies" being implemented.

Faculty

One of the primary independent variables in this study is faculty satisfaction with work life. Johnshrud (2202) explained that job satisfaction is of great importance to organizations as a whole, but the conception is complex and convoluted and as a result has

not been explored in depth in the research. Therefore, exploring faculty job satisfaction is a relevant higher education research topic with important implications for universities.

Models of Faculty Job Satisfaction

Models of faculty job satisfaction provide an operational lens for viewing job satisfaction and were initially developed from the research by Herzberg, Mausner, and Synderman (1959), and Hagedorn (1996). In this study, the construct of job satisfaction has evolved from a focus on the cognitive aspects of work experiences and affective aspects of work life (Brief, 1998; Locke, 1976). This study focuses on the overall or global satisfaction through an exploration of the influence of faculty work life.

Analyzing job satisfaction among full-time faculty, Schuster and Finklestein (2006) noted a steady decline over a 30-year span of time, 1969-1998, in faculty who were "very satisfied" with their job and a steady increase in faculty who were "somewhat/very dissatisfied" with their job. The researchers attributed this trend to increased workloads for faculty members and decreased academic support provided by the faculty member's institution. The decline in overall job satisfaction among faculty was consistent regardless of institutional type, field, gender, race, or tenure status. Schuster and Finklestein challenged higher education scholars to gain a better understanding of factors that may be contributing to the decline in faculty job satisfaction.

Hagedorn (1996) created a causal model to examine the impact of salary differences between men and women faculty on overall job satisfaction. Although Hagedorn's model included several latent constructs, those relevant to this study include academic perceptions of students; perceptions of administration; and perceptions of collegiality. Hagedorn, using



SEM as her method, found that perceptions of administration and perceptions of collegiality were significant indicators of overall job satisfaction. She also concluded that administrators were critical in creating a work environment that enabled faculty success.

There have been other studies that conceptualized job satisfaction employing data from the 1993 National Survey of Postsecondary Faculty (NSOPF: 93) such as Toutkousian and Conley,(2005). Hagedorn (2000) employed NSOPF: 93 to operationalize Herzberg's dual-factor theory and to extend it to the study of faculty job satisfaction in the university setting. Hagedorn (2000), an advocate of Herzberg's theory, asserted that work and family relationships are considered one of the key mediators for job satisfaction among faculty members. In her 2000 research, Hagedorn's theoretical model of university job satisfaction included Hezberg's motivators and hygienes along with "demographics" and "environmental conditions" under the category she termed mediators. She also created an additional factor category of triggers, which reflected the affective elements of job satisfaction and in a multiple regression model.

The results indicated that the model was highly significant (p<. 0001) and explained close to half (49.4 percent) of the variance of job satisfaction. The most highly predictive mediators were the work itself, salary, relationships with administration, student quality and relationships, and institutional climate and culture. (Hagedorn. p. 13)

This work demonstrated the on-going viability of Herzberg's theory in terms of motivators and hygiene, particularly since it employed an extensive national sample of faculty and an extensively validated survey. In a later study, Iiacqua et al. (2001) found that the variables of tenure, rank, years teaching, and age were significantly related to job satisfaction; however, this finding has limited generalizability since the faculty sample was limited to faculty at a private business college and only 83 out of 137 sampled faculty responded to the survey.

Rosser (2005) developed a conceptual model involving work life and satisfaction of two university faculty groups, over time, based on her earlier structural equation modeling work with faculty satisfaction with "work life" and satisfaction overall (Rosser, 2004). This model was essentially an extension of Herzberg's dual-factor model and employed NSOPF: 93 and the 1999 National Survey of Postsecondary Faculty data sets (U.S. Department of Education, 1999; U.S. Department of Education, 1993). Her model investigated trends in faculty satisfaction with work life including advising and course workload, quality of students, and benefits and security, as well as overall job satisfaction over the six-year period between these two studies using structural equation modeling. She concluded that both groups of faculty respondents were satisfied overall with the dimensions of work life and overall job satisfaction. However, the respondents to the NSOPF: 99 survey were significantly (p < 01) more satisfied than the NSOPF: 93 respondents.

Faculty work life satisfaction studies can be categorized into three groups: describing and exploring differences, determining attitudinal impact, and exploring behavioral outcomes (Johnsrud, 2002). The first group of literature is concerned with describing and exploring differences in satisfaction perceptions. Johnsrud (2002) explained these studies define the mutual dimensions of faculty work life and how they are measured. As significant to faculty advancement and retention, Johnsrud and Heck (1994) identified professional priorities, institutional support, and also quality of life. Therefore, faculty satisfactions as a whole or global and work life are represented in the variables chosen for this study.

The second group of faculty work life satisfaction studies is concerned with identifying the dimensions important to faculty and whether they perceived their work life to be adequate (Johnsrud, 2002). This job satisfaction literature is concerned with

conceptualizing the relationship between the perceptions and attitudinal outcomes. The issues explored in this literature include identifying the dimensions of faculty work that contribute to satisfaction, how perceptions affect faculty morale, and what aspects predicts stress levels among faculty (Johnsrud). Researchers studying attitudinal impact and faculty job satisfaction have concluded that important factors include salary, perceived support of colleagues, satisfaction with administrations, enjoyment of student interaction, perceived level of stress (Hagedorn, 1994), conflict between work and non-work balance (Olsen & Near, 1994), professional role interests and institutional fit (Olsen, Maple, & Stage, 1995). The purpose of the current study is directly related to this literature as it examines how faculty work life affects faculty global job satisfaction and their institutional fit.

The final group of the study on faculty job satisfaction is the relationship between perceived attitudes and behavioral outcomes. Johnsrud (2002) explained these studies focused at providing research-based evidence to be used to improve attitudes and redirect behavior and many of these studies explore the relationship between faculty work and life balance, demographic and faculty job satisfaction. In providing research-based evidence used to improve faculty satisfaction and in providing relevant rationale for the current study, the work of Smart (1990), Barnes, Agogo, and Combs (1998), and Johnsrud and Rosser (2002) were provided.

More recently, the Harvard Graduate School of Education initiated a study entitled "The Collaborative on Academic Careers in Higher Education" (2007) which surveyed university tenure-track faculty job satisfaction. The study, which was initiated in 2003, has published reports from the 2005-2006 and 2006-2007 academic years. In the 2007 study, faculty from 26 four-year colleges and universities were surveyed on a number of questions.

The two questions most relevant to this research were the nature of the work and global satisfaction. The results of this study further provide an impetus to investigate faculty satisfaction.

Impact of Organizational and Individual Variables on Job Satisfaction

Research on job satisfaction suggests demographic variables such as gender and race are fixed and interplay with other variables to significantly influence job satisfaction in some instances (Hagedorn, 1994, 1996; Olsen, Maple, & Stage, 1995). Gender, age, salary and academic discipline were included in the current study as control variables. Faculty work life balance and faculty job satisfaction were explored through the different academic disciplines.

Academic discipline, as a variable, demands careful manipulation in research about university faculty because studies have shown that faculty members in different discipline areas have different attitudinal and behavioral patterns that are shaped by their distinctive epistemology, organizational commitments, and member social relationships (Biglan 1973b; Clark 1987; McGee & Ford 1987; Smart & Elton 1982; Smart & McLaughlin 1978).

Discipline variations are manifested in faculty members' different expectations for and commitments to professional responsibilities. Such variation is even more critical in the studies of turnover behaviors because higher education institutions, unlike other organizations, have a labor market that is segmented by academic disciplines and competition across the segments is limited (Youn, 1992). In addition, a faculty member may move to a different institution or choose to leave academia entirely. For faculty members in different fields, demands and opportunities differ in labor markets both inside and outside



academic settings (Zhou & Volkwein, 2004), and not all disciplines have good nonacademic alternatives (Ehrenberg et al., 1990).

Among the best-known cognitively based disciplinary classification schemes is that developed by Biglan (1973a, b). In his landmark studies, Biglan used multidimensional scaling to analyze data on faculty members' perceptions of the similarity of subject matter in different disciplines. Biglan (1973a) found that these faculty perceptions could be represented in three dimensions: hard/soft, pure/applied, and life/non-life systems. The dimensions involve the degree to which a paradigm exists in the field, the degree of concern with application of disciplinary knowledge, and whether or not the discipline is concerned with life systems. Utilizing the already mentioned concept of paradigmatic development as articulated by Kuhn (1970), Biglan (1973a) appropriated the terminology of hard versus soft disciplines (Storer, 1967) to denominate this variation in fields. Hard disciplines are those in which there is a high degree of paradigmatic consensus; for example chemistry, where the numbers of elements and stable chemical processes, as well as the methods of investigating their properties, are commonly agreed. Soft disciplines are those whose paradigms are more nebulous; for example philosophy, where the foundations for philosophical systems are multiple. Pure fields are those in which there is little concern for practical application. For example, in English literature, a pure discipline that has little applied focus, is distinguished from engineering, an applied one, which is precisely about practical application of scientific concepts. The distinctiveness of life disciplines is that their subject matter refers to any type of living thing; therefore botany and zoology as well as anthropology are life sciences. Nonlife fields are those whose subject matter deals with anything non-organic, for example geology.



Utilizing the results of multidimensional analysis, Biglan (1973a, b) showed that the three characterizing dimensions of disciplines correlate with many other aspects of academic behavior: the degree of social connections within disciplines; commitment to teaching, research, and service; the quantity and type of publishing; and the number of dissertations sponsored. Biglan (1973b) concluded that in those areas in which there is greater existence of a paradigm (hard areas) there is more social connectedness, greater commitment to research, less commitment to teaching, and more publication of journal articles. This is even more apparent in the hard-applied disciplines and somewhat less so but still present in the life (vs. non-life) systems. Biglan (1973b) asserted this perspective on the nature of academic behavior would enlighten the future studies of academic organizations.

The Biglan (1973a, b) classification is one of the more widely accepted models of disciplinary classification because of the number of studies done to empirically validate it. Various researchers have considered factors ranging from citation patterns (Hargens, 1996), faculty salaries and staffing patterns (Muffo & Langston, 1981), to professional success and research opportunities (Smart & Elton, 1982) as empirical means of validating Biglan's classification.

Rice and Austin (1988) observed the organizational culture in ten liberal arts colleges where faculty expressed higher morale and job satisfaction. These effective cultures included strong participation of university leadership, good organizational dynamics, and organizational identification. Smart (1990) constructed a causal model of faculty satisfaction based on organizational satisfaction, salary satisfaction, and career satisfaction. Mapesela and Driekie (2006) surveyed the job satisfaction of university faculty member in South Africa and faculty from different backgrounds. They found a growing willingness among faculty to

greater emphasis on the service aspect of their jobs. Faculty was also gradually placing greater emphasis on the service aspect of their jobs. Faculty generally feels a lack of financial support, and they frequently do not have time to participate in higher education research activities. They often wish for greater transparency and openness from university quality-assurance departments, and their main concern is "low wages." Oshagbemi (1996) analyzed job satisfaction of faculty in the U.K. in the areas of teaching, research, management, existing salary, promotion, supervision, collaboration, and physical conditions. He also examined the impact of personal background characteristics on job satisfaction. Ssesanga and Garrett (2005) performed surveys on job satisfaction of faculty in Uganda, examining the areas of teaching, research, management, supervision, collaboration, and working environment. Sabharwal and Corley (2009) analyzed gender and disciplinary differences in job satisfaction among U.S. faculty. They found that female faculty in health care fields had the highest job satisfaction, followed by faculty in science fields. Faculty in engineering fields had the lowest satisfaction, which was consistent with their hypothesis.

Although most authors agree on the relevance of studying organizational human indicators, when applying this approach to universities, some issues arise. It is extremely important to decide what level of analysis is going to be used: it could be the faculty members, the department, the discipline or the whole organization (Sporn, 1996). There is relatively little research on the impact of discipline on faculty satisfaction. Hagedorn (2000) used several individual and environmental characteristics to construct a conceptual framework of faculty job satisfaction. She divided the variables that contribute to faculty job satisfaction into two main categories: (1) mediators and (2) triggers. Academic discipline served as a mediator in the model to predict faculty job satisfaction. Yet, Hagedorn did not

find academic discipline as a significant predictor of job satisfaction. A similar result was obtained by Olsen et al. (1995), who attempted to explain the job satisfaction of women and minority at a Carnegie Research I university. Disciplinary differences were observed in the amount of time expended by faculty in research and teaching, but discipline did not have an impact on job satisfaction levels.

A study by Ward and Sloane (2000), however, concluded that there are significant differences in job satisfaction levels based on the gender and disciplinary affiliation of faculty members. For female faculty members, they found that engineers were the most satisfied and social scientists were the least satisfied. For male faculty members, they concluded that social scientists had the highest levels of satisfaction and natural/physical scientists had the lowest levels. Although their study examined job satisfaction across gender and discipline, it was based on a sample of 900 academics at five Scottish universities more than a decade ago. Disparity in pay across disciplines has also been shown to impact faculty job satisfaction (Morse, 1953; Ward & Sloane, 2000). Morse (1953) found that dissatisfaction could occur when a faculty member experiences inequities with pay based on discipline or the amount of work they accomplish. Ward and Sloane (2000) observed that engineering faculty members express the highest levels of satisfaction with pay when compared with scientists, social scientists, medical and arts faculty members.

Complex organizations like these typically include more than one social unit, or a group that is stable, defined, and with shared history and experiences. Therefore, culture researchers need to expect a number of distinctive subcultures in an organization in addition to the dominant one (Rodriguez & Apodaca, 2004; Schein, 2005). As a result of the culture or subcultures, discourses of knowledge, communication styles, and practices in higher

education may vary significantly among settings, institutions, or even disciplines. These differences both influence and are influenced by the way the students and professors think, speak and enact the academy (Read, Archer, & Leathwood, 2003), therefore, having an impact on their results.

Faculty members, besides belonging to their own organizations, also owe allegiance to other disciplinary colleagues, often feeling the later loyalty stronger than the institutional one (Cannon, 1983). Therefore, besides the evidence that might point towards a common perception of culture, faculty members also respond to two main sources of variation: professional and department culture. The presence of a specific profession within an organization is likely to become a subculture, mainly due to two elements: work interaction and professional acculturation. First, a group that works together on a regular basis, share procedures, skills, and ways to relate to other groups, is bound to develop certain common elements. Second, the professional education that members of this group share as a common experience has influenced them with specific values, norms, and beliefs that may or may not coincide with the overall organizational culture (Dimmitt, 2004a). In a common academic structure, academic departments usually combine both these requirements: professionals with similar formal training commonly form them, and they interact in a regular basis.

Genarally, academic departments constitute a universe of individuals that are self-sufficient (Lane, 1985) and differentiate naturally since they face different environments and tasks. Based on its member's interaction and decision-making, an academic department becomes an internally differentiated organization that faces the external environment among a web of differentiated and interdependent organizations that form an institution of higher education (Cannon, 1983). Organizationally, departments are the functional unit within a

university, their members are relatively homogeneous due to similarities on disciplinary practices, and they usually make some policies among themselves. Based on these elements, it is likely that they will develop some sort of shared norms, beliefs and values that are somewhat specific to the unit (Mills, Beltis, Miller, & Nolan, 2005) that will develop into a subculture. Consequently, when asked to describe the character or culture of the institution, faculty members have had problems to generate a clear analysis, but they can easily refer to distinctive aspects of departmental cultures and climates (Lindholm, 2003).

A university with very strong subcultures can move into a more unified institution, but only after assessing the nature of these cultural units (Sporn, 1996) and generating a strategy that uses these unit's strengths and motivations to achieve institutional goals.

Organizational culture among different social units within an organization can be seen as a Venn diagram where the social units may share a different portion of their culture with other social unit or the whole organization. Focusing on the shared component among all social units would then render just a small portion of the working cultural components of such organization and might not present enough information to comprehend the idiosyncrasies involved (Dolan et.al, 2002).

Summarizing, the existence of an academic department within a larger university is likely to become a subculture inserted in a greater organizational one. As a culture, a department is going to emphasize its own heroes, norms, values and rituals that most probably would affect the perception of each faculty member of his or her quality of life, depending on how valued the work life is for each specific person. Since both the concepts of quality of life and culture are multi-dimensional and multi-factorial concepts that do not have a unique definition or method of study, and since both ideas are based on a hierarchy of

values, it would be interesting to assess the level of impact that the perception of department culture might have on faculty member's concept of quality of life and its consequent quality of life needs.

Therefore, the current study looked at the professional experience of academic discipline. Exploring differences by academic differences is significant; as very few studies of job satisfaction have explored discipline suggests this variable of interest because faculty in different academic disciplines has varying expectations and commitments (Hagedorn, 2000; Xu, 2008). The resulting literature suggests exploring differences in job satisfaction by academic disciplines is an important consideration for this study and the findings will provide insight into another understudied of higher education research.

CHAPTER 3. METHODOLOGY

Design of the Study

The study was approached with an objectivist epistemology that incorporated a postpositivist theoretical perspective. Data collected was analyzed using survey research
methodology. Epistemology refers to the nature of knowledge (Crotty, 1998). Objectivism
"holds that meaning, and therefore meaningful reality, exists as such, apart from the
operation of any consciousness" (Crotty, p. 8). In an objectivist worldview, subjectivity plays
no role in research. In this study, parameter estimates and measurements were analyzed
based solely on the data. The subjectivity of the researcher has no influence upon data
analysis. The theoretical perspective of post-positivists describes a "way of looking at the
world and making sense of it . . . that is, how we know what we know" (p. 8). The theoretical
perspective of this study is informed by published research related to faculty work life
balance and job satisfaction. Creswell (2009) posited that "problems studied by postpositivists reflect the need to identify and assess the causes that influence outcomes" (p. 7).

The purpose of this study was to identify and assess how faculty construct work and life, the extent to which the work life balance influence job satisfaction, and whether the construction of job satisfaction differed across academic disciplines at a Midwestern university. This quantitative research study explored the relationship between the work life and the overall job satisfaction among faculty across academic disciplines.



Research Questions

To examine the relationship between the work life and overall job satisfaction and its collective relationship to academic discipline, the following research questions for this quantitative research project asked:

- 1. To what extend does the faculty work life balance differs by academic discipline?
- 2. To what extend does the faculty job satisfaction differ by academic discipline?
- 3. What relationship exists between work life balance and job satisfaction among faculty at ISU?
- 4. After controlling for demographic and professional experience, does academic discipline have a unique effect on faculty work life balance?
- 5. Controlling for relevant variables, are there any differences in terms of job satisfaction on faculty life balance (WLB) across academic disciplines?

This research sought to determine whether work life differ by the academic discipline group, whether job satisfaction differs by work life, if there is relationship between faculty work life and job satisfaction and if this relationship differs by academic discipline group, and whether academic discipline has a unique effect on faculty work and life balance. In addition to exploring academic discipline, job satisfaction, and work life balance, this study used demographic (gender, age, salary, race, rank) and professional experiences (tenure practices and expectations; climate, culture & collegiality) as control variables. These variables were selected because previous studies have shown that such demographic and professional experience factors and institutional characteristics are related to job satisfaction (Maiter, 1990; Rosser, 2004; Smart, 1990; Zhou & Volkwein, 2004).



Research Model

To conceptualize the research questions in this study, a conceptual model was developed (see Figure 1.1). The model illustrates the hypothetical relationship between academic disciplines, job satisfaction, and work life balance: "A" represents the influence work life balance has on job satisfaction, "B" represents the influence academic disciplines have on job satisfaction, and "C" indicates the influence academic disciplines have on work life balance. In sum, the model assumes academic disciplines directly and indirectly (through job satisfaction) influences work life balance and job satisfaction

Data Source and Survey Instrument

The data used in this study were obtained from the Iowa State University, Office of Institutional Research. ISU has taken part in the Collaborative on Academic Careers in Higher Education (COACHE), a consortium of over 130 colleges and universities across North America. The COACHE, based at the Harvard Graduate School of Education, began as the Study of New Scholars, a research project funded by \$750,000 from the Ford Foundation and Atlantic Philanthropies. The goals of this study were to make the academy more equitable and appealing for new faculty and to increase the recruitment, retention, status, satisfaction, and success of all faculty. Membership in COACHE enables colleges and universities to focus on issues critical to faculty success and on steps academic policymakers can take to gain a competitive advantage in faculty recruitment, retention and development (COACHE, 2011).

The COACHE Tenure-Track Faculty Job Satisfaction Survey™, created by Trower and Chait (2002) of Harvard's Graduate School of Education, is designed to generate



diagnostics and concrete solutions for informing efficient and effective investments in faculty (COACHE, 2011). Its themes are relevant specifically to pre-tenure faculty. The themes include the clarity and reasonableness of expectations for tenure, the nature of faculty work, support for teaching and research, institutional and departmental support for balancing work and home, climate, culture, and collegiality, compensation and benefits and overall job satisfaction.

Survey Administration

Before conducting the current study, the researcher sought human subject research approval from the Institutional Review Board (IRB) at Iowa State University and was granted permission to proceed. A copy of the approval is provided in Appendix A. This study utilized the data collected by the ISU office of Institutional Research for the COACHE 2009-2010 Tenure-Track Faculty Job Satisfaction SurveyTM. Administration of the survey occurred annually by the research staff at COACHE for member institutions during their first year of a three-year membership cycle. A copy of the COACHE 2009-2010 Tenure-Track Faculty Job Satisfaction SurveyTM is provided in Appendix B. Before administering the survey,

COACHE applied to and received approval to conduct the survey from Harvard University's Committee on the Use of Human Subjects. All pre-tenure faculty with at least one-year experience received email invitations to participate in the web-based survey.

Participants

For the purpose of this study, only the data from the Iowa State University COACHE 2009-2010 Tenure-Track Faculty Job Satisfaction SurveyTM was utilized. The ISU population was comprised of 259 faculty and the number of respondents was 143 faculty. On average,

about 55 percent of respondents who enter the COACHE survey completed the survey entirely.

For a participant's responses to be included in the data set, the participant had to provide at least one meaningful response beyond the demographic section of the survey instrument. The responses of faculty who either terminated the survey before completing the demographic section or chose only "N/A" or "decline to respond" for all questions were removed from the data set.

Dependent, Independent, and Control Variables

Work Life Balance (Dependent)

This research sought to clarify how work life balance and job satisfaction influence faculty at different academic disciplines. Therefore, the primary dependent variable is work life balance. According to Shavelson (1996), the dependent variable is the variable that is observed and measured in response to the independent variables and it is expected to change in some way (increase, decrease, or vary) as levels of the independent variables change. On the COACHE survey, the work and life variable allowed for five responses and, as the responses were not continuous, the variable was categorical. The responses are in the 5 Likert-scales, ranging from 1 – Very ineffective, 2 - Ineffective, 3 - Neither effective nor ineffective, 4 – Effective and 5 – Very effective, the variables are categorical. Thirteen items were used to determine work and life balance. The items that defined work life are: - paid/unpaid personal leave, childcare, stop the clock for parental or other family reasons, spousal/partner hiring program, elder care, modified duties for parental or other family

reasons, part-time tenure track position, children raising support and satisfaction with the balance between professional time and personal time.

The factors were identified using the factor analysis. Composite variables were created for each of the three factors, based on the mean of the items that has primary loadings on each factor. The factor loadings for the final solution, eigenvalues, and percent of variance were analyzed and presented in Chapter 4.

Job Satisfaction (Independent)

In addition to work life balance, measures of faculty job satisfaction serve as primary independent variables. Four themes were used to measure faculty job satisfactions: (1)

Nature of work (Overall), (2) Nature of work (Teaching), (3) Nature of work (Research), and (4) Global Satisfaction. A Principal Component Analysis was also conducted among these four themes for the Job Satisfaction. Twenty-eight questions were used to measure the faculty's job satisfaction. These 28 questions were totaled to determine the mean in order to find the differences between job satisfaction and academic disciplines.

From the questionnaire, a Principle Component Analysis (PCA), using orthogonal varimax rotation, was conducted. PCA is used when the primary purpose is to identify and compute satisfaction scores for the factors underlying work life balance. Field (2009) explained that PCA works in a way that is similar to a multivariate analysis of variance test by looking at relationship between variables and calculating the variants of the matrix to determine eigenvalues, the elements that provide the loadings of a particular variable on a factor. According to Field (2009), orthogonal rotation rotates the factors while keeping them independent. Varimax orthogonal rotation was selected because it is a good general approach

that simplifies the interpretation of factors (Field, 2009). PCA is used to uncover the underlying structure of a relatively large set of variables. The a prior assumption is that any indicator may be associated with any factor. This is the most common form of factor analysis. There is no prior theory and one uses factor loadings to intuit the factor structure of the data. Confirmatory factor analysis (CFA) seeks to determine if the number of factors and the loadings of measured (indicator) variables on them conform to what is expected on the basis of pre-established theory. Indicator variables are selected on the basis of prior theory and factor analysis is used to see if they load as predicted on the expected number of factors. The factors were identified using the factor analysis. Composite variables were created for each of the three factors, based on the mean of the items that has primary loadings on each factor. The factor loadings for the final solution, eigenvalues, and percent of variance are analyzed and presented in Chapter 4.

Academic Disciplines (Independent)

One of the main objectives in the study is to explore the relationship between work life balance and job satisfaction, therefore, academic disciplines serves as a primary independent variable. Shavelson (1996) stated an independent variable "is a variable that is employed to influence some other variable; it is an antecedent condition to observe behavior" (p.14). This study was based on the responses of 143 faculty whose academic discipline affiliation is included in the four discipline clusters of Biglan's model (Table 3.1). Table 3.2 shows the Iowa State University academic discipline model according to Biglan's classification.

Table 3.1. Biglan's clustering of academic disciplines in three dimensions

-	Hard		Soft		
	Non Life	Life	Non Life	Life	
	Astronomy	Botany	English	Anthropology	
Pure	Chemistry	Entomology	Germany	Political Science	
	Geology	Microbiology	History	Psychology	
	Math	Physiology	Philosophy	Sociology	
	Physics	Zoology	Russsian		
			Communications		
Applied	Engineering	Agronomy	Accounting	Educational Administration	
	Computer Science	Dairy Science	Finance	Secondary Educ	
	Mech. Engineering	Horticulture	Economics	Special Educ	
		Ag. Economics		Vo-tech	
				Education	

Note. From "Relationships between subject matter characteristics and the structure and output of university departments," by A. Biglan (1973b), *Journal of Applied Psychology* 57(3), 207.

The Biglan (1973a, b) classification is one of the more widely accepted models of disciplinary classification because of the number of studies done to empirically validate it.

Various researchers have considered factors ranging from citation patterns (Hagen, 2002), faculty salaries and staffing patterns (Muffo & Langston, 1981), to professional success and research opportunities (Smart & Elton, 1982) as empirical means of validating Biglan's classification. Based on the model and the purpose of this study, the departments at ISU have been divided into four categories, and the number of responses for each category is listed in Table 3.3.

Table 3.2. Iowa State University: Academic Discipline (according to Biglan's model)

	Hard		Soft	
	Nonlife System	Life System	Nonlife System	Life System
Pure	Chemistry (3) Physics & Astronomy (2) Statistics (1) Biochemistry/Biophysics & Molc Biology (2) Architecture (3)	Entomology (2) Ecology (3) Kinesiology (1) Plant Pathology (2) Vet Pathology (3)	English (5) History (1) Philosophy & Religious (3) Greenlee School Journalism / Communication (4) Art & Design (3) Music (2) World Languages & Culture (4)	Political Science (3) Psychology (8) Sociology (5)
Applied	Aerospace Engin (1) Agriculture & Biosystem Engineering (2) Chemical & Biological Engineering (4) Civic, construction & Environment Engin (3) Electrical & Computer Engin (8) Industrial & Manufacturing System Engin (1) Mechanical Egin (6) Material Science & Egin (1) Computer Science (2) Geological & Atmospheric Sc (1)	Agronomy (1) Horticulture (1) Animal Science (3) Biomedical Science (2) Vet Clinical Sciences (3) Food Science & Human Nutrition (2) Vet Diagnostic & Production Animal Med (4) Vet Microbiology & Preventive Medicine (1) Genetics Development & Cell Biology (5)	Accounting (1) Finance (2) Economics (1) Management (1) Library (4) Marketing (2)	Educational Leadership & Policy Studies (4) Apparel Ed Studies Hospitality Mgmt (6) Community & Regional Planning (3) Curriculum & Instruction (3) Human Development & Family Studies (1) Natural Resource Ecology & Management (2) Agricultural Education & Studies (2)

Table 3.3. Iowa State University academic disciplines and number of responses

	Hard System	Soft System
Pure	22	38
Applied	51	32



Demographic and Professional Experience Factors (Control)

Based on the literature, beyond work life balance and job satisfaction, a number of demographic and professional experience factors can influence faculty work and life balance. In order to ascertain their influence on the study's sample, a number of variables were chosen as control variables. Shavelson (1996) explains that control variables are those variables are held constant. Control variables are the ones that have potential effects on the dependent and independent variables in the study. Seven control variables will be chosen for this study based on their relationship to faculty job satisfaction and work life balance. The first five are demographic (gender, age, salary, rank and race) and professional experience factors (which include tenure practices and tenure expectations and climate, culture and collegiality).

Descriptive statistics for the demographic and professional experience variables will be presented in a table. For the multivariate analysis, these variables will be coded as categorical variables with males being compared to females, participants under 30 years old being compared to the other age categories, those who made under \$45,000 being compared to the other salary categories, and faculty race group.

Data Analysis

ANOVA

ANOVAs were conducted to understand if job satisfaction differs by academic disciplines and to determine if a relationship exists between work life balance and job satisfaction (research questions 2 and 3). Shavelson (1996) stated, "The one-way ANOVA is used to analyze data from designs with one independent variable that produces two or more groups of subjects" (p. 370). Shavelson (1996) explained the purpose of the one-way

ANOVA is to be to compare the means of two or more groups to decide if the observed differences between the variables occurred by chance or by some sort of a systematic effect. Comparing the variability of scores within a group with the variability between the group means does the identification of the differences. If the variability between groups is greater than the variability within groups, the result is evidence of a significant group difference (Shavelson, 1996).

Multiple regression

Multiple regression is a statistical procedure that assesses the relationship between one criterion (dependent) variable and several predictor variables (Nicol, & Pexman, 2007). To conduct a multiple regressions variables are entered one by one into the regression equation, with the first variable entered explaining the most variation in the dependent variable satisfaction. As other variables are entered into the equation and standardized based on the variables which meet the criterion for entry their shared variance and the amount of variation they explain is represented by their standardized betas (β). Whether they are significant predictors of the dependent variable (satisfaction with institution) is based on their student's t statistic (Pedhazur & Pedhazur, 1991). In all three equations the variables that entered each equation were significant at the .05 level. The amount of variation these variables explain together is represented by the adjusted r-square value, which is adjusted for the other terms in the model. The adjusted r-square increases only if the new term improves the model more than by chance. The adjusted r-square can be negative and it will always be less than or equal to r-square (Draper & Smith, 1998). If the amount of variation is significant it is represented by a significant value for the F statistics.

Delimitations and Limitations

The internal and external validity threats to the COACHE Tenure-Track Faculty Job Satisfaction Survey are those common to most standardized survey and include events occurring before or during the survey administration, the instrument itself, and the experimental procedures. Of particular concern, and a threat to internal validity, was the sheer size of the survey, which included nearly 51 questions or sub-questions and took about 30 minutes to complete. The length of the survey and time required to complete it had the potential to influence how participants reacted to the task and could have influenced their responses.

Another limitation is the cross-sectional design of the analysis. The COACHE survey examines job satisfaction of pre-tenure faculty at a specific time and does not necessarily capture how there satisfaction with the variables includes changes over time. A longitudinal study would capture this evolution.

While there are always potential threats to the validity of a study, this study is a secondary analysis of existing data. The reliability and validity of the survey and survey administration will be assumed based on the reputation of the researchers who designed the instrument and the institution they represent.

CHAPTER 4. RESULTS AND DISCUSSION

This chapter reports the findings from the statistical procedures used to answer the research questions. The purpose of this study was to examine the relationship between the relationship of work life balance and job satisfaction among faculty at difference academic disciplines. Specifically, the study was guided by five research questions:

- 1. To what extend does the faculty work life balance differs by academic discipline?
- 2. To what extend does the faculty job satisfaction differ by academic discipline?
- 3. What relationship exists between work life balance and job satisfaction among faculty at ISU?
- 4. After controlling for demographic and professional experience, does academic discipline have a unique effect on faculty work life balance?
- 5. Controlling for relevant variables, , are there any differences in terms of job satisfaction on faculty life balance (WLB) across academic disciplines?

The survey was sent electronically by the ISU Institutional Research to 259 tenure-track faculty and the respondent was 149 (N=149) using the Iowa State University COACHE 2009-2010 Tenure-Track Faculty Job Satisfaction SurveyTM.

Demographic Characteristics of ISU Tenure-track Faculty

As shown in Table 4.1, it is observed that the gender composition of the faculty was nearly even, male (56.6%) and female (43.4%). The large number of the respondents was non-Hispanic (71%) followed by Asian American (20.3%). The rest were Black or American-African (3.5%), the Hispanic (2.1%) and Multiracial (2.8%). More than half of the respondents were U.S. citizen (61.5%) and the rest (34.3%) were non-U.S. citizen. The

Table 4.1. Demographic analysis

		N (%)				
	Variable	Soft Applied	Hard Applied	Hard Pure	Soft Pure	Total
Gender	Male	17 (51.5)	31 (62.0))	13 (59.1)	20 (52.6)	81 (56.6)
	Female	16 (48.5)	19 (38.0)	9 (40.9)	18 (47.4)	62 (43.4)
Race	Asian, Asian American, or Pacific Islander	5 (15.2)	7 (14.0)	7 (31.8)	10 (26.3)	29 (20.3)
	White(non-Hispanic)	24 (72.7)	39 (78.0)	14 (63.6)	24 (63.2)	101 (70.6)
	Black or African- American	2 (6.1)	0 (.0)	1 (4.5%)	2 (5.3)	5 (3.5)
	Hispanic or Latino	0(.0)	2 (4.0)	0 (.0%)	1 (2.6)	3 (2.1)
	Other	0(.0)	1 (2.0)	0 (.0%)	(0.)	1 (.7)
	Multiracial	2 (6.1)	1 (2.0)	0 (.0%)	1 (2.6)	4 (2.80
Salary	\$30,000 to \$44,999	0(.0)	0(.0)	0 (.0%)	1 (2.7)	1 (.7)
	\$45,000 to \$59,999	10 (33.3)	17 (34.7)	6 (30.0)	10 (27.0)	43 (31.6)
	\$60,000 to \$74,999	8 (26.7)	16 (32.7)	6 (30.0)	7 (18.9)	37 (27.2)
	\$75,000 to \$89,999	5 (16.7)	11 (22.4)	3 (15.0)	11(29.7)	30 (22.1)
	\$90,000 to \$104,999	4 (13.3)	2 (4.1)	3 (15.0)	5 (13.5)	14 (10.3)
	\$105,000 to 119,999	2 (6.7)	2 (4.1)	1 (5.0)	3 (8.1)	8 (5.9)
	\$120,000 or above	1 (3.3)	1 (2.1)	1 (5.0)	(0.)	3 (2.2)
Highest	Masters	0(.0)	3 (6.0)	1 (4.5)	(0.)	4 (2.8)
Degree	Doctorate	32 (97.0)	46 (92.0)	21 (95.5)	38 (100)	137 (95.8)
	Other	1 (3.0)	1 (2.0)	0 (.0)	0 (.0)	2 (1.4)
Marital	Single	5 (15.6)	10 (21.3)	4 (19.0)	6 (17.1)	25 (18.5)
Status	Married/Partner	27 (84.4)	37 (78.7)	17 (81.0)	29 (82.9)	110 (81.5)

majority of the academics get a salary of \$45,000 to \$59,999 (31.6%) followed closely by \$60,000 to \$74,999 (27.2%) and the next is \$75,000 to \$89,999 (22.1%). Most of the respondents were from the Hard Applied discipline (34.7.0%) followed by the Soft Pure discipline (29.7%). Nearly all of the academics possess a Doctorate degree (95.8%), only a handful had Masters Degree (2.8%). The majority of the respondents were married (84.4%).

Data Preparation

The data were explored before performing the analysis in SPSS. Many cases of missing values were found in the data set whereby the respondent 'decline to answer'. For the purpose of accurate analysis, the missing values "98" were imputed by the mean. The mean was used as a measure of substitution to reduce non-response bias when the

distribution of the missing values is different from the distribution of the observed values and also to maintain large sample sizes thus increasing efficiency.

Results and Analysis

The internal structure of work life balance and job satisfaction were analyzed, and then the confirmatory analysis for the characteristics on work life balance and job satisfaction was examined. Exploratory Factor Analysis (EFA) was conducted to condense the original number of items into a smaller set of new factors. The minimum value for a good factor loading analysis is 0.3 (Tabachnick & Fidell, 1996). However, a factor loading below 0.45 is suppressed for a sample size between 150 and 200 (Hair et al., 2002). The Principal Components extraction method was used along with the varimax rotation method for the factor analysis and all eigenvalues greater than one was considered in this case.

Barlett's measure tests the null hypothesis that the original correlation matrix is an identity matrix (Field, 2005). Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy measure varies between 0 and 1, and values closer to 1 are better. A value of .6 is a suggested minimum. In the analysis, the Bartlett's test of sphericity was significant with *p*-values less than .05 and the KMO statistic was above .60. The results of the factor analysis for Work and Home, Global satisfaction, Nature of Work (Research), Nature of work (Teaching) and the Overall satisfaction are tabulated below.

First, the structure of the Work and Home was calculated and explored based on the responses. In this study, work life balance was measured in 13 response items on the questionnaire (Appendix B). Factor analysis was adopted to explore dimensions of the factors included in faculty work life as shown in Table 4.2.



Table 4.2. Exploratory factor analysis for Work & Home

Variables	Factor Loading				
Factor 1-Having/Rising Children ($\alpha = .860$)					
My institution does what it can to make having children and the tenure-track compatible.	.788				
My institution does what it can to make raising children and the tenure-track compatible.	.851				
My departmental colleagues do what they can to make having children and the tenure-track compatible.	.828				
My departmental colleagues do what they can to make raising children and the tenure-track compatible.	.812				
My colleagues are respectful of my efforts to balance work and home responsibilities	.788				
% of Variance	31.0				
Factor 2 – Family care ($\alpha = 525*$)					
Paid or unpaid personal leave	.500				
Childcare	.659				
Spousal/partner hiring program	.633				
Elder care	.617				
% of Variance	16.18				
Factor 3 – Personal duty ($\alpha = .573*$)					
Stop-the-clock for parental or other family reasons	.717				
Modified duties for parental or other family reasons (e.g., course release)	.599				
Part-time tenure-track position	.768				
% of Variance	9.96				

Note: *Cronbach's Alpha values are relatively small

The descriptive information shows the means and standard deviations for all of the thirteen variables, as well as all possible bivariate correlations and their p values. It is noted that all of the correlations are positive and significant as might be expected of these variables. Barlett's test of spericity is significant, thus the hypothesis that the intercorrelation matrix involving these eight variables is an identity matrix is rejected. Thus from the perspective of Bartlett's test, factor analysis is feasible. As Bartlett's test is almost always significant, a more discriminating index of factor analyzability is the KMO. For the Work and Home, it is .765, which is very large, so the KMO also supports factor analysis. Kaiser's rule of retaining factors with eigenvalues larger than 1.00 was used in this analysis as the

default. As the eigenvalues for the first three principal components with eigenvalues of 3.720, 1.941 and 1.195 were retained. The first three factors were: having & raising children, family care and personal duty. The above three factors were mainly extracted for Work and Home component accounting for a total variance of 57.1% of all items.

The reliability analysis was also performed to determine the internal consistency of the factors. Such a high figure (very close to the maximum value of 1) indicated that the items were a good indicator of what is being measured. According to Hair et al. (2006), a coefficient of less than 0.6 indicates marginal to low internal consistency. As shown in Table 4.2, the factor 1 (having and raising children) has a high internal consistency whereas the two remaining factors, the Cronbach's Alpha values were .525 and .573, respectively, indicating a marginal internal consistency.

Next, the structure of the Job Satisfaction was calculated and explored based on the responses. In this study job satisfaction was measured in 31 response items on the questionnaire (Appendix B). Factor analysis was adopted to explore based on each four themes of the factors included in faculty job satisfaction: Global Satisfaction, Nature of Work (Research), Nature of Work (Teaching), and nature of Work (Overall).

Barlett's test of spericity is significant, thus the hypothesis that the intercorrelation matrix involving these five variables is an identity matrix is rejected. Thus from the perspective of Bartlett's test, factor analysis is feasible. As Bartlett's test is almost always significant, a more discriminating index of factor analyzability is the KMO. For the Global Satisfaction, it is .896, which is very large, so the KMO also supports factor analysis. Kaiser's rule of retaining factors with eigenvalues larger than 1.00 was used in this analysis

Table 4.3. Exploratory factor analysis for Global Satisfaction

Variables	Factor Loadings
Global Satisfaction ($\alpha = 8.96$)	
How satisfied or dissatisfied are you with your department as a place to work?	.841
How satisfied or dissatisfied are you with your institution as a place to work?	.897
The person who serves as the chief academic officer at my institution seems to care about the quality of life for pre-tenure faculty?	.716
If I could do it over, I would again choose to work at this institution.	.847
How do you rate your institution as a place for tenure-track (pre-tenure) faculty to work?	.913

as the default. As the eigenvalue for the one principal component with eigenvalue of 3.575 was retained. The factor for Global Satisfaction component accounts for a total variance of 71.5%. It is observed that the one factor solution for Global Satisfaction has a high internal consistency with a large Cronbach's Alpha value of .896, which is above .60.

Moreover, turning to the component Nature of Work (Research), factor analysis has extracted two factors. Table 4.4 shows the factor loadings with the corresponding factor for this particular component. Barlett's test of spericity is significant, thus the hypothesis that the intercorrelation matrix involving these five variables is an identity matrix is rejected. Thus from the perspective of Bartlett's test, factor analysis is feasible. As Bartlett's test is almost always significant, a more discriminating index of factor analyzability is the KMO. For the Nature of Work (Research), it is .788, which is very large, so the KMO also supports factor analysis. Kaiser's rule of retaining factors with eigenvalues larger than 1.00 was used in this analysis as the default. The eigenvalues for the two principal components were 2.902 and 1.087 respectively. The two factors account for a total variance of 57.0%. It is observed that the two factor solution for Nature of Work (Research) has quite high internal consistency with Cronbach's Alpha values of .708 and .663 which are above the cut-off value of .60.

Table 4.4. Exploratory factor analysis for Nature of Work (Research)

Variables	Factor Loading
Factor 1- Effectiveness of Policies ($\alpha = .708$)	.747
The amount of time you have to conduct research/produce creative work	.786
The amount of external funding you are expected to find	.779
The influence you have over the focus of your research/creative work	
Factor 2 – Professional Support ($\alpha = .663$)	
Research services	.518
Professional assistance in obtaining externally funded grants	.662
Travel funds to present papers or conduct research	.838
Paid or unpaid research leave	.674

Factor analysis for the component Nature of Work (Teaching) was conducted and Table 4.5 presents the factor loadings for the component. Barlett's test of spericity is significant, thus the hypothesis that the intercorrelation matrix involving these ten variables is an identity matrix is rejected. Thus from the perspective of Bartlett's test, factor analysis is feasible. As Bartlett's test is almost always significant, a more discriminating index of factor analyzability is the KMO. For the Nature of Work (Teaching), it is .766, which is very large, so the KMO also supports factor analysis. Kaiser's rule of retaining factors with eigenvalues larger than 1.00 was used in this analysis as the default. The eigenvalues for the four principal components were 3.397, 1.254, 1.129 and 1.045, respectively. The four factors account for a total variance of 68.2%. It is observed that Factor 1 and Factor 2 has quite high internal consistency with Cronbach's Alpha values of .698 and .731 which are above the cut-off value of .60. However, for Factor 3 and Factor 4, the internal consistency was quite low with values below .60. This may be due to the fact that there is few numbers of items pertaining to these two factors.



Table 4.5. Exploratory factor analysis for Nature of Work (Teaching)

Variables	Factor Loading
Factor 1- Teaching (α = .689)	
The level of the courses you teach	.602
The number of courses you teach	.647
The number of students you teach	.579
An upper limit on teaching obligations	.776
Factor 2 – Administrative Support ($\alpha = .731$)	
The degree of influence you have over the courses you teach	.806
The discretion you have over the content of the courses you teach	.895
Factor 3 – Students' Quality ($\alpha = .496*$)	
The quality of undergraduate students with whom you interact	.735
The quality of graduate students with whom you interact	.769
Factor 4 - Services ($\alpha = .570*$)	
Teaching services	.810
Professional assistance for improving teaching	.788

Note: *values are relatively small Cronbach's Alpha values

Barlett's test of spericity is significant, thus the hypothesis that the intercorrelation matrix involving these six variables is an identity matrix is rejected. Thus, from the perspective of Bartlett's test, factor analysis is feasible. As Bartlett's test is almost always significant, a more discriminating index of factor analyzability is the KMO. As shown in Table 4.6, for Overall, it is .728, which is very large, so the KMO also supports factor analysis. Kaiser's rule of retaining factors (with eigenvalues larger than 1.00) was used in this analysis as the default. The eigenvalues for the two principal components were 2.775 and 1.038, respectively. The two factors account for a total variance of 63.6%. It is observed that Factor 1 and Factor 2 has quite high internal consistency with Cronbach's Alpha values of .696 and .780 which are above the cut-off value of .60 (Table 4.6).

Table 4.6. Exploratory factor analysis for Overall Satisfaction

Variables	Factor Loading
Factor 1 – Institutional Support (α= .696)	
The quality of facilities (i.e., office, labs, classrooms)	.635
The amount of access you have to Teaching Fellows, Graduate Assistants, et al.	.516
Clerical/ administrative services	.725
Research services	.867
Factor 2 – Time (α = .780)	
The way you spend your time as a faculty member	.886
The number of hours you work as a faculty member in an average week	.866

Confirmatory Factor Analysis

Confirmatory factor analysis (CFA) seeks to determine if the number of factors and the loadings of measured (indicator) variables on them conform to what is expected on the basis of pre-established theory. Indicator variables are selected on the basis of prior theory and factor analysis is used to see if they load as predicted on the expected number of factors.

First order and second order factor measurement models were tested. CFA was performed in the statistical software, Analysis of Moment Structures (AMOS 20.0). CFA need to be performed for every latent construct in the model. In the data set, latent constructs were Work & Home, Global Satisfaction, Nature of Work (Research), Nature of Work (Teaching) and Overall Satisfaction. To evaluate the fit of the models, goodness-of-fit indices were used. The χ^2 -statistic (Chi-square statistic) and goodness-of-fit indices such as the Goodness-of-Fit Index (GFI), Adjusted Goodness-of-Fit Index (AGFI), Parsimony Goodness-of-Fit Index (PGFI), Normed Fit Index (NFI), Tucker and Lewis Index (TLI), Comparative Fit Index (CFI) and Root Mean Square Error of Approximation (RMSEA). Table 4.7 provides a description of the fit indices and their corresponding threshold values.



Table 4.7. Description of fit indices

Goodness-of-fit Index	Description	Threshold value
χ^2 (Chi-Square statistic)	If the χ^2 statistic is non-significant and has a small value; the data fits well. Only the χ^2 statistic cannot be considered while evaluating the fit in large samples.	Non-significant & small value
GFI (Goodness of Fit Index)	GFI compares the hypothesized model with the null model (Hu & Bentler, 1995)	>.90
AGFI (Adjusted Goodness-of-Fit Index)	AGFI is classified similar to GFI, as the absolute indexes of fit	>.90
PGFI (Parsimony Goodness-of-Fit Index)	PGFI accounts for the issue of parsimony in the model. It explains the complexity of the hypothesized model relative to the overall model fit (Byrne, 2001)	>.80
NFI (Normed Fit Index)	NFI evaluates the global fit of the model. NFI has a tendency to underestimate fit in small samples (Byrne, 2001)	>.90
CFI (Comparative Fit Index)	CFI forms part of the incremental fit indices. CFI is derived from the comparison of the restricted model with that of the null model.	>.90
TLI (Tucker & Lewis Index)	TLI assesses the factor models.	>.90
RMSEA (Root Mean Square Error of Approximation)	RMSEA as its name states estimate the overall amount of error in the model.	<.08

Unidimensionality, validity and reliability of the measurement models were also assessed. Unidimensionality is achieved when the measuring items have acceptable factor loadings for the respective latent construct. As in this case, the COACHE scale is a newly developed scale, hence the factor loadings should be higher than .50. Validity is the ability to measure what it is supposed to measure for a construct and the three types of validity such as convergent validity, construct validity and discriminant validity.

Reliability is the extent of how reliable is the said measurement model in measuring the intended latent construct. The assessment of reliability of the COACHE instrument could be made using the criteria namely internal reliability, construct reliability and averagevariance extracted. In evaluating the fitness of the model, Hair et al. (2006) and Holmes-Smith and Coote (2006) recommended the use of at least three fit indexes by including at least one

index from each category of the model fit. The categories are, namely, absolute fit (Chisquare statistic, RMSEA and GFI), incremental fit (AGFI, CFI, TLI, & NFI) and parsimonious fit (Chi-square/df). Figures 3.1 – 3.4 depict the first order measurement model of work and home, global satisfaction, nature of work (Research), nature of work (Teaching) and overall satisfaction.

Table 4.8 shows the assessment of fitness of the measurement models. It is observed that the six models achieved the required cut-off point in the three categories. In other words, the models had a perfect fit with nearly all the fit indices such as CFI, GFI, NFI and TLI being above .90. However, the RMSEA is seen to be a quite above the threshold for global satisfaction, nature of work (teaching) and overall satisfaction.

Figures 3.5 - 3.9 depict the second order measurement model of Work and home, global satisfaction, nature of work (Research), nature of work (Teaching) and overall satisfaction. Table 4.9 shows the assessment of the fitness of the measurement models.

Table 4.8. Assessment of fit indices for first order measurement models

Model	χ^2	χ^2/df	CFI	GFI	NFI	TLI	RMSEA
Work &Home	65.5	1.64	.944	.926	.872	.923	.067
Global satisfaction	9.9	1.99	.989	.972	.978	.978	.084
Nature of work (Research)	16.2	1.24	.984	.971	.925	.974	.041
Nature of work (Teaching)	44.3	1.53	.948	.940	.870	.920	.081
Overall satisfaction	16.9	2.11	.957	.965	.924	.920	.088

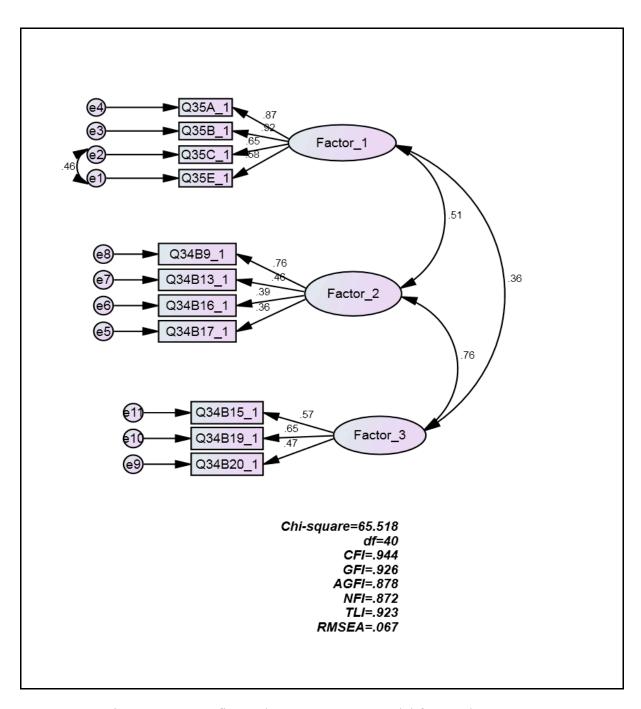


Figure 3.1. CFA first order measurement model for Work & Home

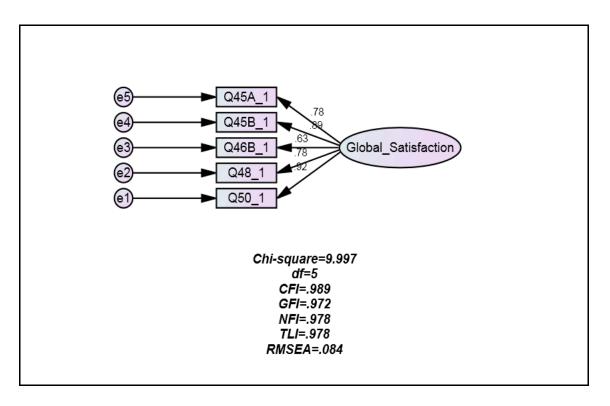


Figure 3.2. CFA first order measurement model for Global Satisfaction

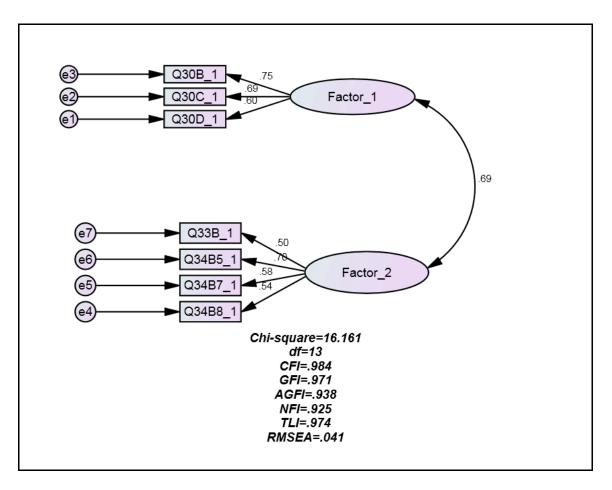


Figure 3.3. CFA first order measurement model for nature of Work (Research)

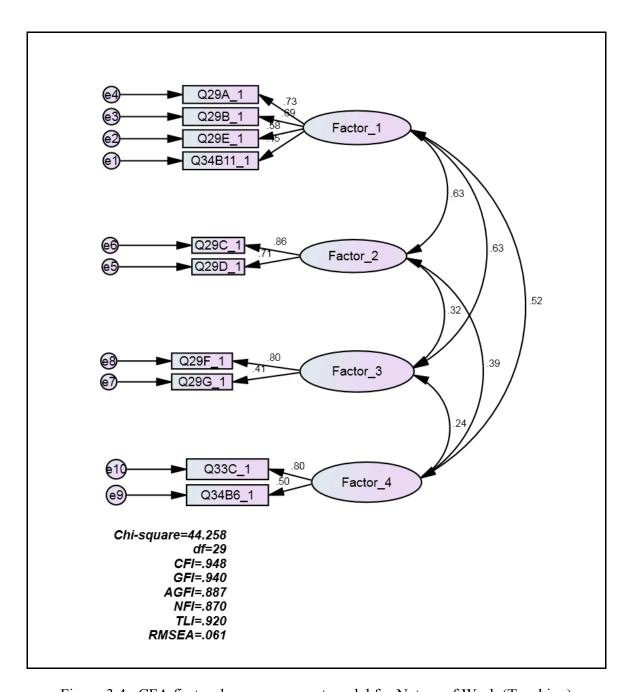


Figure 3.4. CFA first order measurement model for Nature of Work (Teaching)

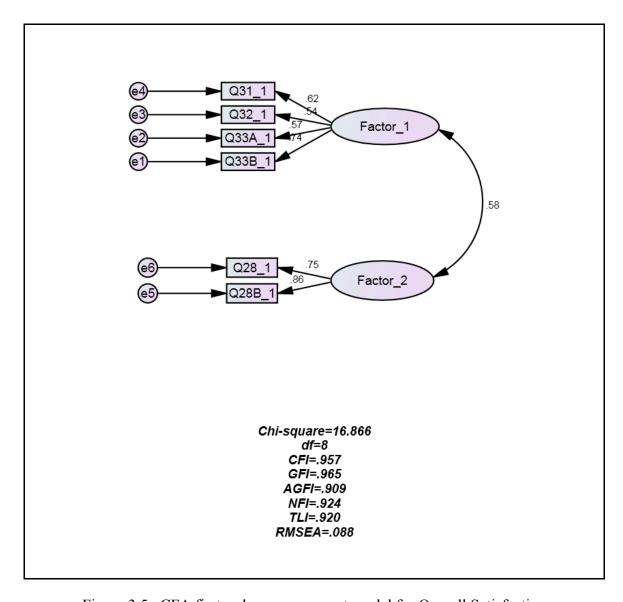


Figure 3.5. CFA first order measurement model for Overall Satisfaction

Table 4.9. Assessment of fit indices for the second order measurement models

Model	χ²	χ^2/df	CFI	GFI	NFI	TLI	RMSEA
Work &Home	65.5	1.64	.944	.926	.872	.923	.067
Nature of work (Research)	16.2	1.24	.984	.971	.925	.974	.041
Nature of work (Teaching)	45.4	1.46	.951	.938	.866	.929	.057
Overall satisfaction	16.9	2.11	.957	.965	.924	.920	.088

The model Global satisfaction was excluded in the analysis of the second order CFA measurement model since this component is a one-factor structure. From Table 4.9, it is observed that the fit indices fitted perfectly the models with approximately all the fit indices being above .90. The RMSEA values were below the cut-off values of .60 except for 'overall satisfaction'.

For both the first and second order CFA, unidimensionality has been achieved since the measuring items have acceptable factor loadings which are greater than .50 for their respective latent constructs. Construct validity has been achieved through GFI, CFI being greater than .90 and the RMSEA is less than .08. Internal reliability has been achieved for some of the factors pertaining to its corresponding components since the Cronbach's Alpha values were above .60.

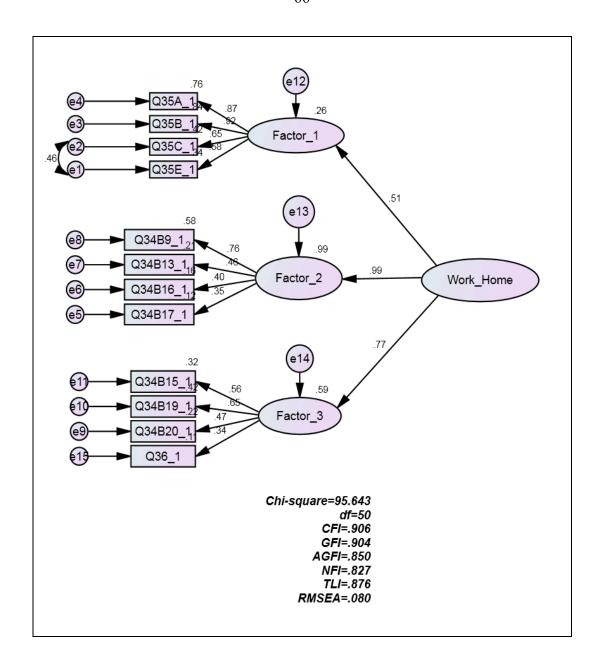


Figure 3.6. CFA second order measurement model for Work & Home

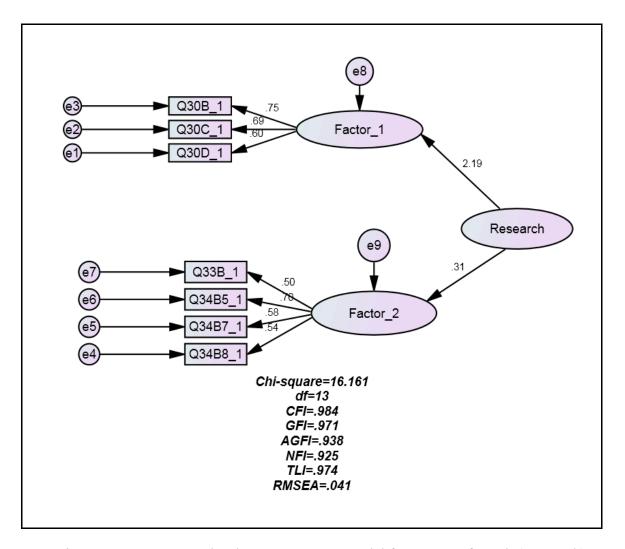


Figure 3.7. CFA second order measurement model for Nature of Work (Research)

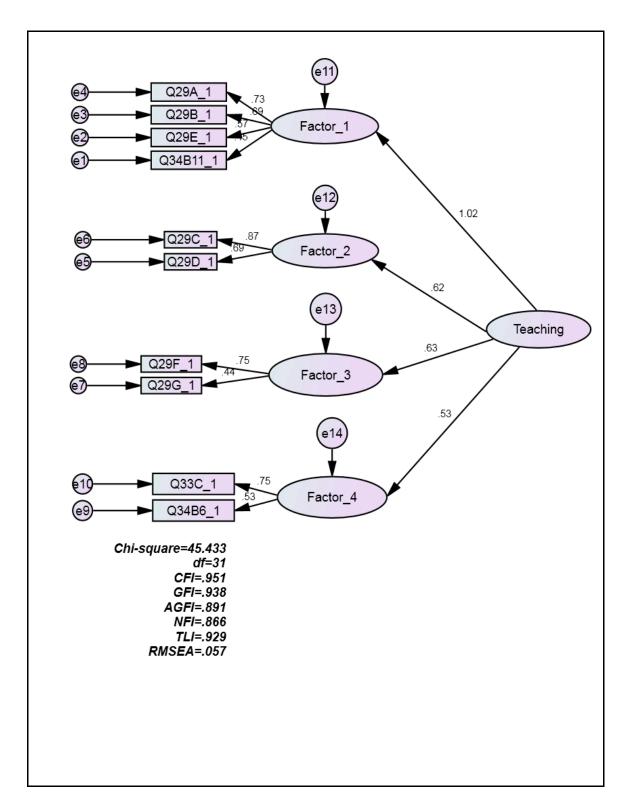


Figure 3.8. CFA second order measurement model for Nature of Work (Teaching)



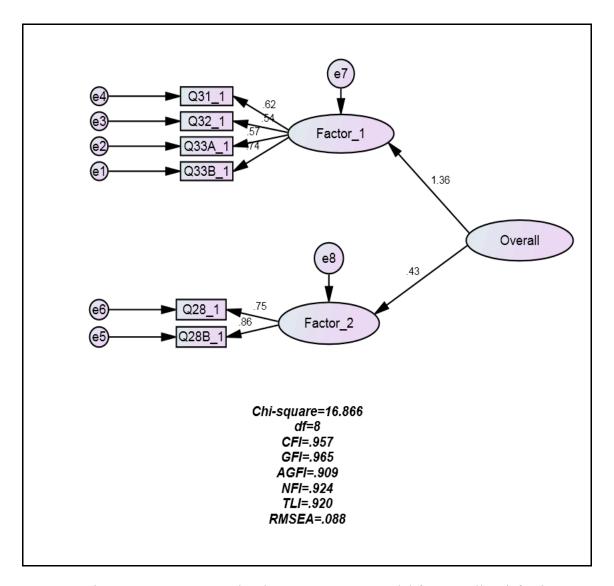


Figure 3.9. CFA second order measurement model for overall satisfaction

Research Questions

Research Question 1: To what extent does the faculty work life balance differs by academic discipline?

The variable faculty Work Life Balance (WLB) consists of 13 categorical variables. To address the first research question, an ANOVA was conducted in SPSS to find out the comparison between Work Life Balance (WLB) and Academic Disciplines.



Table 4.10. Descriptive analysis by academic discipline for first order measurement models

Academic Discipline	Sample Size (N)	Mean	Standard Deviation
Soft Applied	33	3.452	.4340
Hard Applied	50	3.310	.4626
Hard Pure	22	3.329	.3055
Soft Pure	38	3.252	.4535

The test of homogeneity of variances is not significant (F = 1.316, p-value = .272>.05). Hence, the null hypothesis of the equal variances cannot be rejected and it is assumed that there is no violation of homogeneity of variance assumptions for ANOVA as shown in Table 4.11. From Table 4.11, the ANOVA result is not significant (p-value > .05), which means there is no significant difference between work life balance and academic disciplines.

Table 4.11. ANOVA results for first order measurement models

	Sum of Squares	df	F	Sig.
Between group	.741	3	1.316	.272
Within groups	26.085	139		
Total	26.826	142	••••	

Research Question 2: To what extent does the faculty job satisfaction differ by academic discipline?

To address the second research question, an ANOVA was conducted in SPSS to find out the comparison between Job Satisfactions (JS) and academic disciplines. Table 4.12 shows the descriptive statistics such as the sample size, mean and standard deviation. The test of homogeneity of variances is not significant (F = 1.736, p-value = .941>.05). Hence,

Table 4.12. Descriptive analysis by academic discipline for second order measurement models

Disciplines	Sample Size (N)	Mean	Standard Deviation
Soft Applied	33	4.05	.871
Hard Applied	50	3.72	.847
Hard Pure	22	3.53	.931
Soft Pure	38	3.76	.869

the null hypothesis of the equal variances cannot be rejected and it is assumed that there is no violation of homogeneity of variance assumptions for ANOVA

Table 4.13 shows the ANOVA analysis results. The ANOVA result is not significant (p-value > .05), which means that there is no significant difference between job satisfaction and academic disciplines.

Table 4.13. ANOVA results for second order measurement models

	Sum of Squares	df	F	Sig.
Between Groups	3.959	3	1.736	.161
Within Groups	105.7	139		
Total	109.6	142	••••	

Research Question 3: What relationship exists between work life balance and job satisfaction among faculty at ISU?

To determine the relationship between Work life balance (WLB) and Job Satisfaction (JS), a correlation analysis using the Pearson correlation coefficient was performed. Table 4.14 and 4.15 show the descriptive statistics and correlation analysis for WLB and JS. It is Satisfaction is 3.78 (SD = .878). As revealed in Table 4.15, there is a significant relationship (r = .595) between Work Life Balance and Job Satisfaction.

Table 4.14. Descriptive statistics for work life balance and job satisfaction

	Mean	Standard Deviation	N	
WLB	3.33	.435	143	
JS	3.78	.878	143	

Table 4.15. Correlation analysis between work Life balance and job satisfaction

	WLB	JS
WLB	1	.595*
JS	.595*	1

^{*}Correlation is significant at the 0.01 level (1-tailed)

Research Question 4: After controlling for demographic and professional experience, does academic discipline have a unique effect on faculty work life balance (WLB)?

The dependent variable WLB in this study is comprised of 13 items that were discussed in the Chapter 3. For the analysis, the 13 items were combined into one variable "WLB". This was done by computing the mean of all the 13 questions in SPSS, thereafter combining it into one variable "WLB". However, while combining all the 13 questions, the dimension of the variable changes, which means that WLB is no longer a categorical variable. Hence, a multiple r was used to address Research Question 4, which has independent variables as demographic variables (Gender, Age, Salary, Race and Rank), and Professional experiences (tenure practices and expectations; climate, culture & collegiality). Dummy variables were created for each categorical predictor before performing the regression. The number of dummy variables is the number of categories in each variable subtracting one.

The multiple lLinear regression (MLR) employed the "Enter" method for the regression. Table 4.16 and 4.17 show the significance of the MLR and the coefficients,

respectively. From Table 4.16, it is observed that the multiple linear regression is significant F(17,42) = 2.594, p-value < .05). This means that at least one of the independent variables is a significant predictor of faculty Work Life balance. The R-square is .512, indicating that the independent variables can explain about 51.2% of the total variation of Work life balance. A value of R-square close to one, which indicates the model fits the data well. In this case, it can be said that the R-square value is acceptable.

Table 4.16. ANOVA^b results for work life balance and job satisfaction

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	7.126	17	.419	2.594	.006 ^a
Residual	6.788	42	.162		

^a Predictors: (Constant), AGE Respondent Age, calculated from year of birth (Q14) [COACHE]., D1 Dmmy1 for variabel Disciplines, Y3 Dummy3 for race, X7 Dummy7 for salary, climate_culture_collegiality, Y4 Dummy4 for race, X6 Dummy6 for salary, D3 Dummy3 for discipline, gender_dummy Dummy variable for gender, X4 Dummy4 for salary, D2 Dummy2 for discipline, WLB, Tenure_expectation_reaonable, X5 Dummy5 for salary, Tenure_practices, X3 Dummy3 for salary, Y2 Dummy2 for race, Tenure_expectation_clarity.

The results depicted in Table 4.17 show that the "Climate, culture and collegiality" (t=2.957, p-value=.05) and "Age" (t=1.940, p-value=.059) are significant predictors of Work Life Balance. It is revealed that academic disciplines are not a significant (p-value >.05) predictor of WLB. From the Standardized coefficients, the most important predictor is "Climate, culture and collegiality" (β = .533).

^b Dependent Variable: WLB

Table 4.17. Coefficients^b for work life balance and job satisfaction

Model		ndardized Ficients	Standardized Coefficients		
	В	Std. Error	Beta	t	Sig.
1 Constant	1.515	.643		2.356	$.023^{a}$
gender_dummy Dummy	.045	.136	.045	.334	.740
variable for gender					
\$60,000 to \$74,999	348	.326	325	-1.065	.293
\$75,000 to \$89,999	186	.324	174	575	.568
\$90,000 to \$104,999	151	.347	129	434	.667
\$105,000 to \$119,000	014	.343	009	040	.968
\$120,000 above	328	.360	188	911	.367
White	.089	.343	.082	.259	.797
Black or African American	180	.320	174	563	.576
Hispanic or Latino	.125	.559	.033	.224	.824
Tenure_practices	.020	.118	.037	.172	.864
Tenure_expectation_clarity	291	.175	524	-1.665	.103
Tenure_expectation_reaonable	.292	.189	.476	1.544	.130
climate_culture_collegiality	.351	.119	.533	2.957	$.005^{a}$
Soft Applied Disciplines	.000	.170	.000	.002	.998
Hard Applied Discipline	.005	.143	.005	.033	.974
Hard Pure Discipline	.037	.192	.028	.191	.850
AGE Respondent Age,	.021	.011	.257	1.940	$.059^{a}$
calculated from year of birth					
(Q14) [COACHE].					

^a Significant at .001; ^b Dependent Variable: WLB

All the variables that were not significant were excluded, and the multiple linear regressions were run again. Table 4.18 reveals the coefficients after removing the insignificant variables. The estimated regression coefficient of .409 for Climate_culture_collegiality indicates that holding Age constant, for every one unit increase in Climate culture collegiality, the Work Life Balance will increase by .409 unit. Keeping



Table 4.18. Coefficients^b after removing insignificant variables

Model	Unstandardized Coefficients B	Standardized Coefficients Std. Error	Beta	t	Sig.
(Constant)	1.528	.301		5.070	.000 ^a
climate_culture_collegiality	.409 ^b	.053	.608	7.659	$.000^{a}$
AGE Respondent Age,					
calculated from year of	.013	.006	.162	2.042	.044
birth (Q14) [COACHE].					

^a ANOVA is significant at a *p*-value less than .05.

Climate_culture_collegiality constant, for every one year increase in *Age*, WLB will increase by .013 units.

Research Question 5: Controlling for relevant variables, are there any differences in terms of job satisfaction on faculty life balance (WLB) across academic disciplines?

This time, unlike Research Question 4, Job Satisfaction is used as the dependent variable and the same logic applies to the justification of the use of multiple linear regression (MLR). Table 4.19 and 4.20 illustrate the results of the MLR.

Table 4.19. ANOVA^b for work life balance and job satisfaction across academic disciplines

Model	Sum of Squares	df	Mean Squares	F	Sig
1 Regression residual	53.762	18	2.987	15.414	.000ª
	7.945	41	.194		
Total	61.706	59			

Predictors: (Constant), AGE Respondent Age, calculated from year of birth (Q14) [COACHE]., D1 Dmmy1 for variabel Disciplines, Y3 Dummy3 for race, X7 Dummy7 for salary, climate_culture_collegiality, Y4 Dummy4 for race, X6 Dummy6 for salary, D3 Dummy3 for discipline, gender_dummy Dummy variable for gender, X4 Dummy4 for salary, D2 Dummy2 for discipline, WLB, Tenure_expectation_reaonable, X5 Dummy5 for salary, Tenure_practices, X3 Dummy3 for salary, Y2 Dummy2 for race, Tenure_expectation_clarity

a Significant at .001: b Dependent variable: WLB.



b. Dependent variable: WLB

Table 4.20. Coefficients^b for work life balance and job satisfaction across academic disciplines

Model		ndardized ficients	Standardized Coefficients	t	Sig.
_	В	Std. Error	Beta		8
1 Constant	.842	.749		1.125	.267
gender_dummy Dummy	304	.149	143	-2.034	$.048^{a}$
variable for gender					
\$60,000 to \$74,999	393	.362	174	-1.084	.285
\$75,000 to \$89,999	.035	.356	.015	.097	.923
\$90,000 to \$104,999	201	.381	082	527	.601
\$105,000 to \$119,999	250	.375	074	665	.510
\$120,000 or above	.198	.398	.054	.497	.622
White	.095	.376	.042	.254	.801
Black or African -American	270	.352	124	768	.447
Hispanic or Latino	.140	.612	.018	.228	.821
Tenure_practices	.118	.129	.101	.910	.368
Tenure_expectation_clarity	092	.197	079	467	.643
Tenure_expectation_reaonable	.342	.213	.265	1.607	.116
climate_culture_collegiality	.751	.143	.542	5.255	$.000^{a}$
Soft Applied Disciplines	.149	.186	.057	.802	.427
Hard Applied Discipline	021	.157	010	131	.896
Hard Pure Discipline	507	.210	186	-2.416	$.020^{a}$
WorkLife Balance	.284	.169	.135	1.679	.101
AGE Respondent Age,	031	.012	182	-2.528	$.015^{a}$
calculated from year of birth					
(Q14) [COACHE].					

^a Significant at .001; ^b Dependent Variable: Job Satisfaction

From Table 4.19, it is observed that the multiple linear regression is significant F(18,41) = 15.414, p-value < .05). This means that at least one of the independent variables is a significant predictor of Job Satisfaction (JS). The R-square is .871 indicating that the independent variables mentioned above can explain about 87.1% of the total variation of JS.

According to Table 4.20, the results show that "Gender" (t=-2.034, p-value=.048), the "Climate, culture and collegiality" (t=5.255, p-value=.000) and "Age" (t=-2.528, p-value=.015) are significant predictors of Job Satisfaction (JS). It is seen that academic disciplines is not a significant (p-value>.05) predictor of WLB. From the Standardized coefficients, the most important predictor is "Climate, culture and collegiality" (β = .542).

The estimated regression coefficient of -.304 for "Gender" holding the other variables constant, the Job satisfaction is .304 lower for female than for male. The estimated regression coefficient of .751 for "Climate_culture_collegiality" holding the other variables constant, for every one unit increase in "Climate_culture_collegiality" will increase Job satisfaction by .751 units. The estimated regression coefficient of -2.416 for 'D3' indicates that holding "gender", "Climate_culture_collegiality", and "Age" constant, job satisfaction for faculty in Hard Pure discipline is about 2.416 lower than those in the Soft Pure discipline.

CHAPTER 5. SUMMARY AND CONCLUSION

Overview

The purpose of this study was to examine the relationship between work life balance and job satisfaction among faculty across academic disciplines at Iowa State University. This study was guided by five research questions that addressed the extent of work life balance relating to job satisfaction. This chapter presents a summary of findings, conclusions, limitations of the study, and recommendations for future research.

Summary

This study utilized the COACHE Tenure-Track Faculty Job Satisfaction SurveyTM to address five research questions that examined whether faculty's work life balance were different in academic disciplines, whether job satisfaction differ by the academic discipline group, whether there is relationship between faculty work life and job satisfaction and if this relationship differs by academic discipline group, and whether academic discipline has a unique effect on faculty work and life balance. In addition to exploring academic discipline, job satisfaction, and work life balance, this study used gender, age, salary, race, rank, and professional experiences as control variables. The sample for this study was fulltime, pretenured faculty from a doctorate-granting university. A research model that was guided by a conceptual framework that applies faculty work life as a base, was created containing one dependent variable—work life balance. Job satisfaction along with 13 work and home variables—satisfaction with teaching, advising, and service expectations, satisfaction with research expectations, satisfaction with collegiality, satisfaction with compensation, and overall satisfaction with department and institution—served as independent variables.



Finally, five demographic (i.e., gender, age, salary, race, rank) and professional experiences factors were used (i.e., tenure practices and expectations; climate, culture & collegiality) as control variables.

Review of the Study

In chapter 1, the purpose and the problem that drove this research and the research questions were identified. Chapter 2 provided a review of relevant literature that contained topical subsections related to: work life balance, work life balance for the academics, job satisfaction, faculty job satisfaction and the impact of organizational, and individual variables on job satisfaction in academe. Studies associated with faculty work life balance and faculty job satisfaction are well documented in higher education research. Nevertheless, a study by Ward and Sloane (2000) concluded that there are significant differences in job satisfaction levels based on the gender and disciplinary affiliation of faculty members. In addition to belonging to their own organizations, faculty members also owe allegiance to other disciplinary colleagues, and often feel the later loyalty stronger than the institutional one (Cannon, 1983). Therefore, besides the evidence that might point towards a common perception of culture, faculty members also respond to two main sources of variation: professional and department culture. This study looked at the professional experience of academic discipline. Exploring differences by academic differences is significant as very few studies of job satisfaction have explored discipline, which suggests this variable is of interest because faculty in different academic disciplines have varying expectations and commitments (Hagedorn, 2002; Xu, 2008).



In Chapter 3, the research model was presented along with an explanation of exploratory factor analysis and confirmatory analysis, and the data analysis method used in this study. In addition, a detailed description of the survey instrument and data collection procedures was provided along with an overview of the site and the study's participants. The chapter concluded with a discussion of reliability and validity issues and limitations of the study.

In Chapter 4, the results of the data analysis were presented and each research question was answered in light of the results. In this final chapter, Chapter 5, the research questions are discussed in greater detail to situate the results within theoretical and research implications. The chapter concludes with suggestions for future research and implications for practice.

Findings and Discussion

Research Question 1: To what extent does the faculty work life balance differs by academic discipline?

The findings revealed that faculty satisfaction towards work life does not have any differences among all academic disciplines at Iowa State University. Faculty member reported having considered being satisfied with their work and home factor regardless of their academic disciplines. The result does not provide strong support for Xu's (2008) findings regarding differences among disciplines, possibly reflecting different markets by disciplinary type for employment, levels of demand, and the attractiveness or availability of extrinsic rewards (Zhou & Volkwein 2004). However, this finding is consistent with Rosser (2005) in that the quality of faculty members' work life has been shown to have both positive and negative implications toward their overall satisfaction. Similarly, researchers such as

Galinsky et al. (1993) and Premeaux et al. (2007) failed to find any significant relationship between work-life balance of employees and performance of their respective organizations. It should be mentioned that these studies were conducted in almost identical settings, which reflected a positive relationship between two phenomena, e.g., comparative to research settings of Premeaux et al. (2007) and Allen (2001). Similarly, studies conducted by Frye and Breaugh (2004) and Goff et al. (1990) yielded similar results, i.e., no relationship between two phenomena. These assertions indicate that the issue of work-life balance is not always applicable and verifiable under the light of organizational performance; nevertheless, one generalization is quite resonating in that it definitely works towards increasing employee satisfaction, contempt, and positive job attitude. It should be noted that being in different academic disciplines does not differ as a function of satisfaction across work and family roles. On the contrary, a satisfied individual is likely not to be stressed out by work that also helps them in maintaining its quality. Thus, satisfaction can be referred to as an effective benefit of work life balance in place.

Research Question 2: To what extent does the faculty job satisfaction differ by academic discipline?

This result indicated that there is no difference between job satisfactions among academic disciplines at ISU. Being in different academic disciplines does not affect faculty job satisfaction at Iowa State University; although, according to Hagedorn (2001), that academic discipline represents important categories which affect the nature of job satisfaction. Academic discipline served as a mediator in her model to predict faculty job satisfaction. Yet, Hagedorn did not find academic discipline as a significant predictor of job satisfaction. A similar result was obtained by Olsen et al. (1995) who attempted to explain

the job satisfaction of women and minorities at a Carnegie Research I University.

Disciplinary differences were observed in the amount of time expended by faculty in research and teaching, but discipline did not have an impact on job satisfaction levels.

Research Question 3: What relationship exists between work life balance and job satisfaction among faculty at ISU?

There was a significant relationship between work life balance and job satisfaction among faculty at ISU. This finding is consistent with Rosser (2005), who emphasized that the quality work is important to faculty members, and that the perceptions faculty members hold regarding their professional and institutional work lives (i.e., administrative support, technical support, professional development) have a powerful relationship on their overall level of satisfaction. Hagedorn (2000) asserted that work and family relationships are considered one of the key mediators for job satisfaction among faculty member. More important, it is the perceived quality of faculty members' work life that can generate a response as to whether they are, indeed, satisfied (or dissatisfied). However, the relationship between satisfaction balance and quality of life is likely to depend on the total level of satisfaction across work and family roles. Under conditions of high total satisfaction, there is more satisfaction to distribute across work and family roles.

Research Question 4: After controlling for demographic and professional experience, does academic discipline have a unique effect on faculty work life balance (WLB)?

The multiple regressions provided evidence of the predictive ability of the predictors on a measure of work life balance among faculty at ISU. The results indicated that faculty perceived that Climate, culture and collegiality, and also Age do have an effect on their work life satisfaction. Faculty members enjoy working with their students and having control over

the courses they teach, and they continue to have a sense of security within the institutions they work regarding their benefits and salary issues, and their job satisfaction (Rosser, 2005) which reflect the positive perceptions they have of these satisfaction issues. As Vroom (1964) posited, the sources of satisfaction are generated by organizational environmental factors.

Research Question 5: Controlling for relevant variables, are there any differences in terms of job satisfaction on faculty life balance (WLB) across academic disciplines?

The results indicated that job satisfaction for women faculty is lower than men at ISU. As Ward and Wolf-Wendel (2004) and Finkel et al. (1995) discussed, faculty who are primarily women, experience pressure when they are trying to raise children while simultaneously pursuing tenure. The academic resources construct is comprised of variables related to workload that are critical resources as faculty are seeking promotion and tenure. In tprevious studies, the influence of gender in relation to work, pay, promotion, supervision and co-workers was researched (Okpara, 2006; Okpara, Squillance, & Erondu, 2005). The relationship of age, gender, and position was related to a number of facets of job satisfaction such as supervision, colleagues and relationships, working conditions, and responsibility (De Nobile & McCormick, 2008). Some scholars have found that faculty of color and female faculty members encounter more barriers while advancing up the academic ladder (Hagedorn, 1996; Laden & Hagedorn, 2000; Menges & Exum, 1983; Perna, 2001; Peterson, Friedman, Ash, Franco, & Carr, 2004; Tack & Patitu, 1992; Toutkoushian, 1999; Turner & Myers, 2000).

In addition, the findings showed that a faculty member's age does influence overall job satisfaction. This is consistent with Rhodes (1983) who mentioned that, in addition to



gender, there is a positive linear relationship between faculty age and job satisfaction, and age has been shown to be significantly correlated with the overall job satisfaction of 4-year, fulltime faculty (Okpara et al., 2005). The study by Okpara et al. also revealed that age significantly interacts with gender with this population to influence job satisfaction. Iiacqua (2001) also found that the variable of age was significantly related to job satisfaction. In the previous study, the influence of gender in relation to work, pay, promotion, supervision and co-workers was researched (Okpara, 2006; Okpara et al., 2005). The relationship of age, gender and position is related to a number of facets of job satisfaction such as supervision, colleagues and relationship, working conditions and responsibility (De Nobile & McCormick, 2008). Last, but not the least, the influence of gender, age and tenure (Wickramasinge, 2009) was also investigated.

These findings support Hagedorn's (2000) model, which she termed this new category as "environmental conditions" which included collegial relationships, student quality or relationships, administration, and institutional culture or climate, and Hagedorn created a separate category that extended her job satisfaction model from that of Herzberg et al. (1959). In addition to belonging to their own organizations, faculty members also owe allegiance to other disciplinary colleagues, often feeling the later loyalty stronger than the institutional one (Cannon, 1983). Therefore, besides evidence that might point towards a common perception of culture, faculty members also responded to two main sources of variation: professional and department culture. The presence of a specific profession within an organization is likely to become a subculture, mainly due to two elements—work interaction and professional acculturation. Organizationally, departments are the functional unit within a university, their members are relatively homogeneous due to similarities on

disciplinary practices, and they usually make some policies among themselves. Based on these elements, it is likely that faculty will develop some sort of shared norms, beliefs and values that are somewhat specific to the unit (Mills, Beltis, Miller, & Nolan, 2005) that will develop into a subculture. Consequently, when asked to describe the character or culture of the institution, faculty members have had difficulty generating a clear analysis, but they can easily refer to distinctive aspects of departmental cultures and climates (Lindholm, 2003).

The results also revealed that faculty in Hard Pure disciplines are less satisfied with their job compared to faculty in Soft Pure discipline. Biglan (1973b) concluded that in those areas in which there is greater existence of a paradigm (hard areas) there is more social connectedness, greater commitment to research, less commitment to teaching, and more publication of journal articles which is even more apparent in the hard-applied disciplines This suggests that faculty in different academic disciplines have varying expectations and commitments (Hagedorn, 2002; Xu, 2008).

This finding is also consistent with Ward and Sloane (2000) who concluded that there are significant differences in job satisfaction levels based on the gender and disciplinary affiliation of faculty members. Although their study examined job satisfaction across gender and discipline, it was based on a sample of 900 academics at five Scottish universities more than a decade ago. Disparity in pay across disciplines has also been shown to impact faculty job satisfaction (Morse, 1953; Ward & Sloane, 2000). Morse (1953) found that dissatisfaction could occur when a faculty member experiences inequities with pay based on discipline or the amount of work they accomplish. Ward and Sloane (2000) observed that engineering faculty members express the highest levels of satisfaction with pay when compared with scientists, social scientists, and medical and arts faculty members.

Implications

This study's findings have a number of implications for university policy makers and administrators who seek to retain faculty across academic disciplines. As suggested previously in this dissertation, the possibilities of a leak in the faculty pipeline at the pretenure faculty level for faculty work and life balance and their job satisfaction is supported by the study's findings. In order to develop effective retention approaches, it is imperative that work life balance and job satisfaction be addressed. In particular attention is warranted to tenure processes and procedures, teaching, advising, service, research expectations, and collegiality

Relationships with peers and other colleagues are important to pre-tenure faculty and satisfaction with these collegial activities influences work life and job satisfaction. Existing research on faculty work lives has noted collegiality as a salient variable particularly for assistant professors (Bauer et al., 2007, Stanley, 2006; Tierney & Bensimon, 1996). To increase satisfaction with collegiality, institutional leaders should consider creating expanded formal and informal opportunities for pre-tenure faculty to interact with their peers in collaborative ways. These opportunities might include the development of professional development programs focused on giving pre-tenure faculty the skills they need to navigate challenges associated with their jobs and developing self-efficacy and other skills likely to increase job performance. In addition, it has been suggested in that programs designed to encourage relationships between pre-tenured and tenure faculty can be helpful in socializing new faculty (Bauer et al., 2007; Stanley, 2006). Mentoring programs for new faculty, in particular for those populations who are the focus of retention efforts, have proved to be a positive approach for facilitating collegiality (Stanley, 2006; Tierney & Bensimon, 2006). In

addition, prior research has revealed that mentoring programs, especially those focused on supporting women faculty, such as the ISU ADVANCE Scholar's Program, are an effective means to enhance the collegial nature of the workplace. Deans and chairs can implement mentoring programs within their schools and departments as a no-cost (or low-cost) way of encouraging collaborative relationships among faculty, increasing knowledge of research endeavors within one's department or school, and providing opportunities for faculty to develop social and professional networks.

Therefore, university leaders, especially individuals serving as deans and department chairs, need to lead efforts that create collegial environments conducive to positive social relationships among faculty, especially women and the minority. Implementing professional development programming and mentoring programs are effective retention tactics that policy makers and administrators may employ to increase pre-tenure faculty satisfaction with collegiality. Addressing relationships with colleagues would be an important consideration for those most concerned with the work life and their overall job satisfaction across academic disciplines.

Increasing job satisfaction depends on the fulfillment of motivation factors. As a special occupational group, faculty have a high degree of self-motivation, and they pay attention to self-development. Therefore, they should be given autonomy to develop their interests, allowed to work effectively the way they choose, and provided with development opportunities. The role of faculty should be enriched so that they can take on more responsibilities and have greater opportunities to develop their expertise. In evaluations, they can be recognized for their service. They should be given opportunities for development and responsibility for participation in decision-making. These opportunities would allow faculty

to gain practical training and increase their responsibilities, achievements, growth, and selfesteem. The nature of their work and motivation for development can increase faculty members' enthusiasm and job satisfaction. At the same time, a scientific, reasonable, and fair pay system can encourage faculty to progress and to contribute to the institutions because salary and benefits remain important factors for faculty.

This study did not consider variables that are external to the work environment (e.g., family, institution location, etc.) that have been found in past research to influence job satisfaction (Maiter, 1990; Rosser, 2004; Smart, 1990; Zhou & Volkwein, 2004). An understanding of the interplay of some of the other variables included on the COACHE survey would heighten understanding about the experiences of pre-tenure faculty and how these experiences influence their attrition. Finally, the results of this study suggest that regardless of work life balance, academic discipline is still a significant variable influencing faculty overall job satisfaction at a research granting university.

Limitations

There are several limitations to be aware of when considering the results of this study. The study was based on data collected from a survey that was administered electronically in the spring of 2009. Faculty identified as fulltime by the institution were given one month to respond to the initial e-mail requesting their participation by filling out the survey. Because the survey was disseminated and administered electronically, faculty who did not have accurate e-mail addresses or who were not identified by the contact at the college were not able to respond.



Because the survey was voluntary and self-reported, the results reflect only those who chose to respond in the given timeframe. The survey was fairly lengthy, which may have affected the response rate and thoughtfulness of the responses to the questions. In addition, the survey was administered near the end of the academic year, which is often a time when faculty experience an increase in demands on their time. The survey was given only in the spring of 2009, therefore, the findings reflect merely a snapshot in time and may not provide a measure of any changes that may occur over time.

Other limitations were that the study was based on a single institution and only experiences of tenure-track faculty were considered. The number of responses was also very small. Moreover, this study employed survey method rather than interviewing faculty.

Future Research

This study examined work life balance and job satisfaction across academic disciplines using a list of common variables without making causal inferences. The smaller number of major variables identified within the cluster models makes it possible for future researchers to study the variable causality and interactions in a discipline-specific fashion and further clarify the work life mechanism of university faculty. In addition to faculty work life and faculty job satisfaction in this study is the likelihood of an individual moving to a tenure-track position. As argued, job satisfaction may be different between faculty who choose to change positions within academic institutions and those who leave academia entirely. The opportunities are also different for faculty in different disciplines when seeking a nonacademic career.

Therefore, future research needs to further investigate faculty job satisfaction by comparing tenure-track and tenured positions. Finally, this study used faculty sampled from a Research and Doctoral University because institutional reputation and culture are believed to influence the turnover of faculty members (Hall 1995). This study can be replicated with samples from other types of institutions, and comparisons can be made to elicit the patterns of work life and job satisfaction factors across different types of institutions such as historical black colleges or universities. Special attention should also to be paid to faculty of Asian, non-Hispanic, and other origins if university administrators are concerned about faculty satisfaction rates.

Analyzing satisfaction levels across disciplines can help university administrators, deans, and academic unit heads identify factors that contribute to the satisfaction or dissatisfaction of faculty across different colleges and schools. It is suggested that researchers need to pay more attention to discipline-specific patterns in future studies of faculty job satisfaction behaviors. Thus, exploring disciplinary differences in the collegiality, academic culture, leadership, and climate of the department should also be explored in future research.

Satisfaction of faculty is also affected greatly by the institutional factors, such as leadership, collegial and student relationships, climate and culture of the university (Grunwald & Peterson, 2003; Hagedorn, 2000; Zhou & Volkwein, 2004). Relationships with colleagues, students and administrators, as well as perceptions of culture and climate of the institution, can significantly impact faculty job satisfaction (Hagedorn, 2000). Collegial relationships are often a source of support and a mechanism of building networking capability for faculty members (Astin&Davis, 1985; Hagedorn, 1996). Even though this dataset does not report these variables for individual faculty members, it is believed that

these are important factors for assessing the job satisfaction of women and minority faculty members, in particular. In order to explore this matter in depth, it is suggested that interviews with focus group should be carried out, especially with women of color or minority races as well other entities. An extension of the quantitative survey, interviews will add rich data to fill the voids left by the survey in addition to complimenting the survey data by allowing continuing lecturers to express in their own words their perceptions of their work life balance and job satisfaction. The qualitative data, therefore, drives this research. The feedback will support and strengthen the findings of this research. The mixed-method study will contribute more as the issues will be explored in depth rather than solely based on the numbers and figures.

Job satisfaction continues to be a challenging variable to predict, in part because there are number of facets that contribute to job satisfaction. Further research to determine the variables that affect job satisfaction should be conducted, such as using confirmatory factor analysis. Confirmatory factor analysis allows the researcher to test the hypothesis that a relationship between the job satisfaction variables and their underlying latent construct(s) exists. Because this study used data solely from Iowa State University, it would be useful to know whether or not similar results can be found with universities faculty in other states.

Conclusions

The goal of this study was to augment the knowledge of the relationship between work life balance and job satisfaction among faculty across academic disciplines. This study revealed work life balance is significantly associated with job satisfaction. There is a significant amount of informative research in this area. Longitudinal studies should be done

to test the impact of family-friendly policies in the future. Little research has been done on work life balance and job satisfaction. There is even less research on the impact of academic discipline on faculty satisfaction. Most previous studies that have included discipline as an explanatory variable did not conclude that disciplinary differences significantly impacted faculty members' job satisfaction levels (Hagedorn, 2000; Olsen et al., 1995).

Across all disciplines, it was revealed that female faculty expressed lower levels of satisfaction when compared with male faculty when controlling for demographic and professional variables. However, this study did not explore the level of satisfaction among gender across academic disciplines. Rather, this study focused on differences across disciplines as compared to a previous study that examined job satisfaction for women across disciplines (Olsen et al., 1995). In addition, several previous studies focused on specific factors that cause job satisfaction rather than a combination of institutional, personal, and career variables. Female faculty members have been shown to place a greater emphasis on intrinsic factors (e.g., contribution to the society, opportunities for advancement, and intellectual challenge) in comparison to male faculty members, who place greater emphasis on extrinsic factors (e.g., salary and benefits) (Gruneberg, 1979).

The results also revealed that faculty in Hard Pure disciplines are less satisfied with their job compared to faculty in Soft Pure disciplines. Biglan (1973b) concluded that in those areas in which there is greater existence of a paradigm (hard areas) there is more social connectedness, greater commitment to research, less commitment to teaching, and more publication of journal articles and this is even more apparent in the hard-applied disciplines. More specifically, Biglan revealed that hard subject areas have well-defined paradigms that permit shorter research studies (e.g., journal articles), because faculty who specialize in

certain subject areas commonly understand the theories and methods used to conduct research. On the other hand, faculty in the soft areas tend to publish monograph-length works because of the need to describe and justify the research, delimit methodological approaches, and evaluate the problem (Biglan).

This study focused primarily on analyzing work life balance by job satisfaction across disciplines while controlling for a variety of demographic and professional variables. Many have argued that it is important to study job satisfaction because it can directly impact faculty retention (Ambrose, Huston, & Norman, 2005; Johnsrud & Heck, 1994; Rausch, Ortiz, Douthitt, & Reed, 1989). However, caution should be used while interpreting these results because not all faculty members leave their jobs solely because of lower satisfaction levels and, similarly, not all faculty members stay because of higher job satisfaction levels (Ambrose et al., 2005).

Satisfaction of faculty was also shown to be affected greatly by institutional factors, such as leadership, collegial and student relationships, climate and culture of the university (Grunwald & Peterson, 2003; Hagedorn, 2000; Zhou & Volkwein, 2004). Relationships with colleagues, students and administrators, as well as perceptions of culture and climate of the institution, can significantly impact faculty job satisfaction (Hagedorn, 2000). Collegial relationships are often a source of support and a mechanism of building networking capability for faculty members (Astin&Davis, 1985; Hagedorn, 1996). Satisfaction varies not only by gender but also by discipline. Analyzing satisfaction levels across disciplines can help university administrators, deans, and academic unit heads identify factors that contribute to the satisfaction or dissatisfaction of faculty across different colleges and schools.



In summary, this study has added information to understanding a university as having complex social scenarios with a variety of work conditions among faculy. For the institution it was intended, the use of this information can include policy making to improve faculty members work conditions, managerial and acculturation processes, guidance for personnel selection and retention, and inform about valuable aspects of organizational change. In a broader sense, the study also revealed that faculty work environment is not only related to how they feel in their workplace, but also how they think about their life.



APPENDIX A. INSTITUTIONAL REVIEW BOARD APPROVAL

IOWA STATE UNIVERSITY OF SCIENCE AND TECHNOLOGY

Institutional Review Board Office of Research Assurances Vice Provost for Research 1138 Pearson Hall Ames, Iowa 50011-2207

515 294-4566 FAX 515 294-4566

Date: 6/29/2012

To: Farah Binti Mukhtar

407 S 5th St, Apt 116 Ames, IA 50010 **CC:** Dr. Daniel Robinson N247 Lagomarcino

From: Office for Responsible Research

Project Title: The work life balance and job satisfaction among faculty across academic disciplines at ISU

The Co-Chair of the ISU Institutional Review Board (IRB) has reviewed the project noted above and determined that the project:

	Does not meet the definition of research according to federal regulations.
×	Is research that does not involve human subjects according to federal regulations.

Accordingly, this project does not need IRB approval and you may proceed at any time. We do, however, urge you to protect the rights of your participants in the same ways you would if IRBG approval were required. For example, best practices include informing participants that involvement in the project is voluntary and maintaining confidentiality as appropriate

If you modify the project, we recommend communicating with the IRB staff to ensure that the modifications do not change this determination such that IRB approval is required.



APPENDIX B. SURVEY INSTRUMENT

COACHE Tenure-Track Job Satisfaction SurveyTM Instrument



APPENDIX B. SURVEY INSTRUMENT

I. DEMOGRAPHIC BACKGROUND

0. Do you have tenure?

1 ∘ Yes [SCREEN OUT] 0 ∘ No [CONTINUE]

1. Are you employed in a full-time position on the tenure-track?

1 o Yes [CONTINUE] 0 o No [SCREEN OUT]

2. Please provide the FULL name of the institution where you are employed.

[TEXT-REQUIRED]

3. What is the highest degree you have earned?

3 o Doctorate (Ph.D., J.D., M.D. etc.)

2 o Master's

1 o Bachelor's

4 o Associate's

5 o Other

98 o Decline to answer

6a. Is this your first tenure-track appointment?

 1 ○ Yes
 [SKIP TO Q7]

 0 ○ No
 [CONTINUE]

 98 ○ Decline to answer
 [SKIP TO Q7]

6b. How many years on the tenure track did you complete elsewhere?

1 o 1 year or less

2 o 2 years

3 o 3 years

4 o 4 years

5 o f or more years

6 o Full tenure

98 o Decline to answer

6d. Did your current faculty appointment begin with credit for prior service elsewhere?

1 ○ Yes [CONTINUE] 0 ○ No [SKIP TO Q7] 98 ○ Decline to answer [SKIP TO Q7]

6e. How many years of credit for prior service did you receive?

1 o 1 year or less

2 o 2 years

3 o 3 years

4 o 4 years

5 of more years

98 o Decline to answer



7. Please indicate the year in which your current faculty appointment began:

[PULL DOWN MENU]

- 8. What is your rank?
 - 4 o Professor (or "Full Professor")
 - 3 o Associate Professor
 - 2 o Assistant Professor
 - 1 o Instructor/Lecturer
 - 5 o Other
- 10. Name the department(s) or division(s) in which you hold formal responsibilities.

If you hold a joint appointment, respond to the survey questions about your *primary* department or division. (If only one of your departments is your tenure home, then please choose that department as your primary department.). If your formal responsibilities are evenly split, please choose one department as your primary:

Primary [TEXT-REQUIRED]

Secondary [TEXT - NOT REQUIRED]

- 98 Decline to answer
- 11. What is your race? (*Please check all that apply.*)
 - 0

 American Indian or Native Alaskan:

A person having origins in any of the original peoples of North and South America (including Central America).

- 1 a Asian, Asian-American, or Pacific Islander:
 - A person having origins in any of the original peoples of the Far East, Pacific Islands, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, Guam, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, and Samoa.
- 2 u White (non-Hispanic):
 - A person having origins in any of the original peoples of Europe, the Middle East, or North Africa.
- 3 🗆 Black or African-American
 - A person having origins in any of the black racial groups of Africa.
- 4

 Hispanic or Latino:
 - A person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin.
- 5 DOTHER
- 6 □ Multiracial
- 98 Decline to answer [NO OTHER SELECTION VALID]

IF COUNTRY = 0	IF COUNTRY = 1
12. What is your citizenship status? 1	12. Are you a Canadian citizen? 2 o Yes 3 o No

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Appendix B: Survey instrument

98 o Decline to answer	98 o Decline to answer
13. What is your gender? 0 o Male 1 o Female 98 o Decline to answer	
Q13b. Do you identify as a member of the gay, lesbing 1 o Yes 0 o No 98 o Decline to answer	an, bisexual, transgendered (GLBT) community?
14. In what year were you born? [PULL DOWN MENU]	
98 Decline to answer	
15. What is your annual salary? [PULL DOWN MENU]: 1	
98 o Decline to answer	
Q16. Do you have any children or other dependents 1	E to Q16a1] 7]
Q16a1. How many children who are infants, toddlers 0	s, or pre-school age live with you at home?
Q16a2. How many children in elementary, middle, or 0 o None 1 o 1	r high school live with you at home?
Q16a3. How many children currently in college do yo	ou have?

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Appendix B: Survey instrument

- 0 o None
- 0 1
- 2 02
- **3** ∘ **3**
- 4 04
- 5 o 5 or more98 o Decline to answer
- 16b. How many other dependents (e.g., an adult who requires your care) live with you at home?

[PULL DOWN MENU]

17. Which statement most clearly describes your household's employment situation?

0	○ I do not have a spouse/partner.	[SKIP TO Q19]
1	 My spouse/partner is not employed. 	[SKIP TO Q19]
2	 My spouse/partner is employed full-time at this institution. 	[CONTINUE]
3	 My spouse/partner is employed full-time elsewhere. 	[CONTINUE]
4	o My spouse/partner is employed part-time at this institution.	[CONTINUE]
5	 My spouse/partner is employed part-time elsewhere. 	[CONTINUE]
98	o Decline to answer	[SKIP TO Q19]



II. TENURE & PROMOTION

This set of items addresses various aspects surrounding tenure in your department.

	<mark>5</mark> Very clear	<mark>4</mark> Fairly clear	3 Neither clear nor unclear	<mark>2</mark> Fairly unclear	<mark>1</mark> Very unclear	98 Decline to answer
19. I find the tenure process in my department to be	0	0	0	0	0	0
20. I find the tenure criteria (what things are evaluated) in my department to be	0	0	0	0	0	0
21. I find the tenure standards (the performance threshold) in my department to be	0	0	0	0	0	0
22. I find the body of evidence that will be considered in making my tenure decision to be	0	0	0	0	0	0
23. My sense of whether or not I will achieve tenure is	0	0	0	0	0	0

The following pairs of questions ask you to identify the <u>clarity</u> and the <u>reasonableness</u> of various aspects of tenure.

Please answer both questions. If you choose not to answer these questions, please select "This criterion does not apply to me (not applicable)" or "Decline to answer" below.

24a. Is what's expected in order to earn tenure **clear** to you regarding your performance as: **a scholar** (e.g., research and creative work)?

5	4	3	2	1
Very	Fairly	Neither clear	Fairly	Very
clear	clear	nor unclear	unclear	unclear
0	0	0	0	0

25a. Is what's expected in order to earn tenure **reasonable** to you regarding your performance as: **a scholar** (e.g., research and creative work)?

5 Very reasonable	4 Fairly reasonable	3 Neither reasonable nor unreasonable	2 Fairly unreasonable	1 Very unreasonable
0	0	0	0	0

9 This criterion does not apply to me (not applicable).

98 Decline to answer

[RECORD N/A FOR BOTH] [RECORD DECLINE FOR BOTH]



Appendix B: Survey instrument

24e. Is what's expected in order to earn tenure clear to you regarding your performance as: a campus citizen?

5	4	3	2	1
Very clear	Fairly clear	Neither clear nor unclear	Fairly unclear	Very unclear
0	0	0	0	0

25e. Is what's expected in order to earn tenure reasonable to you regarding your performance as: a campus citizen?

5 Very reasonable	4 Fairly reasonable	3 Neither reasonable nor unreasonable	<mark>2</mark> Fairly unreasonable	1 Very unreasonable
0	0	0	0	0

This criterion does not apply to me (not applicable).

[RECORD N/A FOR BOTH]

98 Decline to answer

[RECORD DECLINE FOR BOTH]

24f. Is what's expected in order to earn tenure clear to you regarding your performance as: a member of the broader community (e.g., outreach)?

<mark>5</mark> Very			<mark>2</mark> Fairly	1 Very
clear	clear	nor unclear	unclear	unclear
0	0	0	0	0

25f. Is what's expected in order to earn tenure reasonable to you regarding your performance as: a member of the broader community (e.g., outreach)?

	- m m m - m - m - m - m - m - m - m -	. (0.9., 0a	iti odolij .	
<mark>5</mark> Very reasonable	<mark>4</mark> Fairly reasonable	3 Neither reasonable nor unreasonable	<mark>2</mark> Fairly unreasonable	<mark>1</mark> Very unreasonable
0	0	0	0	0

☐ This criterion does not apply to me (not applicable).

[RECORD N/A FOR BOTH]

98 Decline to answer

[RECORD DECLINE FOR BOTH]

Please indicate whether you agree or disagree with each of the following statements:

26. I have received consistent messages from tenured faculty about the requirements for tenure.

	9 Not applicable/ I don't know	5 Strongly agree	4 Somewhat agree	3 Neither agree nor disagree	2 Somewhat disagree	1 Strongly disagree	98 Decline to answer
	0	0	0	0	0	0	0

27a. In my opinion, tenure decisions here are made primarily on performance-based criteria (e.g., research/creative work, teaching, and/or service) rather than on non-performance-based criteria (e.g., politics, relationships, and/or demographics).

9 Not applicable/ I don't know	5 Strongly agree	4 Somewhat agree	3 Neither agree nor disagree	2 Somewhat disagree	1 Strongly disagree	98 Decline to answer
0	0	0	0	0	0	0

[SKIP TO Q28]

[SKIP TO Q28]

[SKIP TO Q28]

[SKIP TO Q28]

[CONTINUE] [CONTINUE]

[SKIP TO Q28]



Appendix B: Survey instrument

27b. In your opinion, on what **non-performance-based criteria** are tenure decisions in your department primarily made?

[TEXT - REQUIRED]			

□ Decline to answer

[TEXT FIELD NOT REQUIRED]

III. THE NATURE OF YOUR WORK

The next set of items explores your day-to-day activities as a faculty member.

Please indicate your level of satisfaction or dissatisfaction with the following aspects of your work:

	9 Not applicable/ I don't know	5 Very Satisfied	4 Satisfied	3 Neither satisfied nor dissatisfied	2 Dissatisfied	1 Very dissatisfied	98 Decline to answer
28. The way you spend your time as a faculty member	0	0	0	0	0	0	0
28b. The number of hours you work as a faculty member in an average week	0	0	0	0	0	0	0
29a. The level of the courses you teach	0	0	0	0	0	0	0
29b. The number of courses you teach	0	0	0	0	0	0	0
29c. The degree of influence you have over the courses you teach	0	0	0	0	0	0	0
29d. The discretion you have over the content of the courses you teach	0	0	0	0	0	0	0
29e. The number of students you teach	0	0	0	0	0	0	0
29f. The quality of undergraduate students with whom you interact	0	0	0	0	0	0	0
		IF VERSION	I = COLLEG	E, SKIP TO	30b		
29g. The quality of graduate students with whom you interact.	0	0	0	0	0	0	0



Appendix B: Survey instrument

30b. The amount of time you have to conduct research/produce creative work	0	0	0	0	0	0	0
30c. The amount of external funding you are expected to find	0	0	0	0	0	0	0

[CONTINUE ON SAME PAGE AS PREVIOUS]

[CONTINUE ON 3A	WETAGEA	OTIVEVIOU	<u> </u>				
	9 Not applicable/ I don't know	<mark>5</mark> Very Satisfied	4 Satisfied	3 Neither satisfied nor dissatisfied	2 Dissatisfied	<mark>1</mark> Very dissatisfied	98 Decline to answer
30d. The influence you have over the focus of your research/creative work	0	0	0	0	0	0	0
31. The quality of facilities (i.e., office, labs, classrooms)	0	0	0	0	0	0	0
32. The amount of access you have to Teaching Fellows, Graduate Assistants, et al.	0	0	0	0	0	0	0

33. How satisfied are you with the quality of these support services?

	9 Not applicable/ I don't know	5 Very Satisfied	4 Satisfied	3 Neither satisfied nor dissatisfied	2 Dissatisfied	1 Very dissatisfied	98 Decline to answer
33a. Clerical/ administrative services	0	0	0	0	0	0	0
33b. Research services	0	0	0	0	0	0	0
33c. Teaching services	0	0	0	0	0	0	0
33d. Computing services	0	0	0	0	0	0	0



IV. POLICIES AND PRACTICES

This set of questions addresses faculty policies and practices common at colleges and universities.

Please rate **how important** or **unimportant** the following policies and practices would be to your success, regardless of whether they currently apply to your institution, then rate **how effective or ineffective** each has been at your institution. For each item, please mark the appropriate column.

POLICY/PRACTICE:

1. Formal mentoring program (e.g., assigned mentors, matching)

34a. Importance or unimportance of policy to your success:

<mark>5</mark> Very important	4 Important	3 Neither important nor unimportant	<mark>2</mark> Unimportant	<mark>1</mark> Very unimportant
0	0	0	0	0

34b. Effectiveness or ineffectiveness of policy at your institution:

<mark>5</mark> Very effectiv	4 Effective	3 Neither effective nor ineffective	2 Ineffective	<mark>1</mark> Very Ineffective	8 Not offered at my institution	<mark>9</mark> I don't know/ Not applicable
0	0	0	0	0	0	0

98 Decline to answer [NO OTHER SELECTION VALID]

2. Informal mentoring

34a. Importance or unimportance of policy to your success:

<mark>5</mark> Very important	4 Important	3 Neither important nor unimportant	<mark>2</mark> Unimportant	1 Very unimportant
0	0	0	0	0

34b. Effectiveness or ineffectiveness of policy at your institution:

	1000 01 111011001		, ,			
5 Very effective	4 Effective	3 Neither effective nor ineffective	2 Ineffective	<mark>1</mark> Very Ineffective	8 Not offered at my institution	9 I don't know/ Not applicable
0	0	0	0	0	0	0

98 Decline to answer [NO OTHER SELECTION VALID]





Appendix B: Survey instrument

5. Professional assistance in obtaining externally funded grants

34a. Importance or unimportance of policy to your success:

5 Very important	4 Important	3 Neither important nor unimportant	<mark>2</mark> Unimportant	<mark>1</mark> Very unimportant
0	0	0	0	0

34b. Effectiveness or ineffectiveness of policy at your institution:

5 Very effective	4 Effective	3 Neither effective nor ineffective	2 Ineffective	1 Very Ineffective	8 Not offered at my institution	9 I don't know/ Not applicable
0	0	0	0	0	0	0

98 Decline to answer [NO OTHER SELECTION VALID]

6. Professional assistance for improving teaching

34a. Importance or unimportance of policy to your success:

5 Very important	4 Important	3 Neither important nor unimportant	<mark>2</mark> Unimportant	<mark>1</mark> Very unimportant
0	0	0	0	0

34b. Effectiveness or ineffectiveness of policy at your institution:

5 Very effective	4 Effective	3 Neither effective nor ineffective	2 Ineffective	<mark>1</mark> Very Ineffective	8 Not offered at my institution	9 I don't know/ Not applicable
0	0	0	0	0	0	0

98 Decline to answer [NO OTHER SELECTION VALID]

7. Travel funds to present papers or conduct research

34a. Importance or unimportance of policy to your success:

O-ta. Important	oc or arminportal	our success.		
<mark>5</mark> Very important	4 Important	3 Neither important nor unimportant	<mark>2</mark> Unimportant	<mark>1</mark> Very unimportant
0	0	0	0	0



Appendix B: Survey instrument

34b. Effectiveness or ineffectiveness of policy at your institution:

5 Very effective	4 Effective	3 Neither effective nor ineffective	2 Ineffective	1 Very Ineffective	8 Not offered at my institution	9 I don't know/ Not applicable
0	0	0	0	0	0	0

98 Decline to answer [NO OTHER SELECTION VALID]

8. Paid or unpaid research leave

34a. Importance or unimportance of policy to your success:

<mark>5</mark> Very important	4 Important	3 Neither important nor unimportant	<mark>2</mark> Unimportant	<mark>1</mark> Very unimportant
0	0	0	0	0

34b. Effectiveness or ineffectiveness of policy at your institution:

5 Very effective	4 Effective	3 Neither effective nor ineffective	2 Ineffective	<mark>1</mark> Very Ineffective	8 Not offered at my institution	9 I don't know/ Not applicable
0	0	0	0	0	0	0

98 Decline to answer [NO OTHER SELECTION VALID]

9. Paid or unpaid personal leave

34a. Importance or unimportance of policy to your success:

o real map or team.	oo or arminporter	ice of policy to	,	
<mark>5</mark> Very important	<mark>4</mark> Important	3 Neither important nor unimportant	<mark>2</mark> Unimportant	1 Very unimportant
0	0	0	0	0

34b. Effectiveness or ineffectiveness of policy at your institution:

OTD. LITCULIVE	1033 OF ITTOTICOU	veriess of policy	at your montan	OH.		
<mark>5</mark> Very effective	4 Effective	3 Neither effective nor ineffective	2 Ineffective	<mark>1</mark> Very Ineffective	8 Not offered at my institution	9 I don't know/ Not applicable
0	0	0	0	0	0	0

98 Decline to answer [NO OTHER SELECTION VALID]





Appendix B: Survey instrument

10. An upper limit on committee assignments for tenure-track faculty

34a. Importance or unimportance of policy to your success:

5 Very important	4 Important	3 Neither important nor unimportant	<mark>2</mark> Unimportant	<mark>1</mark> Very unimportant
0	0	0	0	0

34b. Effectiveness or ineffectiveness of policy at your institution:

5 Very effective	4 Effective	3 Neither effective nor ineffective	2 Ineffective	<mark>1</mark> Very Ineffective	8 Not offered at my institution	9 I don't know/ Not applicable
0	0	0	0	0	0	0

98 Decline to answer [NO OTHER SELECTION VALID]

11. An upper limit on teaching obligations

34a. Importance or unimportance of policy to your success:

5 Very important	4 Important	3 Neither important nor unimportant	<mark>2</mark> Unimportant	<mark>1</mark> Very unimportant
0	0	0	0	0

34b. Effectiveness or ineffectiveness of policy at your institution:

5 Very effective	4 Effective	3 Neither effective nor ineffective	2 Ineffective	<mark>1</mark> Very Ineffective	8 Not offered at my institution	<mark>9</mark> I don't know/ Not applicable
0	0	0	0	0	0	0

98 Decline to answer [NO OTHER SELECTION VALID]

12. Peer reviews of teaching or research/creative work

34a. Importance or unimportance of policy to your success:

o ra. iii	portari	oo or arminportar	loo of policy to	, our ouccos.	
5 Ver impor		4 Important	3 Neither important nor unimportant	<mark>2</mark> Unimportant	1 Very unimportant
0		0	0	0	0



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34b. Effectiveness or ineffectiveness of policy at your institution:

5 Very effective	4 Effective	3 Neither effective nor ineffective	2 Ineffective	<mark>1</mark> Very Ineffective	8 Not offered at my institution	9 I don't know/ Not applicable
0	0	0	0	0	0	0

98 Decline to answer [NO OTHER SELECTION VALID]

13. Childcare

34a. Importance or unimportance of policy to your success:

5 Very important	4 Important	3 Neither important nor unimportant	<mark>2</mark> Unimportant	<mark>1</mark> Very unimportant
0	0	0	0	0

34b. Effectiveness or ineffectiveness of policy at your institution:

5 Very effective	4 Effective	3 Neither effective nor ineffective	2 Ineffective	1 Very Ineffective	8 Not offered at my institution	9 I don't know/ Not applicable
0	0	0	0	0	0	0

98 Decline to answer [NO OTHER SELECTION VALID]

14. Financial assistance with housing

34a. Importance or unimportance of policy to your success:

o ran milportani			,	
5 Very important	4 Important	3 Neither important nor unimportant	<mark>2</mark> Unimportant	<mark>1</mark> Very unimportant
0	0	0 0		0

34b. Effectiveness or ineffectiveness of policy at your institution:

OTD. LITCULIVE	1033 OF ITTOTICOU	veriess of policy	at your montan	OH.		
<mark>5</mark> Very effective	4 Effective	3 Neither effective nor ineffective	2 Ineffective	<mark>1</mark> Very Ineffective	8 Not offered at my institution	<mark>9</mark> I don't know/ Not applicable
0	0	0	0	0	0	0

98 Decline to answer [NO OTHER SELECTION VALID]



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15. Stop-the-clock for parental or other family reasons

34a. Importance or unimportance of policy to your success:

<mark>5</mark> Very important	4 Important	3 Neither important nor unimportant	<mark>2</mark> Unimportant	<mark>1</mark> Very unimportant
0	0	0	0	0

34b. Effectiveness or ineffectiveness of policy at your institution:

5 Very effective	4 Effective	3 Neither effective nor ineffective	2 Ineffective	1 Very Ineffective	8 Not offered at my institution	9 I don't know/ Not applicable
0	0	0	0	0	0	0

98 Decline to answer [NO OTHER SELECTION VALID]

16. Spousal/partner hiring program

34a. Importance or unimportance of policy to your success:

5 Very important	4 Important	3 Neither important nor unimportant	<mark>2</mark> Unimportant	1 Very unimportant
0	0	0	0	0

34b. Effectiveness or ineffectiveness of policy at your institution:

O ID. Ellocavol	1000 of Intellecti	vollede of policy	at your montan	011.		
5 Very effective	4 Effective	3 Neither effective nor ineffective	2 Ineffective	<mark>1</mark> Very Ineffective	8 Not offered at my institution	9 I don't know/ Not applicable
0	0	0	0	0	0	0

98 Decline to answer [NO OTHER SELECTION VALID]

17. Elder care

34a. Importance or unimportance of policy to your success:

<mark>5</mark> Very important	4 Important	3 Neither important nor unimportant	<mark>2</mark> Unimportant	<mark>1</mark> Very unimportant
0	0	0	0	0



Appendix B: Survey instrument

34b. Effectiveness or ineffectiveness of policy at your institution:

5 Very effective	4 Effective	3 Neither effective nor ineffective	2 Ineffective	1 Very Ineffective	8 Not offered at my institution	9 I don't know/ Not applicable
0	0	0	0	0	0	0

98 Decline to answer [NO OTHER SELECTION VALID]

18. Tuition waivers (e.g., for child, spouse/partner)

34a. Importance or unimportance of policy to your success:

5 Very important	4 Important	3 Neither important nor unimportant	<mark>2</mark> Unimportant	<mark>1</mark> Very unimportant
0	0	0	0	0

34b. Effectiveness or ineffectiveness of policy at your institution:

5 Very effective	4 Effective	3 Neither effective nor ineffective	2 Ineffective	1 Very Ineffective	8 Not offered at my institution	9 I don't know/ Not applicable
0	0	0	0	0	0	0

98 Decline to answer [NO OTHER SELECTION VALID]

19. Modified duties for parental or other family reasons (e.g., course release)

34a. Importance or unimportance of policy to your success:

5 Very important	4 Important	3 Neither important nor unimportant	<mark>2</mark> Unimportant	1 Very unimportant
0	0	0	0	0

34b. Effectiveness or ineffectiveness of policy at your institution:

5 Very effective	4 Effective	3 Neither effective nor ineffective	2 Ineffective	<mark>1</mark> Very Ineffective	8 Not offered at my institution	9 I don't know/ Not applicable
0	0	0	0	0	0	0

98 Decline to answer [NO OTHER SELECTION VALID]



20. Part-time tenure-track position

34a. Importance or unimportance of policy to your success:

<mark>5</mark> Very important	4 Important	3 Neither important nor unimportant	<mark>2</mark> Unimportant	<mark>1</mark> Very unimportant
0	0	0	0	0

34b. Effectiveness or ineffectiveness of policy at your institution:

5 Very effective	4 Effective	3 Neither effective nor ineffective	2 Ineffective	<mark>1</mark> Very Ineffective	8 Not offered at my institution	9 I don't know/ Not applicable
0	0	0	0	0	0	0

98 Decline to answer [NO OTHER SELECTION VALID]

Please indicate your level of agreement or disagreement with the following statements:

	9 Not applicable/ I don't know	5 Strongly agree	4 Somewhat agree	3 Neither agree nor disagree	2 Somewhat disagree	1 Strongly disagree	98 Decline to answer
35a. My institution does what it can to make having children and the tenure-track compatible.	0	0	0	0	0	0	0
35b. My institution does what it can to make raising children and the tenure-track compatible.	0	0	0	0	0	0	0
35c. My departmental colleagues do what they can to make having children and the tenure-track compatible.	0	0	0	0	0	0	0
35d. My departmental colleagues do what they can to make raising children and the tenure-track compatible.	0	0	0	0	0	0	0
35e. My colleagues are respectful of my efforts to balance	0	0	0	0	0	0	0

Appendix B: Survey instrument

work and home				
responsibilities.				

36. How satisfied or dissatisfied are you with your compensation (that is, your salary and benefits)?

9 Not applicable/ I don't know	5 Very Satisfied	4 Satisfied	3 Neither satisfied nor dissatisfied	2 Dissatisfied	1 Very dissatisfied	98 Decline to answer
0	0	0	0	0	0	0

37. How satisfied or dissatisfied are you with the balance between your professional time and your

personal or family time?

9 Not applicable/ I don't know	5 Very Satisfied	4 Satisfied	3 Neither satisfied nor dissatisfied	2 Dissatisfied	1 Very dissatisfied	98 Decline to answer
0	0	0	0	0	0	0

V. Climate, Culture and Collegiality

This set of questions addresses the climate, culture and collegiality of your workplace.

Please indicate your level of satisfaction or dissatisfaction with the following aspects of your workplace:

	9 Not applicable/ I don't know	5 Very Satisfied	4 Satisfied	3 Neither satisfied nor dissatisfied	2 Dissatisfied	1 Very dissatisfied	98 Decline to answer
38a. The fairness with which your immediate supervisor evaluates your work	0	0	0	0	0	0	0
38b. The interest tenured faculty take in your professional development	0	0	0	0	0	0	0
38c. Your opportunities to collaborate with tenured faculty	0	0	0	0	0	0	0
38d. The value faculty in your department place on your work	0	0	0	0	0	0	0
39a. The amount of professional interaction you have with tenured faculty in your department	0	0	0	0	0	0	0
39b. The amount	0	0	0	0	0	0	0



Appendix B: Survey instrument

of personal interaction you have with tenured faculty in your department							
39c. The amount of professional interaction you have with pretenure faculty in your department	0	0	0	0	0	0	0
39d. The amount of personal interaction you have with pretenure faculty in your department	0	0	0	0	0	0	0

[CONTINUE ON SAME PAGE AS PREVIOUS]

	9 Not applicable/ I don't know	5 Very Satisfied	4 Satisfied	3 Neither satisfied nor dissatisfied	2 Dissatisfied	1 Very dissatisfied	98 Decline to answer
40. How well you "fit" (e.g., your sense of belonging, your comfort level) in your department	0	0	0	0	0	0	0
41. The intellectual vitality of the tenured faculty in your department	0	0	0	0	0	0	0
41a. The intellectual vitality of <i>pre-tenure</i> faculty in your department	0	0	0	0	0	0	0
41b. Opportunities for participation, appropriate to your rank, in the governance of your institution	0	0	0	0	0	0	0

IF VERSION = COLLEGE, SKIP TO 42

41c. Opportunities for participation, appropriate to your rank, in the governance of	0	0	0	0	0	0	0	
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Appendix B: Survey instrument

	your department							
--	-----------------	--	--	--	--	--	--	--

Please indicate your level of agreement or disagreement with the following statement:

	9 Not applicable/ I don't know	5 Strongly agree	4 Somewhat agree	3 Neither agree nor disagree	2 Somewhat disagree	1 Strongly disagree	98 Decline to answer
42. On the whole, my institution is collegial.	0	0	0	0	0	0	0

VI. GLOBAL SATISFACTION

Finally, we ask you to make some overall assessments about your department and your institution as a place to work.

44a. Please check the two (and only two) best aspects about working at your institution.

1. Quality of colleagues 17. Presence of others like me.

2. Support of colleagues 18. My sense of "fit" here.

3. Opportunities to collaborate with colleagues 19. Protections from service/assignments

4. Quality of graduate students 20. Commute

5. Quality of undergraduate students 21. Cost of living

6. Quality of facilities 22. Research/creative work requirements for tenure

7. Support for research/creative work (e.g., leave) 23. Teaching load

8. Support for teaching 24. Tenure requirements in general

9. Support for professional development 25. Tenure criteria clarity

10. Assistance for grant proposals 26. Tenure process clarity

11. Childcare policies/practices 27. Manageable pressure to perform

12. Availability/quality of childcare facilities 28. Academic freedom

13. Spousal/partner hiring program 94. Other (Please specify)

14. Compensation 95. Other (Please specify)

15. Geographic location 99. There are no positive aspects.

16. Diversity 98. Decline to answer

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[TEXT-REQUIRED if checking "Other"]

[TEXT-REQUIRED if checking "Other"]

Appendix B: Survey instrument

44b. Please check the two (and only two) worst aspects about working at your institution.

1. Quality of colleagues

2. Support of colleagues

3. Opportunities to collaborate with colleagues

4. Quality of graduate students

5. Quality of undergraduate students

6. Quality of facilities

7. Lack of support for research/creative work (e.g.,

leave)

8. Lack of support for teaching

9. Lack of support for professional development

10. Lack of assistance for grant proposals

11. Childcare policies/practices (or lack thereof)

12 Availability/quality of childcare facilities

13. Spousal/partner hiring program (or lack thereof)

14. Compensation

15. Geographic location

16. Lack of diversity

17. Absence of others like me.

18. My lack of "fit" here.

19. Too much service / too many assignments

20. Commute

21. Cost of living

22. Research/creative work requirements for tenure

23. Teaching load

24. Tenure requirements in general

25. Tenure criteria clarity

26. Tenure process clarity

27. Unrelenting pressure to perform

28. Academic freedom

94. Other (Please specify)

[TEXT- REQUIRED if checking "Other"]

95. Other (Please specify)

[TEXT- REQUIRED if checking "Other"]

98. There are no negative aspects.

99. Decline to answer



Appendix B: Survey instrument

45a. All things considered, how satisfied or dissatisfied are you with your **department** as a place to work?

9 Not applicable/ I don't know	5 Very Satisfied	4 Satisfied	3 Neither satisfied nor dissatisfied	2 Dissatisfied	1 Very dissatisfied	98 Decline to answer
0	0	0	0	0	0	0

45b. All things considered, how satisfied or dissatisfied are you with your **institution** as a place to work?

9 Not applicable/ I don't know	<mark>5</mark> Very Satisfied	4 Satisfied	3 Neither satisfied nor dissatisfied	2 Dissatisfied	<mark>1</mark> Very dissatisfied	98 Decline to answer
0	0	0	0	0	0	0

46a. Who serves as the **chief academic officer** at your institution?

(An institution's 'chief academic officer' typically reports to the President or Chancellor and oversees all educational affairs and activities, including research and academic personnel.)

5	o President	[CONTINUE]
6	o Chancellor	[CONTINUE]
4	 Vice President for Academic Affairs 	[CONTINUE]
3	 Academic Dean 	[CONTINUE]
2	o Provost	[CONTINUE]
1	Other (Please specify):	[CONTINUE]
9	 I don't know. 	[SKIP TO Q47]
98	 Decline to answer 	[SKIP TO Q47]

Please indicate your level of agreement or disagreement with the following statement:

46b. The person who serves as the chief academic officer at my institution seems to care about the quality of life for pre-tenure faculty.

quality of the for pre-tendre racalty.							
9 Not applicable/ I don't know	5 Strongly agree	4 Somewhat agree	3 Neither agree nor disagree	2 Somewhat disagree	1 Strongly disagree	98 Decline to answer	
0	0	0	0	0	0	0	

47. Assuming you achieve tenure, how long do you plan to remain at your institution?

		,
4	 For the rest of my career 	[SKIP TO Q48]
3	For the foreseeable future	[SKIP TO Q48]
2	 For no more than 5 years after earning tenure 	[CONTINUE TO Q47b]
1	 I haven't thought that far ahead 	[SKIP TO Q48]
9	 Not applicable 	[SKIP TO Q48]
98	Decline to answer	ISKIP TO Q481

47b. Why do you plan to remain at your institution for no more than five years after earning tenure?

- 1 o Prefer to work at another academic institution
- 2 o Prefer to work in private industry
- 3 o Prefer to work in government4 o Other (*Please explain*:)

98 o Decline to answer

[TEXT- REQUIRED if checking "Other"]





Appendix B: Survey instrument

Please indicate your level of agreement or disagreement with the following statement:

48. If I could do it over, I would again choose to work at this institution.

9 Not applicable/ I don't know	5 Strongly agree	4 Somewhat agree	3 Neither agree nor disagree	2 Somewhat disagree	1 Strongly disagree	98 Decline to answer
0	0	0	0	0	0	0

- 49. If a candidate for a tenure-track (pre-tenure) faculty position asked you about your **department** as a place to work, would you:
 - 2 o Strongly recommend your department as a place to work
 - 1 o Recommend your department with reservations
 - 0 o Not recommend your department as a place to work
 - 98 o Decline to answer
- 50. How do you rate your **institution** as a place for tenure-track (pre-tenure) faculty to work?
 - 5 o Great
 - 4 o Good
 - 3 o So-so
 - 2 ∘ Bad
 - 1 Awful
- 51. Please use the space below to tell us the **number one thing** that you, personally, feel your institution could do to improve the workplace.

[TEXT- REQUIRED]		

□ Decline to answer



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