A COMPARATIVE STUDY OF FACULTY JOB SATISFACTION: LOOKING BEYOND THE AGGREGATE

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Chapter 1 – Introduction

"My father used to have an expression. He'd say, 'Joey, a job is about a lot more than a paycheck. It's about your dignity. It's about your self-respect. It's about your place in your community' " (Biden, n.d.). Whether you are talking about a coal miner in West Virginia, a pilot in California, or a teacher in Kansas, it's more than a job. U.S. workers spend about a third of their lifetime at work (Reference.com, 2020). Therefore, it stands to reason a worker would want a job and workplace that provides some type of satisfaction beyond a paycheck. However, how do employers know if their employees are satisfied? Do employees typically tell a manager how happy they are with their job? Do employees often express their satisfaction with benefits, company policies, their supervisor, or the quality of the breakroom? Maybe they do, but employees are more likely to express dissatisfaction with an aspect of their employment, rather than satisfaction. Research shows employees spend about 10 hours a month complaining at work (Bregman, 2018). This might leave the manager or administrators wondering if employees are unhappy or discontent in the job all the time. To understand the realities of the situation, it is necessary to look at the factors that cause employees to be satisfied or dissatisfied with their jobs and the environment in which they work.

Employers rely on employees to do their jobs and keep the revenue flow positive. University faculty are no different. Faculty are forward-facing to what one might call the customer – the students. Their job satisfaction is important to the school as the revenue stream from tuition and research grants may be based on their performance. However, public perception has been shaped to distrust the college professor and ignore their job satisfaction, or lack thereof (Hagedorn, 2000). Yet, having a disgruntled faculty member can negatively impact the student experience. While multiple organizations report on faculty quality in the form of rankings, they

may not capture faculty job satisfaction. One survey that attempts to capture job satisfaction is the *Great Colleges to Work For*.

Texas Christian University (TCU) has participated in the Great Colleges to Work For survey (ModernThink, n.d.) and has made the listing 10 years in a row. Although it is an honor to be listed, it is not a confirmation of faculty job satisfaction. The survey conducted by Modern Think, LLC gathers data from faculty and staff but does not include part-time (adjunct) faculty; thus, leaving out a large contingent of this population.

A common editorial topic in higher education news articles is the plight of the adjunct. These part-time faculty members have job concerns that are different from full-time faculty (Lewis, 2012). Although the media coverage on the poor employment conditions is vast, data collected by TIAA show these complaints are coming from a small minority of part-time faculty (Yakoboski, 2018). A project was started by the TCU Faculty Senate in 2018 to gather data on the part-time faculty and how they were being utilized on campus, but the project failed after resistance within the administration (T. Legatski, personal communication, June 4, 2018).

As an institution, TCU does not have data on the job satisfaction of their faculty. Given the large numbers of this employee population, job satisfaction should be assessed on a regular basis. After all, faculty working conditions are student learning conditions (Ott & Cisneros, 2015) and are vital to the success of the school.

Purpose

The purpose of this study is to use applied research that measures faculty job satisfaction with an analysis of various demographic categories beyond the aggregate. The data were also categorized by job components, broken down into motivators and hygiene factors, per the Two-Factor Theory (Herzberg et al., 1959). This detailed information allows for a conclusion to

confirm faculty job satisfaction or determine in what areas there is room for improvement to achieve faculty satisfaction. However, there is the possibility of both: faculty job satisfaction and areas that threaten this satisfaction and need to be improved.

Research Questions

To determine job satisfaction of faculty the following research questions served as the guide for the research.

1. How does job satisfaction differ by faculty status?
2. How does job satisfaction differ by college?
3. How does job satisfaction differ by gender pronouns?
4. How does job satisfaction differ for ethnic or racial minorities?
5. How does job satisfaction with intrinsic job factors (motivators) differ from satisfaction with extrinsic job factors (hygiene factors)?
6. How does TCU's part-time faculty job satisfaction compare to the results and conclusions found in the literature?

Significance

Link to Performance

Managers may use common sense to determine that happier employees are more productive employees. Yet, "…the majority of empirical findings published on this topic point to the apparent conclusion that the relationship between satisfaction and performance is weak at best" (Jones, 2006). However, researchers have successfully shown a positive correlation between individual job satisfaction factors and productivity (Randhawa, 2007). This link is discussed in detail in Chapter 2.

Turnover Issues

Employees leaving an employer or changing jobs within an organization have real and unseen financial costs. While the factors in hiring new faculty may vary slightly, there is a real cost in recruiting tenure-track faculty (TTF), including travel, lodging, food, and entertainment during a sight visit plus possible relocation costs (Mueller, 2020). In addition to the real expenses of posting available jobs, paying interview costs, and conducting background research on potential employees, unseen costs like manager time and lost productivity while the position is vacant are incurred (Mueller, 2020). These unseen costs continue while the new employee learns the job. Administrators can reap the rewards of increased job satisfaction through decreased turnover and intention to leave (Jones, 2006). The financial costs of keeping an employee, even faculty, are lower than replacing one.

Mental Health Issues

One facet of job satisfaction often overlooked is the mental health of the employee. Allen et al. (2000) report in their review of literature on the topic of satisfaction, with increased interference of work-related issues on nonwork activities, psychological strain was evident. They also report that work-to-family conflict results in increased levels of anxiety and irritability/hostility, physical symptoms of poor appetite and fatigue, increased depression, alcohol abuse, cigarette use, and job burnout. Dahm et al. found that minor tradeoffs, such as sacrificing family time to work late or leaving work early for a child's baseball game, "significantly and more frequently influence workers' emotional and psychological well-being in work, family, and personal life" (2019, p. 495). All the symptoms listed here are indicative of poor mental health and can manifest in undesirable behaviors at work (Curran et al., 2007). These behaviors may include increased absenteeism, verbal aggression, physical violence, and

increased unproductive time. Potential mental health issues can result from job dissatisfaction; therefore, it is important to monitor the job satisfaction of all employees (Beutell & Schneer, 2014).

The Campus Under Study

Texas Christian University (TCU) is located in Fort Worth, Texas. Established in 1869 as AddRan College for Men and Women, in 1873 brothers Addison and Randolph Clark affiliated their 5-year-old college with the Christian Church (Disciples of Christ) to ensure that their vision of education for men and women could be continued (Mission & History, n.d.). The renamed AddRan Christian University moved from Thorpe Spring to Waco in 1895 and was renamed in 1902 as Texas Christian University (Mission & History, n.d.). The university moved to Fort Worth in 1910 after a fire destroyed the campus in Waco (Mission & History, n.d.).

Today, the university sits on its original Fort Worth location and has expanded from 50 acres to 295 acres (Mission & History, n.d.; Quick Facts, n.d.). The student population consists of 9,474 undergraduate students and 1,550 graduate students (Quick Facts, n.d.). TCU offers 116 undergraduate majors and 94 graduate areas of study (Quick Facts, n.d.). With a requirement for first and second-year students to live on campus, 54% of all students reside on the campus (Quick Facts, n.d.). The majority of students are female (59%) and white (72%) (Quick Facts, n.d.; TCU quick reference fall 2020, 2020). Most students are from Texas (53%) but all 50 states are represented in the undergraduate population (Quick Facts, n.d.; TCU quick reference fall 20202, 2020). The annual total cost of attendance is estimated at $70,428, with 77% receiving financial aid (Quick Facts, n.d.; TCU quick reference fall 2020, 2020). This private research institution has operating revenues of $561,490,000 and total investments of $1,926,238,000 (TCU quick reference fall 2020, 2020).

As of Fall 2019 (TCU Institutional Research, 2019), the faculty population consists of the following numbers by status:

Tenured Faculty (TF)	346
Tenure Track Faculty (TTF)	120
Non-Tenure Track Faculty (NTTF)	261
Part-Time (PTF)[a]	306

[a] The number of PTF is an estimate based on data gathered in 2018 directly from department administrators by the researcher.

The full-time faculty is compromised of 51% men, 79% white, and 87% holding a terminal degree (TCU Institutional Research, 2019).

The faculty population is divided amongst ten (10) distinct colleges (TCU Institutional Research, 2019). They include:

1. AddRan College of Liberal Arts
2. Bob Schieffer College of Communication
3. College of Education
4. College of Fine Arts
5. College of Science & Engineering
6. Harris College of Nursing & Health Sciences
7. John V. Roach Honors College
8. Neeley School of Business
9. School of Interdisciplinary Studies
10. University Programs

This does not include the medical school campus with faculty and facilities shared with The University of North Texas Health Science Center or the seminary located on the main campus.

Current Campus Issues

The timing of this research is unique given the multiple changes happening at TCU in addition to the response to COVID-19. The campus issues are numerous and have changed the context in which faculty do their jobs. Hagedorn's (2000) work introduces a new conceptual framework incorporating the motivators and hygiene factors from the Two-Factor Theory with demographics, environmental conditions, and changes and transfers in the job. What is important to note is her inclusion of change in an employee's reference to context. As situations develop, as leadership changes, and as extenuating circumstances are presented, the context in which an employee judges job satisfaction also changes (Hagedorn, 2000). Given the multitude of changes that have occurred in the last year at TCU, it is important to put the measured job satisfaction into context.

In the last year, there have been multiple changes in campus leadership. The Provost retired, and a new Provost started in March 2019 (FWBP Staff, 2018). Recent changes among deans include a new dean for the business school (O'Donnell, 2019), a new dean for the nursing school (Harral, 2019), a new dean of the College of Education (Preusser, 2020a), and a new dean for the College of Liberal Arts (FWBP Staff, 2020). The College of Fine Arts currently has an interim dean (Preusser, 2020b) and after a lawsuit was filed claiming discrimination against a student, the dean of the Honors College stepped down (Vaglio, 2020).

In addition to leadership changes, the Chancellor announced intentions to cut benefits for incoming employees. This resulted in several heated meetings with current faculty with one

vocal faculty member in opposition to the change being removed from a Faculty Senate working committee on compensation (Vaglio, 2019).

In an email sent to all TCU faculty, a tenured faculty member called out the Secretary of the Faculty Senate for an email regarding a Faculty Senate vote. The email chastised her for responding to a tenured faculty member while she was only 'contingent.' This exchange highlights the perception many hold that non-tenure track faculty (NTTF) are inferior to tenured faculty (TF) and tenure track faculty (TTF) (D. Colon, personal communication, March 26, 2019; Rawn & Fox, 2018). To illustrate this further, the Department of Management and Leadership asked all full-time faculty to consider volunteering to be Department Chair. According to the Interim Department Chair, all full-time faculty were eligible, but "conversations with the powers that be in the last couple of years have led me to believe that instructors would not be approved for the position" (G. Stephens, personal communication, December 2, 2019). He went on to say that Professors of Professional Practice are not considered ideal candidates. This email illustrates a perception that both titles are part of the NTTF faculty and considered second-rate to the TTF and TF (Ott & Cisneros, 2015).

Although a lawsuit claiming racial discrimination against an employee was dismissed, there remains an underlying feeling of discrimination promoting campus-wide listening sessions (V. Boschini, personal communication, January 31, 2020). Multiple training opportunities for diversity and inclusion have been announced in an effort to resolve issues brought forward by employees and students (TCU HR Department, personal communication, February 18, 2020). Knowing these concerns are a sampling of widespread issues in our society, a faculty vote was held to include a diversity requirement in the university core curriculum (TCU Faculty Senate, n.d.).

With the worldwide outbreak of COVID-19, the Chancellor extended the 2020 Spring Break an additional week and then required classes to move online (V. Boschini, personal communication, March 11, 2020). This modification of traditional in-person classes changes the context of faculty jobs. Also, in response to the financial strains on the university during this time, all employees were informed that pay increases for the following year would be suspended, all hiring would be put on hold, and retirement contributions would be permanently cut from 11.5% to 8% (V. Boschini, personal communication, April 6, 2020; V. Boshchini, personal communication, May 14, 2020). Many of these decisions were made without consulting the Staff Assembly or Faculty Senate therefore bypassing Shared Governance (Jones, C., personal communication, May 21, 2020).

Application of Herzberg's Theory

The research proposed here uses Herzberg's theory as the foundation in assessing factors contributing to job satisfaction of faculty at TCU. For the past ten years, TCU has been recognized by Great Colleges to Work For and made the honor roll for multiple categories of job satisfaction (ModernThink, n.d.). Yet, recent events outlined here suggest that, although a prior sample of employees expressed job satisfaction, there are likely areas of dissatisfaction, especially concerning salary/benefits, relationships, and working conditions (hygiene factors) (Herzberg et al., 1959). Higher education media outlets often have opinion pieces on the poor pay levels for part-time faculty and the rising numbers of non-tenure track faculty at schools across the nation. Waltman et al. (2012) found in their study of full-time and part-time non-tenure track faculty that the factors noted in job satisfaction by this group were motivators while those listed in situations of dissatisfaction were hygiene issues. The university in the proposed study has a faculty population of 54.6% combined NTTF & PTF (TCU Institutional Research,

2019). Therefore, the Two-Factor Theory was selected as the theoretical framework to determine overall job satisfaction and differentiate satisfaction with the individual variables within job satisfaction. The study examined if job satisfaction is subject to the same influence reported by Herzberg et al. (1959) – job satisfaction with positive motivating factors and job dissatisfaction with negative responses to hygiene factors.

Definitions

The following definitions will be used throughout the research project:

Hygiene factors – Extrinsic elements of the job including, "company policy and administrative practices, supervision, interpersonal relationships, working conditions, and salary" (Herzberg, 1964, p. 4).

Job Satisfaction - "…an individual's expressed attitude towards his work *as a whole* with respect to his like *or* dislike of it. It is taken as a global assessment of like or dislike of a working situation" (Wall and Stephenson, 1970, p. 49).

Motivators – Intrinsic elements of the job including, "achievement, recognition for achievement, intrinsic interest in the work, responsibly, and advancement" (Herzberg, 1964, p. 4).

Non-Tenure Track Faculty (NTTF) – Full-time faculty members who are not eligible for tenure. The actual job title varies: clinical professor, instructor, lecturer, professor of professional practice. Their jobs consist of teaching with little or no research responsibility. They are employed at will.

Part-Time Faculty (PTF) - "Any professional teaching courses at a higher education institution on a part-time, temporary, at-will or contingency basis" (Rich, 2016).

Tenure Track Faculty (TTF) – Faculty members in a probationary period while they are being considered for a tenured appointment. Significant research is expected to obtain a tenured appointment. TTF are employed at will during this probationary period.

Tenured Faculty (TF) – Faculty members appointed for an indefinite term. This employment may be terminated for cause or under extraordinary circumstances. They are not employed at will (AAUP, *Tenure*, n.d.).

Underemployed – A description of a situation in which an employee seeks full-time employment, but instead takes a part-time job. It may also be used to describe someone in a role that is well beneath their skills and experience.

Summary

In the midst of this unique time of multiple campus changes and response to a pandemic, this research explores the job satisfaction of faculty and the components within. Using the Two-Factor Theory, this research gives insight into the potential issues linked to poor job satisfaction: turnover, mental health concerns, and lower productivity. A detailed review of the literature on these issues, faculty appointment types, and the Two-Factor Theory are discussed in the next chapter.

Chapter 2 – Literature Review

Job satisfaction means "…an individual's expressed attitude towards his work *as a whole* with respect to his like *or* dislike of it. It is taken as a global assessment of like or dislike of a working situation" (Wall & Stephenson, 1970, p. 49). Since modern workers spend one-sixth of their lives at work, they would naturally seek some sort of satisfaction during this time (Wall & Stephenson, 1970). While employees may seek job satisfaction for their own happiness, employers also benefit from employee job satisfaction. Business leaders look for ways to increase productivity and see motivated employees as a way to accomplish this. *The Motivation to Work* (Herzberg et al., 1959) introduced the Two-Factor Theory to help management assess job satisfaction as a means to increase worker motivation and boost productivity. A flurry of research followed the release of the book, attempting to confirm or upset the Two-Factor Theory (Bassett-Jones & Lloyd, 2005; Behling et al., 1968). No clear answer was obtained, but the resulting research is ripe with information on job satisfaction and the many ways it can be assessed, measured, and described (Behling et al., 1968).

Job Satisfaction

One may believe that job satisfaction is measured on a continuous scale (Iiacqua & Schumacher, 1995). However, Herzberg's Two-Factor Theory clearly outlines multiple factors contributing to job satisfaction and job dissatisfaction (Herzberg et. al, 1959). Together these factors produce the feeling of job satisfaction, or lack thereof. The overall concept of job satisfaction has been researched extensively and the factors contributing to this measure have also been individually researched and documented (Iiacqua & Schumacher, 1995). Management Practices (Gosnell et. al., 2020), continual change (Boswell et al., 2005; Chadi & Hetschko, 2018; Dool, 2009), organizational climates (Kirovska et al., 2017), expressed gratitude (Stegen

& Wankier, 2018), corporate social responsibility (Asante Boadi et al., 2020), colleague support (Jungert et al., 2017), situational leadership (Santoso et al., 2020), generational identity and differences (Mahmoud et al., 2020), manager motivation (Wieseke et al., 2011), work environment (Inamizu, 2016), the 9-11 terrorist attacks (Ryan et al., 2003; Van Ryzin, 2014), mental health (Chou et al., 2017; Pas et al., 2016), job fit (Moreland, 2013), gender (August & Waltman, 2004; Webber & Rogers, 2018), minority status (Seifert & Umbach, 2008), education level (Schroder, 2008), and stress (Horowitz et al., 2008) are just a few of the topics and specific job satisfaction components researchers have used to investigate job satisfaction.

Böckerman & Ilmakunnas (2012) listed four outcomes of higher job satisfaction. These include 1) a person's measured productivity, 2) higher organizational citizenship [engagement], 3) lower absenteeism rates, and 4) fewer employees who express intentions to leave the job and actual separations. All four outcomes are beneficial to an organization and its bottom-line and therefore, are of interest to managers. This is true in academia as well.

When faculty are unhappy in their role or dissatisfied with the job, their productivity decreases, their stress levels increase, their interactions with students are less effective, and they misuse their resources (Webber & Rogers, 2018). However, when the environment is positive, and faculty have job satisfaction, they will produce more positive outcomes for all players, including students (Hagedorn, 2000). Therefore, faculty job satisfaction produces positive outcomes for students and the institution, something an institution would support and encourage for its own benefit. Looking at the specific outcomes of job satisfaction and the research within gives a better look at why institutions would support higher faculty job satisfaction.

Reduced Turnover and Intention to Leave

Employees leaving an employer or changing jobs within an organization create real and unseen costs for employers. In addition to the expenses of posting available job openings and conducting background research on potential employees (direct costs), productivity and institutional knowledge (indirect costs) is lost during a transition (Sears et al., 2017). Manager time is spent reviewing and selecting new employees and there is lost productivity while the position is vacant. This lost productivity continues while the new employee learns the job. Although a standard for calculating turnover costs does not exist due to wide variations in actual costs across industries and job titles, a study by the Work Institute reported findings between $4,000 and 1.5 times an employee's annual salary across all industry sectors (Sears et al., 2017). The estimate for calculating turnover costs suggested by the Work Institute is 33% of an employee's annual salary. Meaning, each time an employee leaves, a replacement will cost the organization an amount equal to 33% of the salary for the job. In higher education, when the recruiting process is lengthy due to budget year and school year misalignment, this calculation should be increased to allow for lost research productivity and a lack of teaching resources (Shipp, A., personal communication, April 27, 2020). While the research is not definitive on the direct relationship job satisfaction has on job performance, it does indicate that managers can reap the rewards of increased job satisfaction influencing a reduction in turnover and intention to leave (Jones, 2006). The expense of turnover should be incentive enough to monitor job satisfaction, keep retention high, and reduce turnover.

After the recession of 2008-2009, jobs in America rebounded prior to the worldwide COVID-19 outbreak in 2020. Work Institute found that in 2015 there were more job openings than total separations (Sears et al., 2017). With an abundance of industry jobs available,

academics may choose to leave academe if they are not content with their current role (Darnell et al., 2020). In researching why employees stay, Work Institute found that career development, job characteristics, and work environment topped the list (Sears et al., 2017). They also cited the top three reasons employees leave: career development, work-life balance, and management behavior (Sears et al., 2017). Concerning faculty, academics may choose to change institutions to gain a promotion, obtain a higher salary, and/or escape a less than ideal work environment (Hagedorn, 2000). In the past, faculty may have felt trapped in an institution, but productive academics are much more mobile and able to change institutions while maintaining or gaining tenure (Hagedorn, 2000). Given that over 75% of voluntary departures are preventable by the employer (Sears et al., 2017), institutions of higher education may no longer have the advantage over industry in retaining faculty who are unhappy in their academic roles (Seifert & Umbach, 2008).

In addition to expenses incurred, faculty turnover reduces collaboration within an institution and changes the student experience (Lee et al., 2017). Likewise, with increased diversity efforts, faculty turnover may change the diversity of the faculty and impact the student perception, if not the experience (Lee et al., 2017). Retention of a diverse faculty may be influenced more by the culture and environment than by financial rewards offered and by the work itself (Seifert & Umbach, 2008). Thus, it is important to look at job satisfaction components, not just at overall job satisfaction when evaluating faculty retention.

Mental Health Issues

Another facet of job satisfaction that should concern employers is the mental health of their employees. In a review of literature on the topic of satisfaction, it was found that with increased interference of work-related issues on nonwork activities there is evident psychological

strain (Allen et al., 2000). Work-to-family conflict results in increased levels of anxiety and irritability/hostility, physical symptoms of poor appetite and fatigue, increased depression, alcohol abuse, cigarette use, and job burnout (Allen et al., 2000). All the symptoms listed above are indicative of poor mental health. While these are often off-work behaviors, they can be manifested in undesirable behaviors at work (Curran et al., 2007). These behaviors may include increased absenteeism, verbal aggression, physical violence, and increased unproductive time (smoke breaks, longer lunches, etc.). Mental health problems may cause increased absenteeism, productivity losses, and increased rates of early retirement, all of which may have bad economic results (Curran et al., 2007). Productivity losses are often a result of employees who are present but not producing to expectations; they are physically present, but not mentally present (Curran et al., 2007). In support of the relationship between job satisfaction and mental health, research has found one's mental health and self-rated physical health are predictors of satisfaction with life, while only mental health predicts job satisfaction (Beutell & Schneer, 2014). While this study does not conclude a cause for the relationship, employers should be mindful to consider an employee's mental health as a reason to support positive job satisfaction in their employee population, if not for the well-being of their employee, then for the organization's bottom-line and reduction of productivity losses.

Motivation

There are multiple definitions of motivation (Dăneci-Pătrău, 2019; Steers et al., 2004). "They are all principally concerned with factors or events that energize, channel, and sustain human behavior over time" (Steers et al., 2004, p. 379). Locke & Latham identify that "the concept of motivation refers to internal factors that impact action and to external factors that can act as inducements to action (2004, p. 388)." These echo both the autonomous motivation of the

individual (push) and the external factors influencing motivation (pull) that theories within the field reflect (Steers et al., 2004).

A visible difference between employees who are motivated and those who are not is described by Mahmoud et al. (2020) as employees who are not motivated cannot answer why they want to be employed beyond the paycheck. They are apathetic towards the job and the organization. They lack the desire and determination to work. On the contrary, motivated individuals can state the 'why' behind their work, and they experience intrinsic (push) and extrinsic (pull) motivation to do the job.

In a publication by Steers et al. (2004), a short history of motivation theories gives insight into the evolution of this field of study dating back to the Greek philosophers. At the end of the 19th century, motivation theory moved into the field of psychology, and soon empirical models were developed. Some theories were based on drive (push), some on reinforcement (pull), and others on prior behavior and consequences determining future behaviors, what is known as Expectancy Theory (Wieseke et al., 2011). Content theories of motivation evolved in the 1950s. These theories were identified as content because they searched for the factors that compromised or influenced motivation. The 1960s are identified as the 'Golden Age' of work motivation theories. During this time, process theories emerged. These theories studied motivation in dynamic environments, not the static environment of content theories (Steers et al., 2004). Although content and process theories were introduced more than fifty years ago, most textbooks continue to reference them (Steers et al., 2004). "While other fields of management research…continue to develop conceptually, substantive theoretical developments focusing on work motivation have not kept pace" (Steers et al., 2004, p. 383). However, research progress

has been made. Today, the ability to influence motivation is due to the research on multiple factors of employee motivation (Latham & Pinder, 2005).

Exploring both motivation and job satisfaction, leads one to find that the factors identified in job satisfaction are similar to those in motivation (Böckerman & Ilmakunnas, 2012). The factor of supervision is reported to have a direct impact on employee work motivation, based on supervisor behavior, communication, and leadership style (Kanat-Maymon et al., 2020). Wieseke et al. go further in their conclusion by stating, "…making use of motivation spillover to engender employee motivation is not only the manager's responsibility but also strongly in the manager's interest" after finding the supervisor's motivation directly influences the employee's motivation (2011, p. 228).

Motivation in performing the job may be the most discussed topic, but motivation affects the acquisition of skills as well (Locke & Latham, 2004). Herzberg refers to this factor in job satisfaction as professional development (Herzberg et al., 1959). Smith (2009) found that the motivation of employees is key in determining if a strategy implementation will be successful or not. This is key to organizations trying to change their culture and climate.

In the literature review of the Jungert et al. (2018) study, there is a reference to five different research studies that indicate autonomous work motivation affects performance and is correlated to higher levels of effort on the job. Thus, indicating that higher job satisfaction increases worker motivation and results in higher productivity.

Productivity

Managers may agree that happier employees are more productive employees. Yet published findings show the relationship between job satisfaction and performance is mixed, according to Randhawa (2007). The literature included in his research publication cites three

studies that conclude a significant positive correlation between job satisfaction and performance. He then cites four other studies that report only a weak relationship between the two. As job satisfaction is made up of multiple elements, additional research on this topic tends to focus on one element at a time and produces a mixed result on how each factor impacts job satisfaction. Gosnell et. al (2020) concluded that the relationship employees had with their supervisor directly impacted the job satisfaction of the employee, and Dool (2009) found that constant change on the job increased stress, decreased job satisfaction, and decreased productivity. Van Steenbergen et al. (2018) concluded that employees fully engaged at work are more productive and experience lower absenteeism. A positive work culture resulted in increased job performance in a study by Kirovska et al. (2017). While these four studies did not directly state job satisfaction is positively correlated to job productivity, the job satisfaction variables of supervision, policies, and working conditions are positively correlated to productivity and performance. Sharma and Gupta (2020) concluded that only job satisfaction can improve the productivity of an employee in a specific organization.

Frederick Herzberg spent years tying motivation and job satisfaction to productivity. In his 2003 article, “One more time: How do you motivate employees?,” Herzberg explains how motivated employees are more productive and how employers can help employees find that motivation. While managers and human resource professionals follow Herzberg’s advice and use the argument that increased job satisfaction increases productivity, research supports this by confirming the variables of job satisfaction are positively correlated to productivity and performance.

Job satisfaction is an important measurement for all employers to monitor. Given the correlation to increased productivity (Jones, 2006), the high cost of turnover (Sears et al., 2017),

and the consequences of poor mental health (Curran et al., 2007), employers should monitor and take steps to increase job satisfaction for all employees, including faculty in higher education.

Faculty

Public perception of a job in academia is one of low stress, shorter hours, large salaries, and lifetime job security (Hagedorn, 2000). However, that is far from the truth. Instead, faculty are immersed in a high-pressure environment with multiple roles and no clear borders (Hagedorn, 2000). It is a stressful job and not always enjoyable. Public perception also groups faculty as a single body of professionals, but there are significant differences based on appointment types. Faculty are divided into four types for this study: tenured, tenure-track, non-tenure track, and part-time.

Tenured Faculty (TF)

Faculty members who receive a tenure appointment have employment which is no longer 'at will.' They may only be released for cause (their own wrongdoing) or under extraordinary circumstances (American Association of University Professors, n.d.). The main purpose of this job guarantee is to provide academic freedom and a safeguard against those who disagree with the dissemination of their acquired knowledge. Protected activities include teaching, written publications, verbal communications, and findings of their research (American Association of University Professors, n.d.). Faculty members earn the privilege of tenure by demonstrating expertise in their field, most often through research publication. Achieving tenure in an academic role is an indicator of success and comes with assumed prestige (Webber & Rogers, 2018).

This type of appointment creates a financial liability of unknown length to the institution. Prior to 1970, this type of appointment was the most common; however, the nationwide percentage of faculty with tenure has declined to 21% (American Association of University

Professors, n.d.; American Association of University Professors, 2014). Job duties for this type of appointment are usually a mix of research, teaching, and service to the university (Rawn & Fox, 2018).

Tenure Track Faculty (TTF)

Those who wish to obtain tenure will likely pursue a tenure track appointment. This probationary appointment allows a faculty member to demonstrate his or her expertise in a chosen field. According to the American Association of University Professors (1970), this probationary period should not last more than seven years. If successful, a faculty member would then receive a tenured appointment. If not successful, the faculty member's appointment would not be renewed.

Although PhD candidates frequently seek this type of appointment after graduation, they may find it is becoming harder to obtain. There is a decrease in the number of tenure track appointments market-wide (Webber & Rogers, 2018), resulting in many new PhDs being unemployed or underemployed. Job duties for this type of appointment are usually a mix of research, teaching, and service to the university (Rawn & Fox, 2018).

Non-Tenure Track Faculty (NTTF)

NTTF are given appointments without the possibility of obtaining tenure. These positions are often teaching-intensive and do not require participation in scholarly research (American Association of University Professors, 2014). While their qualifications may be the same as a faculty member on the tenure track, the institution employing them has not committed to offering tenure as a possibility.

Nationwide, non-tenure track faculty accounted for nearly 70% of all faculty by 2007, including those working full-time and part-time (American Association of University Professors,

2014). However, NTTF are an overlooked population on campus and in scholarship (Ott & Cisneros, 2015). At most research doctoral universities, NTTF are eligible for election to the faculty senate but do not have representation equal to their numbers thereby limiting their voice and participation in shared governance (Jones et al., 2017).

While the American Association of University Professors promotes all faculty as equal regardless of status, those not on the tenure track are treated as inferior by those with tenure and those on the tenure track (Ott & Cisneros, 2015; American Association of University Professors, 2014). Teaching is considered a task of a lower status when compared to the research task (Rawn & Fox, 2018). This perception puts NTTF in a position to be undervalued and stigmatized (Rawn & Fox, 2018). Characteristics reserved for academic professionals include autonomy, tenure, and an ability to create and shape their working conditions. As NTTF often lack these characteristics, their professional status is called into question according to Kezar & Sam (2014). However, the overwhelming majority do participate in scholarly activities, including research (Rawn & Fox, 2018). While job duties for this type of appointment vary, they often reflect those of TTF and TF including teaching, service to the institution, and some research activity (Rawn & Fox, 2018).

The number of NTTF appointments are rising. This type of appointment is attractive to institutions as they seek to be responsive to changing enrollment numbers (Morphew et al., 2017) and may be used as a cost-saving strategy (Frye, 2017). Institutions are replacing retiring tenured faculty with NTTF appointments (McNaughtan et al., 2017). Likewise, although TF and TTF are mostly men, the majority of NTTF are women (Kezar & Bernstein-Sierra, 2016; McNaughtan et al., 2017). While a decision to hire a NTTF member instead of a TTF member can decrease the yearly budget, this short-term plan is having a long-term impact on the structure of the faculty (Frye, 2017).

NTTF are less satisfied with the autonomy they have over their work than are their TF and TTF counterparts (Ott & Cisneros, 2015). NTTF are significantly less satisfied with the sense of collegiality in their departments but more satisfied with the variety of activities in their roles compared to their TF and TTF colleagues (Ott & Cisneros, 2015). Thus, the culture of the department and the integration of the NTTF into the institutional culture are the best indicators of NTTF job satisfaction (Rawn & Fox, 2018).

Part-Time Faculty (PTF)

Part-Time Faculty, often called 'adjuncts,' comprise roughly 50% of faculty in higher education (Kezar & Bernstein-Sierra, 2016; Yakoboski, 2018). This growing majority are offered contracts based on a course or term and do not enjoy many of the benefits offered to full-time employees.

Faculty in the PTF status are either voluntarily or involuntarily in this role. Those voluntarily in the role enjoy a flexible schedule and often supplemental income (Kezar & Bernstein-Sierra, 2016; Yakoboski, 2018). Those employed involuntarily in this role (the underemployed) have numerous complaints about the condition of their employment (Kezar & Bernstein-Sierra, 2016; Maynard & Joseph, 2008; Yakoboski, 2018).

Those in the PTF role who desire full-time employment and are reportedly more dissatisfied with areas of advancement, salary, and job security than those employed voluntarily employed part-time (Kezar & Bernstein-Sierra, 2016; Maynard & Joseph, 2008; Yakoboski, 2018). PTF often complain of low wages, lack of benefits, little or no social interaction with other faculty, no integration in campus culture, lack of resources, no control over course and syllabus creation, and little or no notice for course assignment (Kezar & Bernstein-Sierra, 2016). Most earn less than $3,000 per course (Yakoboski, 2018).

PTF are hired almost exclusively for teaching (Kezar & Bernstein-Sierra, 2016). There is little to no expectation for PTF to participate in department meetings and institution service (Morphew et al., 2017). There is also little expectation for them to engage in the campus community and in support of the institution's broader mission (Morphew et al., 2017). These factors contribute to feelings that there is a lack of collegiality in their departments (Ott & Cisneros, 2015).

While recent doctoral graduates may accept a PTF role if a TTF role is not available, institutions hire very few of their PTF into full-time faculty roles (Kezar & Bernstein-Sierra, 2016). A common perception painted by the media is that PTF are young, recent doctorate graduates teaching multiple classes at multiple institutions trying to make a living while hoping for a TTF position (Yakoboski, 2018). While these PTF exist, they are not the norm. Data show that PTF are most likely women, over the age of 40, teach one or two classes at one institution, are married or living with a partner, have a Master's degree, and are in a household earning more than $50,000 a year (Yakoboski, 2018).

Demographic Differences

In addition to faculty status, various other demographic factors influence job satisfaction. This difference is evident in gender. There is significant agreement in research that men are more satisfied with the extrinsic factors of salary and benefits (Hagedorn, 2000). Women in relationships with dual careers have challenges with limited mobility; therefore, this may result in acceptance of lower-paying and non-tenure track positions (Webber & Rogers, 2018). Research suggests that positive social and working relationships lead to increased job satisfaction levels (Hagedorn, 2000). Female faculty tend to choose work environments that are more collegial and offer positive social interaction, sacrificing prestige and salary (Webber & Rogers,

2018). Employees with higher job satisfaction will stay in the position longer, and TTF are more likely to seek a tenured appointment; however, voluntary departure before tenure is obtained is twice as likely for women than for men (August & Waltman, 2004).

A literature review found women and faculty of color have lower overall job satisfaction. This difference is noted in both intrinsic and extrinsic factors compared to their white male counterparts (Hagedorn, 2000; Seifert & Umbach, 2008).

In general, age is positively correlated with higher job satisfaction (Seifert & Umbach, 2008). As people age and advance in their careers, they express higher job satisfaction. Herzberg (1964) believes this was due to employees looking forward to retirement and being more concerned with extrinsic rewards than intrinsic motivators.

While age, gender, and race are shown to influence job satisfaction, it should be noted that any deviation from the prior faculty norm (white men without a disability from a higher socio-economic class) may influence job satisfaction (Seifert & Umbach, 2008).

Two-Factor Theory

The Theory

In describing his own theory, Herzberg (1964) states, “This hypothesis suggested that the factors involved in producing job satisfaction were separate and distinct from the factors that led to job dissatisfaction” (Herzberg, 1964, p. 3). That is, what makes one satisfied with the job will not be the same thing that makes one dissatisfied. Herzberg’s work in job satisfaction was based on his belief that by unlocking job satisfaction, employees will be self-motivated to be more productive (Herzberg et al., 1959). Thereby linking the need for employers to monitor and improve employee satisfaction as a way to increase productivity.

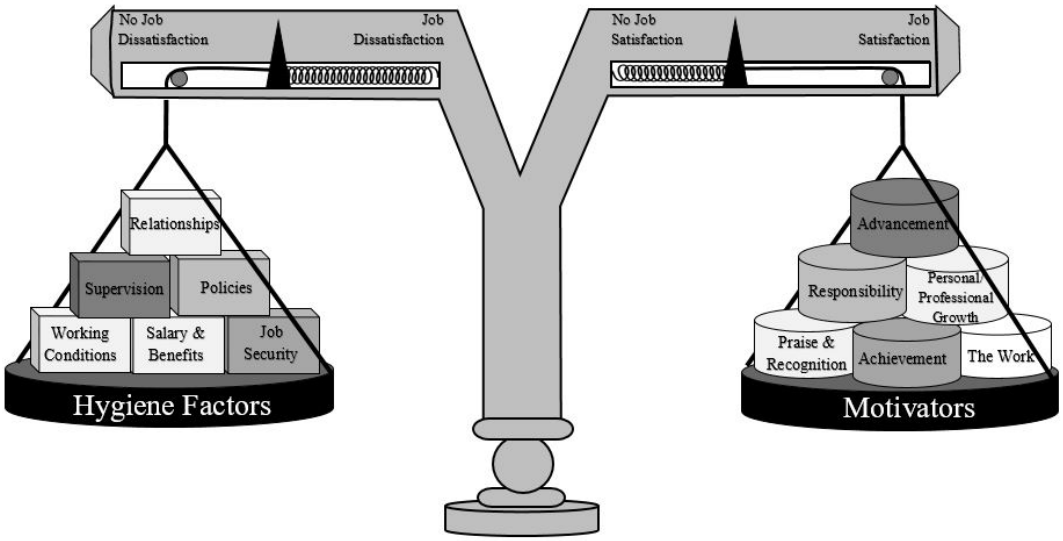
According to Herzberg, it is the extrinsic factors in the environment of the job that determine if dissatisfaction occurs. These factors include “company policy and administrative practices, supervision, interpersonal relationships, working conditions, and salary” (Herzberg, 1964, p. 4). Herzberg calls these extrinsic aspects ‘hygiene factors’ in reference to preventive measures one might employ, such as hygiene practices to prevent illness.

Herzberg’s theory then states that factors determining satisfaction are intrinsic. These are listed as “achievement, recognition for achievement, intrinsic interest in the work, responsibly, and advancement” (Herzberg, 1964, p. 4). Specifically, the work itself creates job satisfaction. Herzberg calls these factors ‘motivators’ in reference to motivation for improved performance with job satisfaction.

Figure 1 shows an illustration of the Two-Factor Theory. As each job factor has satisfaction, the weight becomes heavier, pushing the platform down and changing the corresponding rating of satisfaction/dissatisfaction.

Figure 1.1

Illustration of Two-Factor Theory (Herzberg et al., 1959)



Multiple Scales

With job satisfaction and job dissatisfaction coming from two different sources in this theory, Herzberg states that two parallel scales exist (Herzberg, 1964). This means there is not one linear scale for job satisfaction, but two as seen in Figure 1. One measures satisfaction, and one measures dissatisfaction. Herzberg maintains that one should ask an employee about the job and attitudes about the job twice. First, ask what makes the employee happy. Then ask what makes the employee unhappy (Herzberg, 1964). He believes these are separate questions with separate answers and cannot be deduced from asking only one of the questions.

Although Herzberg is somewhat opposed to a 'scale,' other researchers are adamant about using a scale. The intensity of feelings is almost impossible to explain and conceptualize without using some sort of scale to measure and compare (Udechukwu, 2009). Herzberg's thoughts on measuring the intensity of job satisfaction can best be summed up by his own words, "If two persons state that they are happy with their jobs, how do you know they are equally happy?" (Herzberg, 1964, p. 4).

Multiple Interpretations

Wall and Stephenson (1970) outline two interpretations of Herzberg's theory that may explain some of the variances in other studies. As they point out, Herzberg states motivators are more important as determinants of job satisfaction. However, he never states more important *than*. Their first interpretation is "motivators are more important than hygiene factors as determinants of job satisfaction and hygiene factors are more important than motivators as determinants of job dissatisfaction" (Wall and Stephenson, 1970, p. 46). The second interpretation they offer is "motivators are more important as determinants of job satisfaction than they are as determinants of job dissatisfaction and hygiene factors are more important as

determinants of job dissatisfaction than they are as determinants of job satisfaction" (Wall and Stephenson, 1970, p. 46). This distinction is important as researchers design a study testing Herzberg's theory. When comparing studies and results, it is imperative to understand which interpretation the researcher is using.

Bassett-Jones and Lloyd (2005) state that Herzberg's theory asserts that there is a correlation between financial reward and job satisfaction. What is tricky here is the term 'financial reward.' A reward is a recognition, which is a motivator, not a hygiene factor. Salary is for doing the job one is expected to do (hygiene). A bonus is a financial reward for a job well done or a job above expectations (motivator). When crafting questions and coding results, this slight wording change may greatly impact the results and conclusion of the study (Behling et al., 1968).

Bockman (1971) acknowledges the liberty she takes in her paper on Herzberg. "Although Herzberg does not specifically point out the converse, an intuitive inference might be that in a condition of increased sensitivity to the lack of motivators caused by an absence of hygiene factors, motivators might temporarily relieve the need for certain hygiene factors" (p. 159). As Herzberg did not state this, it is unknown if he intended it to be implied or he did not find the inverse to be true as Bockman inferred.

As Lindsay et al., (1967) point out, Herzberg's theory does not explain how motivators and hygiene factors might interact with one another. Researchers infer this absence of explanation as motivators and hygiene factors do not interact and are only present in situations of positive satisfaction *or*, not *and*, job dissatisfaction. Maidani's (1991) research concludes that hygiene factors are sources of satisfaction because they are present when job satisfaction is measured. However, Herzberg does not claim the two-scale model means the factors will only be

present for one situation (hygiene factors in cases of dissatisfaction and motivators in case of job satisfaction). Both could always be present, yet they are responsible for different feelings – satisfaction or dissatisfaction (Halpern, 1966).

Gardner (1977) goes so far as to say that in practice the theory is difficult because hygiene factors are contributing to job satisfaction and motivators contributing to dissatisfaction. However, the word *contributing* is where this interpretation needs further review. It is unknown if the hygiene factors contribute to job satisfaction or if they are simply present. If absent, they would contribute to dissatisfaction, according to Herzberg's theory. Researchers claim Herzberg's theory is incorrect because hygiene factors are mentioned by those with job satisfaction and that the presence of hygiene factors means Herzberg's theory is not valid (Halpern, 1966). Halpern also points out that the Herzberg theory does not say it will predict job satisfaction, yet researchers continue to assert this in their discussion of findings.

Behling, et al. (1968) make a statement in their research findings that may best summarize the discussion. "The assumption underlying research [on Herzberg's theory], the comments made about the nature of job satisfaction and, most importantly, the research results obtained, reveal little consistency from author to author or from study to study. They are talking about different things, measuring them in different ways, and obtaining dissimilar results" (p. 108).

Studies in Support of Herzberg's Theory

After Herzberg's theory was released in 1959, there were multiple studies on the model and theories of motivation (Bassett-Jones & Lloyd, 2005; Behling et al., 1968). When researchers used the same critical incident method, they were able to demonstrate the existence of the duality in close to twenty separate studies involving such diverse groups as housekeeping

and unskilled food service workers, country agricultural extension workers, women in high-level professional positions, scientists, nurses, and engineers (Behling et al., 1968).

Hoyt's (2012) research illustrates this in the presentation of dissatisfaction experienced by part-time faculty members. His research shows this dissatisfaction resulted from the absence of certain hygiene factors. He cites that they desired more contact, invitations to department meetings, curriculum assistance, consideration for decision input, opportunities to serve the university on committee and collaboration opportunities, all of which are administrative practices. Thus, the lack of these factors results in dissatisfaction by the members of the part-time faculty (Hoyt, 2012).

While studies using the same method employed by Herzberg show the same results, studies that used other methods of data gathering provide results that conflict with Herzberg's theory and often support a single scale for job satisfaction (Behling et al., 1968; French et al., 1973; Hinton, 1968; Schneider & Locke, 1971).

Herzberg stands by the method he used requesting that the employee describe the factors in their own words versus having researchers give the employee a list of predetermined factors which may or may not influence the employee's satisfaction (Behling et al., 1968). Critics could show alternative results with alternative methods but have difficulty in understanding and explaining the consistent results with the methods employed by Herzberg and team (Bassett-Jones & Lloyd, 2005).

Studies in Opposition to Herzberg's Theory

Critics have several issues when discussing Herzberg's theory (Bockman, 1971). In a literature review, Bockman shares that the first criticism often offered is on the coding of data obtained by Herzberg's team. If the employee stated a factor was present in the situation

described, the team noted it and coded it. Although coding was completed by two members of the team and checked by a third, critics claim they did not code situations with accuracy and that it was completely subjective. However, as noted earlier with the monetary reward example, there is room for error and misjudgment. What one may call salary, another would call a special recognition for a job well done. This could happen in the individual's report of the incident, the interviewer's interpretation, or in the coding. There is room for error and misclassification as noted in the published study (Herzberg et al., 1959).

When employees self-report the incident, as with Herzberg's use of the critical incident method, researchers tend to find that the unpleasant moments or unfavorable outcomes (dissatisfaction) are most often attributed to external factors (hygiene), while an instance of positive feelings and socially desirable outcomes (satisfaction) are attributed to oneself (motivators) (Farr, 1977; Schneider and Locke, 1971). A person may want to avoid attributing negative feelings to his or her own actions and want to take credit for positive outcomes, even if done so unconsciously. Wall and Stephenson (1970) agree and cite Vroom's position that people are more likely to contribute causes of satisfaction to themselves and causes of dissatisfaction to the work environment, rather than to their own inadequacies.

In Bockman's (1971) review of literature, she references a study by Paul F. Wernimont from 1966. Her summary of Wernimont's research includes his criticism of Herzberg's method as it asks employees to mix past and present feelings. This issue is mentioned in several other studies in her literature review. The critical incident method utilized by Herzberg and team asked for past incidents and factors contributing to the satisfaction or dissatisfaction at the time of the incident and on-going feelings. However, other studies do not make a distinction between past incidents and current feelings, rather mixing the two (Bockman, 1971).

Bockman (1971) also describes the pitfalls of assessing feelings and attitudes. She describes how people will respond to a question about a factor whether or not they have a feeling about it, giving way to errors in research methods other than the critical incident method employed by Herzberg. The interviews in Herzberg's study did not prompt employees with predetermined factors, unlike the surveys used in some studies.

"In sum, the theory has been both substantiated and refuted in part" (Lindsay et al., 1967, p. 330). It depends on the research method employed, the hypothesis being tested (does it reflect Herzberg's original method or does it take liberties in the interpretation?), and the interpretation of the results.

Summary

For reasons outlined here, it is in the best interest of companies to measure job satisfaction to gain insight into possible turnover, mental health issues in the workplace, worker motivation, and ways to increase productivity. Using the variables of job satisfaction, one can take a detailed look at the differences in job satisfaction among different groups of faculty members. Using the Two-Factor Theory as a theoretical framework, this information may serve as a guide for administration in making decisions to improve campus culture, in making policy changes, or in creating performance evaluations. The following chapter outlines in detail the proposed steps to capture responses to the contributing factors of job satisfaction of faculty and the analysis of this data using the Two-Factor Theory.

Chapter 3 – Methods

This chapter considers the methodology utilized in this research study, describing the instrumentation, discussing the collection of data, and detailing the steps employed in analyzing the data to answer the posed research questions. A discussion on threats to validity and possible ethical concerns will also be presented. Finally, a proposed timeline for the completion of this study will be offered.

Purpose

This applied research utilized a survey tool for the measurement of faculty job satisfaction at Texas Christian University (TCU). The analysis included consideration of various demographic categories for comparison. The data were categorized by job component using motivators (intrinsic) and hygiene factors (extrinsic), per the Two-Factor Theory as detailed by Herzberg et al. (1959). This analysis was designed to answer the research questions posed here.

Research Questions

To analyze the job satisfaction of faculty the following research questions serve as the guide for the study.

1. How does job satisfaction differ by faculty status?
2. How does job satisfaction differ by college?
3. How does job satisfaction differ by gender pronouns?
4. How does job satisfaction differ for ethnic or racial minorities?
5. How does job satisfaction with intrinsic job factors (motivators) differ from satisfaction with extrinsic job factors (hygiene factors)?
6. How does TCU's part-time faculty job satisfaction compare to the results and conclusions found in the literature?

Design

Participants

All TCU Faculty at the main campus in Fort Worth, Texas were invited to participate in this study. An email invitation was sent to all faculty listed in the institution's global address book in the email software. This email invitation contained an anonymous link to a survey in Qualtrics.

Instrumentation

The survey instrument created by Smerek and Peterson in their 2007 research on job satisfaction in non-academic university employees was the basis of the survey. The Smerek and Peterson survey had 109 job-related questions that were grouped into 13 distinct factors using principal component analysis (PCA) (Pallant, 2016; Smerek & Peterson, 2007). The groupings were then labeled with job factors identified in the Two-Factor Theory by Herzberg et al. (1959). In addition to these components, a grouping of survey items was identified and labeled as 'Overall Job Satisfaction.' As this measurement tool modeled the conceptual framework of the Two-Factor Theory, the survey utilized in this research was based on the survey created by Smerek and Peterson (2007). Permission to use this copyrighted survey appears in Appendix C. Modifications to the survey items were made to better reflect the participants and their position as university faculty. These modifications include changing 'customer' to 'student' and 'unit' to 'department.' Other modifications included the elimination of items not associated with job factors identified in the Two-Factor Theory by Herzberg et al. (1959). These included survey items that fell in the 'Clarity of Mission' and 'Presence of Core Values' components. Although the authors indicated that responses were on a 10-point Likert scale, the items listed under the 'Overall Job Satisfaction' component were scored with an alternate measure, one with Likert-

like properties, but contained responses in a form other than agree/disagree (Brill, 2011, pp. 428-429; Cowles & Nelson, 2019). The survey for this research used responses to reflect a 6-point Likert scale (Brill, 2011, pp. 428-429; Toepoel, 2017, pp. 184-202). The original survey created by Smerek and Peterson appears in Appendix A. Modifications to the original questions that were used in this research project are marked by an asterisk (*). The survey used in this study appears in its entirety in Appendix B.

To avoid the more specific questions on component satisfaction influencing the more general questions of overall job satisfaction, the questions identified in the 'Overall Job Satisfaction' grouping were listed first in this survey (Fogli & Herkenhoff, 2018). To increase the number of data points for analysis before participants self-select to abandon the survey, the 2 questions identified with the highest loading in each component in the Smerek and Peterson (2007) survey were be listed first in this survey. After 2 questions from each component were listed, all other questions were listed randomly.

Features in the survey included pagination after 8 questions, allowing answers to be saved (Toepoel, 2017, pp. 184-202). Instructions appeared in italics just before the available answers (Toepoel, 2017, pp. 184-202). A matrix style response was utilized to minimize screen space (Toepoel, 2017, pp. 184-202) with 8 lines per matrix.

The revised survey was loaded in Qualtrics using a 6-point Likert scale (Brill, 2011, pp. 428-429). This Likert scale was traditional: balanced bi-polar response, individually labeled response categories, a gradation in responses, with variations of agree/disagree (Brill, 2011, pp. 428-429; Fogli & Herkenhoff, 2018). Response selections for each questionnaire item included 1) Strongly disagree, 2) Disagree, 3) Somewhat disagree, 4) Somewhat agree, 5) Agree, and 6) Strongly agree. This type of response assumes that the respondent has previously thought about

the issue presented in the question and has either a negative or positive opinion (Fogli & Herkenhoff, 2018). After the pilot study, an optional response of 'Not Applicable' was added since some of the salary and benefit questions did not apply to part-time faculty (PTF).

Pilot Study

A pilot study was conducted in July 2020 with 30 participants (Cowles & Nelson, 2019; Litwin, 2013, pp. 59-68). Participants in the pilot study were a convenience sample of faculty members engaged in work during the summer semester (Fogli & Herkenhoff, 2018).

Participants in the pilot study were asked for feedback on the questions to check for reading comprehension and understanding. The data and results were checked for anomalies and inconsistencies. Multiple issues were discovered in wording, language, and available response options. Those were addressed prior to the survey deployment in September 2020 (Litwin, 2013, pp. 59-68).

Collection

The data collection for the research was conducted a few weeks after the Fall 2020 semester began, avoiding the beginning of the semester and the rush of finals (Thomas, 2011, pp. 119-130). The launch date was September 9, 2020, with a two-week collection period (Thomas, 2011, pp. 119-130). A pre-notification email was sent by the Faculty Senate Chair, announcing the survey two days before the survey opened (Fogli & Herkenhoff, 2018; Thomas, 2011, pp. 119-130). A follow-up email with additional details was sent shortly after when eligible participants asked multiple questions of the Faculty Senate Chair. Both emails may be found in Appendix E. An invitation to participate was sent to all faculty using the university's email system with a link to the online survey (Appendix E). A copy of the reminder sent the day before the survey closed is also available in Appendix E. (Thomas, 2011, pp. 119-130; Toepoel, 2017,

pp. 184-202). A sample size of 278 or larger was desired, given a confidence level of 95% and a 5% margin of error (Qualtrics, 2019). Once the data were collected, the sample included 361 participants who completed the survey. All participants consented by answering positively to the request on the initial screen of the survey. A copy of the consent form is included in Appendix B (Toepoel, 2017, pp. 184-202).

To encourage participation, participants were given an option to enter into a drawing for two $50 Amazon gift cards. To keep the data anonymous, after all questions had been answered, participants were given a link to a second survey. In the second survey, participants could enter their name and email address for consideration in the drawing. This allowed identifying information to be collected and kept separately from the survey data. The winning participants were announced on September 24, 2020 (Appendix E).

Analysis

Prior to answering the research questions posed, the overall job satisfaction measure was assessed. This aggregate measure was to be used for comparison in the detailed analyses within faculty status, college of appointment, gender categories, and minority status.

The following analyses were performed to answer the posed research questions.

RESEARCH QUESTION 1: How does job satisfaction differ by faculty status?

RESEARCH QUESTION 2. How does job satisfaction differ by college?

RESEARCH QUESTION 3. How does job satisfaction differ by gender pronouns?

To compare the answers of specific faculty groups a one-way analysis of variance (ANOVA) was used. The ANOVA inferential statistical measure compares the mean scores of more than two groups (Pallant, 2016). This computation assesses the variance between the groups (TF, TTF, NTTF, PTF) with the variance within the group (the variability due to chance)

(Pallant, 2016). A large ratio of these two values indicates that there is more variability between the groups than within the groups. (Pallant, 2016).

Assumptions of the ANOVA statistic include: simple random samples from the population, each observation is independent of the others, the dependent variable is normally distributed, and the variance of the dependent variable is the same in each group (Wahed & Tang, 2012, pp 27-29).

Below are the ANOVA factorial designs for research questions 1 (Table 1), 2 (Table 2), and 3 (Table 3).

Table 3.1

ANOVA Illustration of Job Satisfaction by Faculty Status

Way	Item #			
Level	Tenured Faculty	Tenure Track Faculty	Non-Tenure Track Faculty	Part-Time Faculty

Table 3.2

ANOVA Illustration of Job Satisfaction by College

Way	Item #									
Level	AddRan College of Liberal Arts	Bob Schieffer College of Communication	College of Education	College of Fine Arts	College of Science & Engineering	Harris College of Nursing & Health Sciences	John V. Roach Honors College	Neeley School of Business	School of Interdisciplinary Studies	University Programs

Table 3.3

ANOVA Illustration of Job Satisfaction by Gender Pronouns

Way	Item #		
Level	he/him/his	she/her/hers	they/them/their

During the analysis, any category with fewer than 15 participants was removed from the analysis.

Using the ANOVA statistical calculation for these research questions would reveal if a difference existed, but it could not show between which groups the difference existed. Therefore, a post hoc test was run to determine where the difference occurred (Blankenship, 2020, pp 34-36).

The Tukey Honestly Significant Difference test (Tukey) was utilized (Stoll, 2018, pp 1306-1307). Assumptions in using Tukey include an equal number of group sizes. While the samples were not exactly equal, unless there was a vast difference in the group sizes, the Tukey post hoc is an acceptable assessment (Stoll, 2018, pp 1306-1307).

Additional analyses were conducted to look at the interaction of these factors. Using two-way ANOVAs, the interactions between Faculty Status, College, and Gender were analyzed to explore if the various categories had a statistically significant interaction effect on job satisfaction. Additionally, one-way ANOVAs were used to analyze if statistically significant differences were present within categories and across categories, e.g. Faculty Status within the college and Tenured Faculty across all colleges.

RESEARCH QUESTION 4. How does job satisfaction differ for ethnic or racial minorities?

Based on the relatively small number of ethnic/racial minority faculty at TCU (TCU Institutional Research, 2019), it was assumed a small sample size of individual minority categories would occur, making it difficult to analyze this information by specific minority groups. Therefore, only self-identification as an ethnic or racial minority was used. With only two categories, a t-test was used to compare the mean score of each category (Pallant, 2016). As these categories are different from one another, an independent t-test was utilized (Pallant, 2016). Assumptions of the t-test include homogeneity of variance (Salkind, 2014) which was verified with Levene's test (Pallant, 2016).

Table 3.4

Illustration of Job Satisfaction by Self-Identification as an Ethnic or Racial Minority

Item #	
Minority	Non-Minority

Additional analyses were conducted to look at the interaction of these factors with the prior categories in Research Questions 1, 2, and 3. Using two-way ANOVAs, Minority Status with Faculty Status, College, and Minority Status were analyzed to explore if the various categories had statistically significant interaction effect on job satisfaction. As with the other research questions, additional one-way ANOVAs were used to see if minority categories showed differences within and across categories in Faculty Status, Colleges, and Gender.

Research Question 5: How does job satisfaction with intrinsic job factors (motivators) differ from satisfaction with extrinsic job factors (hygiene factors)?

Smerek and Peterson (2007) reduced their questions to a smaller set of variables using Principal Component Analysis (PCA) (Pallant, 2016). Using direct oblimin rotation, the results gave a pattern of groupings in a way that is easier to interpret than other methods (Pallant, 2016). These groupings were then labeled using the factors in job satisfaction identified by Herzberg et al. (1959). Using Smerek and Peterson's (2007) groupings, this data will be analyzed for similarities and differences based on survey items considered intrinsic job factors (motivators) and those considered extrinsic job factors (hygiene factors) (Herzberg et al., 1959). Using a paired sample t-test, the mean of all questions categorized as motivators were compared against the mean of all questions categorized as hygiene factors.

As with the other research questions explored here, it is important to look at the data and the interaction with various groups, including faculty status, college, gender identity, and

minority status. One-way ANOVAs were used to look for the difference in the motivators and hygiene factors by faculty status, college, gender, and minority status. Each analysis was followed by a Tukey HSD post hoc test to determine where the differences occurred if identified in the ANOVA.

Finally, correlations were calculated for the Two-Factor Theory categories, age of the participants, and length of employment at TCU.

Research Question 6: How does TCU's part-time faculty job satisfaction compare to the results and conclusions found in the literature?

This research question was answered using a qualitative assessment of results and conclusions from various sources identified in Chapter 2 and the results from Research Questions 1 and 5. The literature discussed in Chapter 2 includes a variety of research using different methods, different populations, and different research questions. Therefore, a quantitative comparison is not possible. However, some statistical measures were used in comparing those who had part-time employment but desired full-time employment and those who were voluntarily employed part-time. Independent-sample *t*-tests were used to compare the job satisfaction measure and the Two-Factory Theory categories for these two classifications of PTF.

Additional Data

Events directly related to the job can impact job satisfaction. Therefore, additional data was gathered regarding responses to recent events impacting faculty. These included administrative decisions in response to the pandemic, changes in benefits, annual pay increase suspension, a hiring freeze, and a campus-wide budget reduction. Sixteen events were presented for participants to rank how/if the event impacted their job satisfaction. The 7-point scale ranged

from ‘extremely negative’ (1) to ‘extremely positive’ (7) with a neutral response of ‘no impact’ (4). The events were analyzed using *t*-tests and ANOVAs to see if differences exist among the faculty by status, by college, by gender, and by minority status.

The events were analyzed using a correlation study for the events, by age of the participants, and by the length of employment at TCU. Finally, a correlation of events with the Two-Factor Theory categories is employed.

Threats to Validity

Using the eight common internal threats to validity as outlined in Designing and Conducting Research in Education (Drew et al., 2014, p. 209-240), we can identify several possible threats to the generalization of this study.

Events impact the results of the study (threat of History). Given that the research occurred in the middle of a pandemic on a campus with limited in-person classes, hundreds of COVID-19 cases, and the death of a faculty member due to COVID-19, the pandemic and events outlined in the profile of the university impacted the results. However, job satisfaction is a measurement that is expected to change over time when events occur or do not occur. Repeated measures could tell us if the events changed the measurement, but a change in the measurement is to be expected. Job satisfaction changes over one’s tenure at a specific organization and during one’s career.

The threat of maturation is not a perceived threat in this study. For those new to the organization, their job satisfaction is just as important as those who have been with the organization for over 20 years.

Experimental mortality was considered a threat before the end of the survey. Once responses were gathered, the attrition rate of the participants was lower than expected and did not diminish the number of responses available for analysis.

Instrumentation could be a threat to this study as each participant was asked to determine who 'administrator' represented to them for specific questions. Some may have considered this the Department Chair, a Dean, or Program Director. This threat is a minor one if the faculty member responding believes the person they identified is their administrator, thus their responses are valid.

Bias in Group Composition could be a threat to internal validity. Although all faculty were asked to participate, they had to self-select. As seen with other feedback surveys, they attract those who have opinions at the extremes. This could have a polarizing effect on the data.

Test practice, Statistical Regression, and the Hawthorne Effect were found not to be threats to internal validity given that the design of this study did not include treatment and control groups or pre-test/post-test.

The threats to internal validity identified here are minor and should not invalidate the results of the research. Given that the research is focused on a specific university, generalization may be difficult. However, results can confirm prior research or provide evidence of exceptions to prior accepted research regarding job satisfaction for faculty.

Limitations

One known threat to the validity of this study is the possibility that participants may have self-selected in ratios not equal to the faculty population. The sample in this study may have a greater portion of men than exists in the population. Likewise, the number of ethnic and racial minorities may be a smaller percentage of this sample than the population contains. These ratio

issues could impact the analysis. However, looking at the interaction of the different groups helps mitigate this minor threat.

Similarly, this sample was too small for some categories to be utilized. To analyze the data, at least 15 participants were desired in the category under study. In some analyses, a category had to be removed to make the statistical analysis valid. However, the analysis then removed the category as a factor in job satisfaction. This occurred with colleges and gender identities.

There is no option for a participant to select 'neutral opinion' or 'I never thought about it.' Instead, the survey forces a response in the positive or negative for each item. A participant may skip a question, but the survey assumes the participant has thought about and has feelings about the job factor in question. This threat may change the generalization of the study as it does not capture neutral responses. While a participant could select 'not applicable,' this does not capture the neutral responses or those who have never thought about the question posed.

This survey was designed to allow anonymous submissions. Since IP addresses were not collected, a participant could have answered the survey multiple times (Toepoel, 2017, pp. 184-202). However unlikely, it was possible.

The data collection was conducted in September 2020, while TCU was still under COVID-19 restrictions. A large portion of classes were conducted online, faculty were encouraged to work from home, and the campus was only partially open; it is likely the results of the study are not generalizable. While the results can be used to describe the impact of COVID-19 responses on faculty job satisfaction, there were no baseline measurements taken before the outbreak of COVID-19. This was considered while constructing the conclusion of the study's result.

Ethical Considerations

Although submissions were anonymous, some faculty without tenure may have found it difficult to respond honestly, in fear of retaliation. Given the sensitive nature of the data being collected, it was and is imperative to keep the raw data confidential. Although identifying information such as a name or address was not collected with the survey responses, enough information was gathered that a person might be able to identify an individual based on the demographic information. Therefore, data and results will only be released and discussed in aggregate form. All information has been stored electronically in password-protected files on a cloud server accessible only with a password. No paper files will be kept of the raw data.

There is a concern that components identified as a factor in faculty dissatisfaction, no action may be taken by the administration to remedy the issue. Should an executive summary be requested, the results of this study will be shared directly with TCU administration in aggregate form. It is presumed the study will be published as part of the dissertation process and will be accessible to the public. An individual faculty member may access the results and conclude the university had reasonable knowledge that a problem existed. Therefore, an ethical issue to consider is whether faculty will be affected by identifying a need and not having that need addressed by TCU administration.

Summary

It is important to understand how job satisfaction relates to employee productivity, mental health, and turnover. However, a simple job satisfaction measurement may not tell the whole truth. Instead, it is essential to look at the individual components of job satisfaction, different demographics of the employee population, and to use the data in the context of current events and changes. Given that faculty are important forward-facing employees to a university,

their job satisfaction has the potential to greatly influence the student experience. Therefore, this study analyzes faculty job satisfaction at TCU utilizing the Two-Factor Theory (Herzberg et al., 1959). Using inferential statistics, the analysis includes comparisons by demographics, by faculty appointment type, and by previously published research results. These comparisons give insight into the elements of the job where faculty are satisfied and the elements where they experience dissatisfaction, and how these may differ among faculty groups.

Chapter 4 – Results

The data extracted from Qualtrics were scrubbed for those declining consent and those identifying as faculty from the seminary school and medical school. Next, new variables were computed from the 64 job satisfaction questions. These variables are the means of all questions grouped by Two-Factor Theory categories (motivators and hygiene), as identified in Smerek and Peterson's (2007) original survey. Then, these means were combined to create an overall mean of job satisfaction. Questions are grouped in this way to create the overall job satisfaction measure. Due to the number of questions per category being unequal if all questions were combined into one mean, the 13 questions regarding 'effective supervisors' would outweigh the three questions about 'effective senior management' in the calculated mean; therefore, skewing the result.

Table 4.1

Paired Sample t-test for Job Satisfaction Questions

	Mean of All Questions		Mean of Categories				
n	*M*	*SD*	*M*	*SD*	*t*	*df*	Sig. (2-tailed)
361	4.52	.80	4.38	.89	16.99	360	.000**

** Difference is significant at the 0.01 level (2-tailed).

As shown in Table 4.1, the mean of job satisfaction using all questions weighted equally ($M = 4.52$, $SD = .80$) is slightly higher than the mean of each category weighted equally ($M = 4.38$, $SD = .89$), with a difference that is statistically significant, $t\ (360) = 16.99$, $p < .001$, two-tailed. Therefore, the 'Mean of Categories' is used in this analysis and referred to as the 'Job Satisfaction Measure' to ensure no one category unduly influences the overall job satisfaction measurement and analysis.

Research Question 1: How does job satisfaction differ by faculty status?

The findings for this question were as faculty status (rank) increased, job satisfaction decreased. Differences between the faculty ranks (Table 4.2) were statistically significant.

Table 4.2

Job Satisfaction Measure by Faculty Status

Faculty Status	*n*	*M*	*SD*
Tenured Faculty (TF)	156	4.16	.82
Tenure-Track Faculty (TTF)	46	4.43	.75
Non-Tenure Track Faculty (NTTF)	91	4.49	.80
Part-Time Faculty (PTF)	68	4.67	.68
All Faculty	361	4.38	.80

A one-way analysis of variance (ANOVA) was used to compare job satisfaction (dependent variable) among the levels of faculty status (independent variable). Levene's test was used to confirm no violation of the assumption of homogeneity of variance occurred. There was a statistically significant difference at the $p < .001$ level in job satisfaction for the faculty status groups, $F(3, 357) = 7.93$, $p < .001$. The post hoc Tukey HSD test showed a statistically significant difference between the Tenured Faculty ($M = 4.16$, $SD = .82$) and Non-Tenure Track Faculty ($M = 4.49$, $SD = .80$) groups, and the Tenured Faculty and Part-Time Faculty ($M = 4.67$, $SD = .68$) groups. The Tenure Track Faculty group ($M = 4.43$, $SD = .75$) was not statistically different from another group. Although there was a statistically significant difference among the means by faculty status and the partial eta squared ($\eta^2 = .06$) shows a medium effect, the difference in means was not large (.51 on a 6.00 scale).

Research Question 2. How does job satisfaction differ by college?

Findings by College indicate that job satisfaction varies slightly across colleges but did not exhibit significant differences between any two colleges. As seen in the prior research question, within colleges there were statistically significant differences across faculty status.

Although there are 10 colleges within the university; some have fewer than 20 full-time faculty members on staff and others had fewer than 20 staff members participate in the survey. To prevent a violation of confidentiality and ensure adequate cell sizes for analysis, colleges with fewer than 15 responses were removed from the analysis. That left seven colleges for comparison (Table 4.3). A one-way ANOVA was used to determine if there was a statistically significant difference among the colleges (independent variable) on the job satisfaction measure (dependent variable). Faculty who identified appointment with more than one of the seven colleges were removed for this comparison.

Table 4.3

Job Satisfaction Measure by College

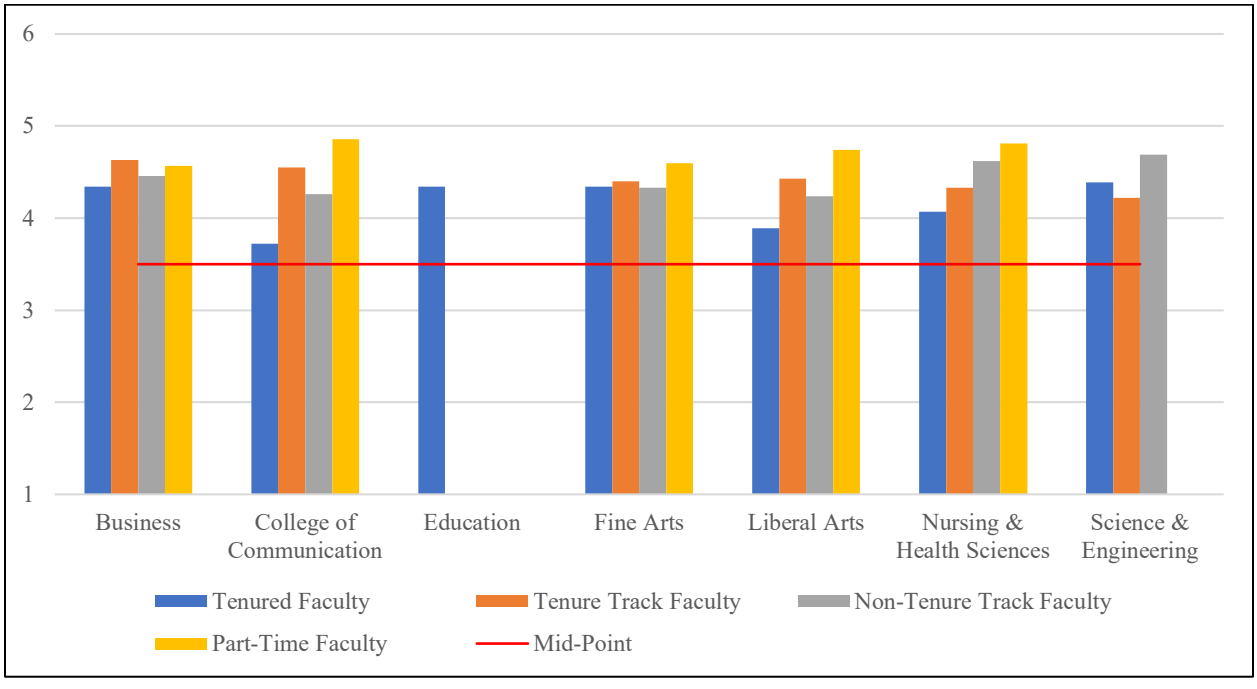
College of Appointment	*n*	*M*	*SD*
Business	61	4.48	.83
Communication	26	4.13	.93
Education	18	4.52	.74
Fine Arts	59	4.40	.72
Liberal Arts	79	4.15	.90
Nursing & Health Sciences	50	4.53	.71
Science & Engineering	59	4.46	.69

Levene's test confirmed there were no violations of the assumption of homogeneity of variance. There was a statistically significant difference at the $p < .05$ level in overall job satisfaction for the colleges, $F(6, 345) = 2.18$, $p = .045$, $\eta^2 = .04$. Although the results show a difference among the colleges, the post hoc did not identify a statistically significant difference between any two colleges. The eta squared value indicates the college of appointment explains only 4% of the variance within the sample.

To further look at possible differences among the colleges, a two-way ANOVA was utilized to find any interaction effect between college and faculty status. The result was not statistically significant, $F(18, 324) = .65$, $p = .857$, partial $\eta^2 = .04$. Although this analysis shows no statistically significant interaction effect, Figure 4.1 shows a visual difference, even if not statistically significant.

Figure 4.1

Job Satisfaction Measurement by College of Appointment and Faculty Status



NOTE. Results were removed for categories with fewer than 4 responses.

For the sake of thoroughness, ANOVAs were used to look at the faculty status within the college of appointment (Table 4.4).

Table 4.4

Job Satisfaction Measurement, Faculty Status by College

College of Faculty Appointment	Tenured Faculty			Tenure Track Faculty			Non-Tenure Track Faculty			Part-Time Faculty		
	n	*M*	*SD*	*n*	*M*	*SD*	*n*	*M*	*SD*	*n*	*M*	*SD*
Business	17	4.34	.87	10	4.63	.35	18	4.46	1.03	16	4.57	.80
Communication	13	3.72	1.05	4	4.55	.76	5	4.26	.25	4	4.86	.69
Education	11	4.34	.81									
Fine Arts	26	4.34	.74	8	4.40	.64	13	4.33	.86	12	4.60	.60
Liberal Arts	43	3.89	.85	8	4.43	.83	15	4.24	.92	13	4.74	.78
Nursing & Health Sciences	10	4.07	.46	5	4.33	1.27	21	4.62	.63	14	4.81	.63
Science & Engineering	35	4.39	.69	6	4.22	.95	16	4.69	.61			

NOTE. Results were removed for categories with fewer than 4 responses.

After confirming homogeneity of variance, results showed a statistically significant difference within Liberal Arts by faculty status, $F(3, 75) = 3.70$, $p = .015$, $\eta^2 = .13$. The post hoc showed the difference was between Tenured Faculty ($M = 3.89$, $SD = .85$) and Part-Time Faculty ($M = 4.74$, $SD = .78$). ANOVAs for all other colleges showed no statistically significant difference among the job satisfaction measurements by faculty status within their college.

A one-way ANOVA was used to determine if a difference occurs across colleges by faculty status. In this case, only Tenured Faculty showed a statistically significant difference,

$F(6, 148) = 2.35$, $p = .034$, $\eta^2 = .09$. The Tukey HSD Post Hoc test did not indicate any specific colleges where there were statistically significant differences for Tenured Faculty.

Research Question 3. How does job satisfaction differ by gender pronouns?

Differences between men and women were slight and not statistically significant. This finding was consistent across faculty status and colleges.

To answer this question a one-way ANOVA was used with the gender pronouns (independent variable) and the measure of job satisfaction (dependent variable). The survey allowed participants to select from 4 responses. Those answering they/them/their numbered 3. Given this group was too small to consider in the analysis, their responses were removed (Table 4.5).

Table 4.5

Job Satisfaction Measurement by Gender Identity

Gender Identity	*n*	*M*	*SD*
he/him/his	136	4.45	.77
she/her/hers	195	4.38	.83
I prefer not to answer	27	4.02	.73

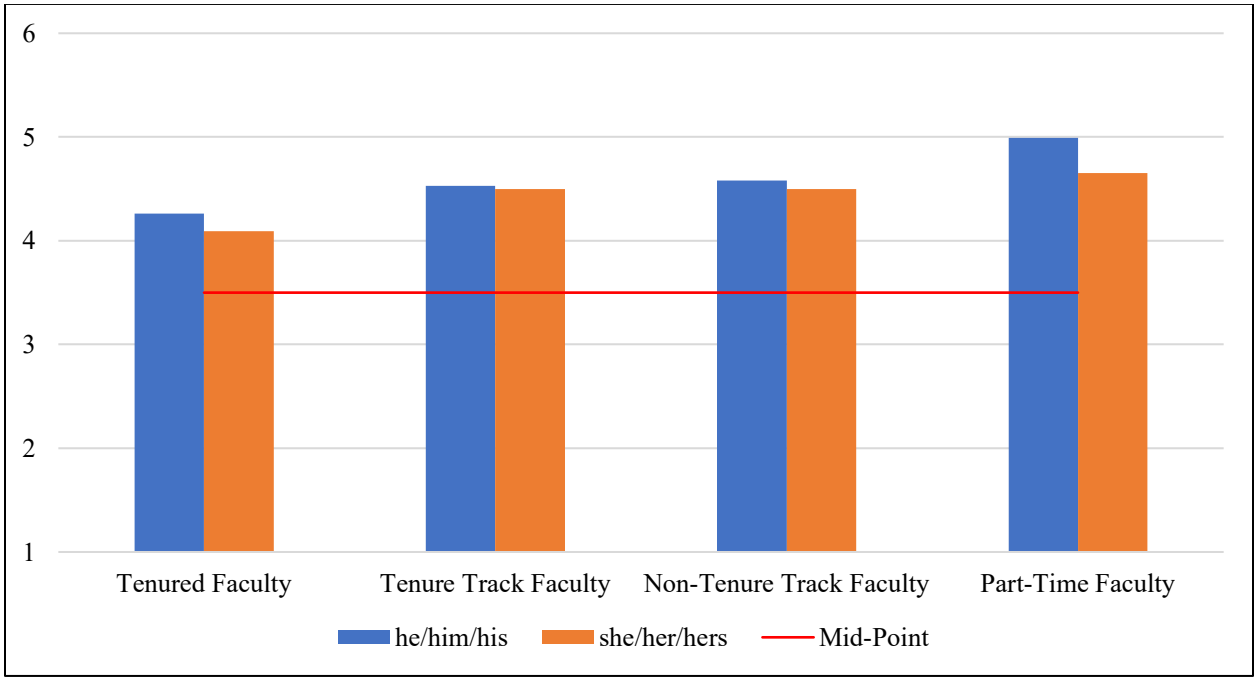
Levene's test was used to confirm no violation of the assumption of homogeneity of variance occurred. There was a statistically significant difference in overall job satisfaction by gender identity, $F(2, 355) = 3.20$, $p = .042$, $\eta^2 = .02$. The post hoc Tukey HSD test showed a statistically significant difference between those identifying as he/him/his ($M = 4.45$, $SD = .77$) and those who chose not to identify their gender ($M = 4.02$, $SD = .73$). The analysis did not reveal if the responses choosing not to identify did so because the categories listed did not match

their self-identification or they did not want to disclose the information in case they could be identified.

With a difference among the gender groups, it warrants a closer look at possible differences among or an interaction with colleges and faculty types. The results of a two-way ANOVA showed the interaction effect between gender and faculty status was not statistically significant, F (3, 323) = .36, p = .779, η^2= .00. Therefore, job satisfaction by gender was not impacted by the various levels of faculty status. However, Figure 4.2 highlights that men have higher job satisfaction than women across all faculty status levels.

Figure 4.2

Job Satisfaction Measure by Gender and Faculty Status



Taking a closer look, an independent-samples t-test was completed to see if there was a difference between the genders within a faculty status. For this test, the response option of 'I prefer not to answer' was removed. The results shown in Table 4.6 show no statistically significant difference between the genders at any level of faculty status.

Table 4.6

t-test of Gender and Faculty Status Interaction on Job Satisfaction

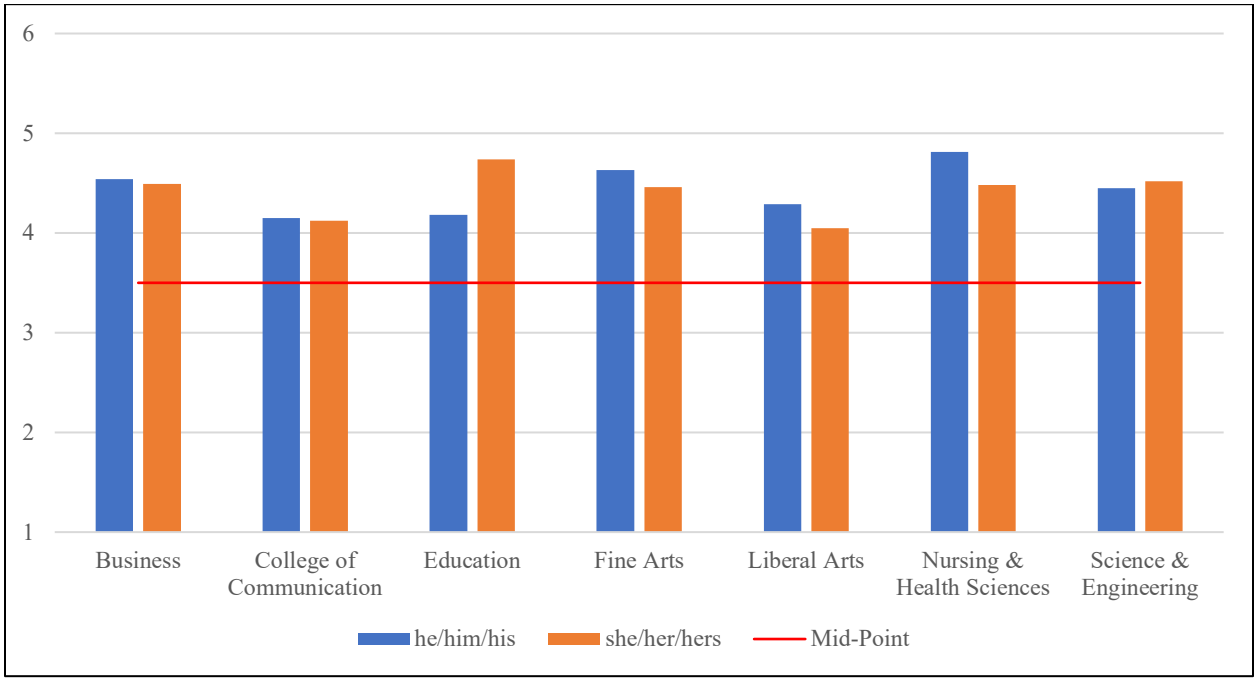
Faculty Status	he/him/his			she/her/hers			*t*	*df*	Sig. (2-tailed)
	n	*M*	*SD*	n	*M*	*SD*			
Tenured Faculty	73	4.26	.72	73	4.09	.89	1.25	144	.213
Tenure Track Faculty	18	4.53	.57	23	4.50	.87	.98	39	.922
Non-Tenure Track Faculty	30	4.58	.92	54	4.50	.72	.43	82	.672
Part-Time Faculty	15	4.99	.60	45	4.65	.69	1.67	58	.100

Although within each faculty status no statistically significant difference was found by gender, there may exist a difference across the faculty status categories within the gender. A one-way ANOVA confirmed the homogeneity of variances and found statistically significant differences within both genders across faculty status categories. For men, $F(3, 132) = 4.64$, $p = .004$, $\eta^2 = .10$ and for women, $F(3, 191) = 6.65$, $p < .001$, $\eta^2 = .09$. This aligns with our prior test of statistically significant differences by faculty level as seen in Research Question 1.

To investigate if job satisfaction by gender was influenced by the college of faculty appointment, a two-way ANOVA was utilized. It showed the interaction effect between gender and college of appointment was not statistically significant, $F(6, 309) = .74$, $p = .619$, $\eta^2 = .00$. Figure 4.3 shows how the job satisfaction measure differs by gender and college.

Figure 4.3

Plot of Job Satisfaction Measure by Gender and College of Appointment



For diligence, an independent-sample *t*-test was conducted on the variables of gender (independent) and job satisfaction measure (dependent) by the college of appointment. The *t*-tests (Table 4.7) showed no statistically significant difference was found between the genders within any of the seven colleges reviewed. Comparing men across colleges showed no statistically significant difference, $F(6, 127) = .74$, $p = .617$, $\eta^2 = .03$. Women had the same result of no statistically significant difference across colleges, $F(6, 182) = 2.06$, $p = .06$, $\eta^2 = .06$.

Table 4.7

Independent-Sample t-test of Job Satisfaction Measure by Gender Identity and College

	he/him/his			she/her/hers					Sig.
College of Appointment	*n*	*M*	*SD*	*n*	*M*	*SD*	*t*	*df*	(2-tailed)
Business	29	4.54	.88	27	4.49	.84	.24	54	.81
Communication	9	4.15	.97	13	4.12	1.06	.07	20	.95
Education	7	4.18	.95	11	4.74	.51	-1.40	8.20	.19
Fine Arts	20	4.63	.63	31	4.46	.62	.92	49	.36
Liberal Arts	32	4.29	.76	41	4.05	1.04	1.10	71	.28
Nursing & Health Sci	5	4.81	.49	44	4.48	.73	.96	47	.34
Science & Engineering	32	4.45	.64	22	4.52	.70	.35	52	.73

Research Question 4. How does job satisfaction differ for ethnic or racial minorities?

There were no statistically significant differences found between minorities and non-minorities. This was true across faculty status, colleges, and gender. However, a statistically significant difference was found between minority men and women with minority men having higher job satisfaction than minority women.

With a small number of racial minorities within the faculty, responses were collected as ‘minority’ and ‘non-minority’ versus asking for the participant to respond with a specific category of racial minority. An independent-sample *t*-test was utilized to compare the means (Table 4.8).

Table 4.8

Independent-Samples t-test of Job Satisfaction Measure by Minority Status

Minority			Non-Minority					
n	*M*	*SD*	*n*	*M*	*SD*	*t*	*df*	Sig. (2-tailed)
65	4.32	.88	270	4.42	.78	-.92	333	.359

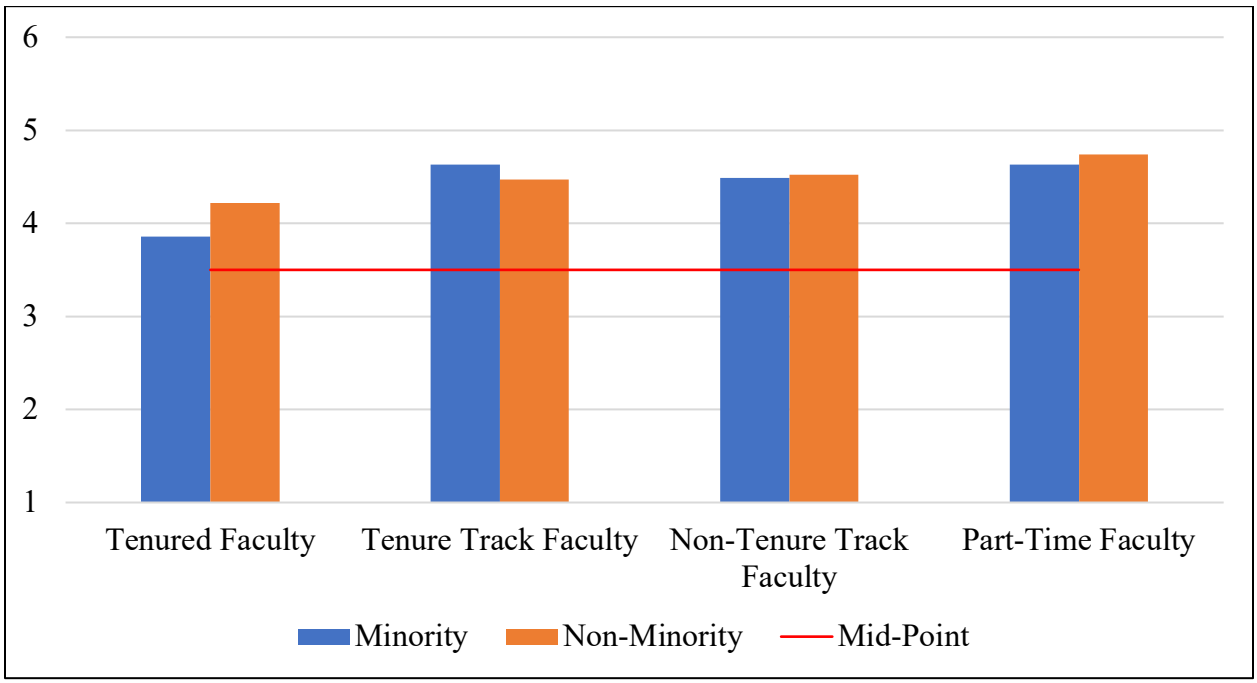
Although the mean of the job satisfaction measure was slightly lower for participants identifying as a minority (M = 4.32, SD = .88), the difference in job satisfaction with non-minorities (M = 4.42, SD = .78) was not statistically significant, t(333) = -.92, p = .359, two-tailed.

This *t*-test looked at the job satisfaction of the minority population for faculty as an aggregate; however, one must consider there may be differences within specific faculty populations, such as faculty status levels, different colleges, and gender identities. Each of these factors were compared for differences by minority status.

First, a two-way ANOVA found the interaction effect between minority status and faculty status was not statistically significant, $F(3, 327) = 1.04$, $p = .374$, $\eta^2 = .00$. Figure 4.4 shows a graphical representation of how the job satisfaction measure varies by faculty status and minority status.

Figure 4.4

Plot of Job Satisfaction Measure by Minority Status and Faculty Status



Although no interaction effect was found, for consistency, a *t*-test (Table 4.9) was utilized to determine if there was a difference within a specific faculty rank. A statistically significant difference was found between those identifying as a minority and those who did not within the rank of Tenured Faculty, $t(145) = -2.00$, $p = .048$, two-tailed.

Table 4.9

Independent sample t-test of Job Satisfaction Measure by Minority Status and Faculty Status

	Minority			Non-Minority					Sig.
Faculty Status	*n*	*M*	*SD*	*n*	*M*	*SD*	*t*	*df*	(2-tailed)
Tenured Faculty	23	3.86	.76	124	4.22	.81	-2.00	145	.048*
Tenure Track Faculty	10	4.63	.70	30	4.47	.72	.63	38	.535
Non-Tenure Track Faculty	19	4.49	.92	66	4.52	.77	-.13	83	.897
Part-Time Faculty	13	4.63	.87	50	4.74	.63	-.52	61	.603

* Difference is significant at the 0.05 level (2-tailed).

The interaction effect between minority status and college of faculty appointment was analyzed using a two-way ANOVA, F (6, 312) = .34, p = .917, η^2 = .00. It was found to be statistically insignificant. Figure 4.5 shows a visual representation of how the job satisfaction measure for minorities varies by college.

To substantiate, an independent-sample t-test was conducted to determine if there was a difference in the job satisfaction measure for minorities within a college (Table 4.10). The results of the analyses show there is no statistically significant difference between minorities and non-minorities within the college of appointment. Minority status across colleges was analyzed using a one-way ANOVA. Minorities had no statistically significant difference across colleges, F(6, 55) = 1.07, p = .392, η^2 = .10 and neither did non-minorities, F(6, 257) = 1.72, p = .117, η^2 = .04.

Figure 4.5

Plot of Job Satisfaction Measure by Minority Status and College of Appointment

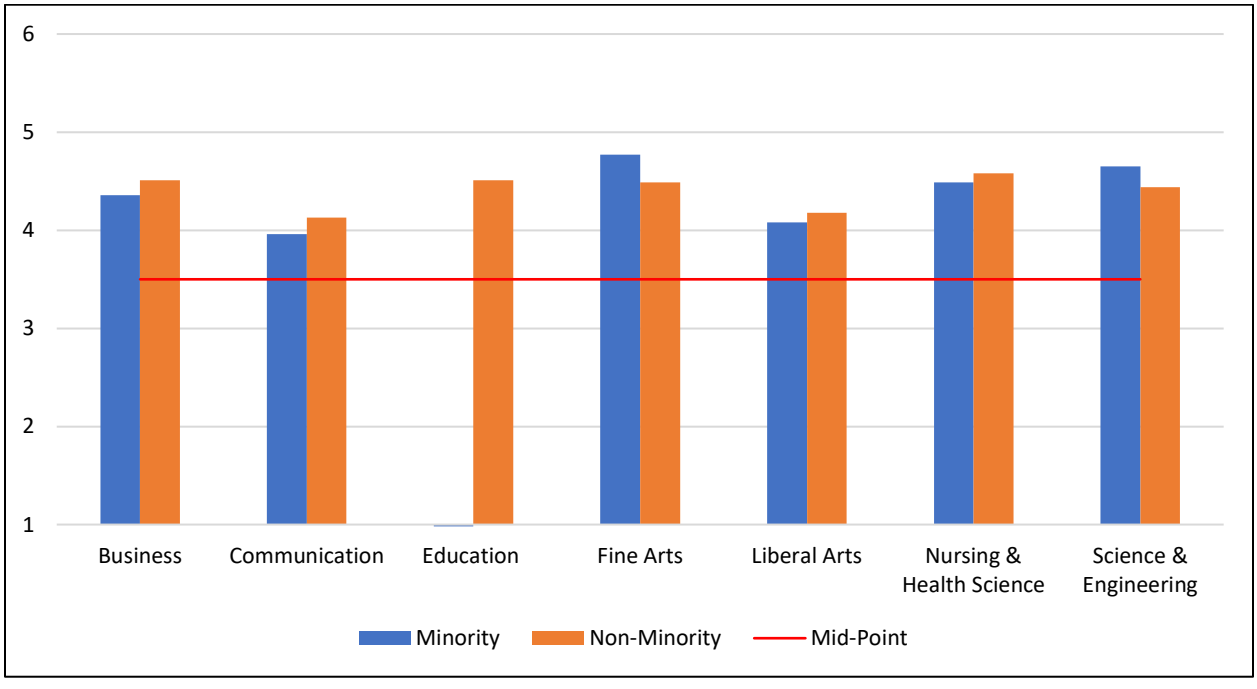


Table 4.10

Independent-Sample t-test of Minority Status on Job Satisfaction Measure by College

College of Appointment	Minority			Non-Minority			*t*	*df*	Sig. (2-tailed)
	n	*M*	*SD*	*n*	*M*	*SD*			
Business	7	4.36	.75	49	4.51	.88	-.45	54	.657
Communication	5	3.96	1.37	20	4.13	.84	-.35	23	.729
Education	[a]	[a]	[a]	16	4.51	.78			
Fine Arts	7	4.77	.71	43	4.49	.61	1.10	48	.278
Liberal Arts	25	4.08	.92	50	4.18	.92	-.43	73	.667
Nursing & Health Sci	8	4.49	.92	37	4.58	.63	-.36	43	.718
Science & Engineering	8	4.65	.58	49	4.44	.69	.81	55	.421

[a] Sample was too small for analysis

To consider minority status with gender identity, a two-way ANOVA was utilized to determine if there was an interaction effect, $F(1, 317) = 4.72$, $p = .031$, partial $\eta^2 = .02$. To investigate the interaction further, an independent-samples *t*-test was utilized to determine if there was a statistically significant difference between those identifying as a minority and those who do not within each gender (Figure 4.6 & Table 4.11).

Figure 4.6

Plot of Job Satisfaction Measure by Minority Status and Gender Identity

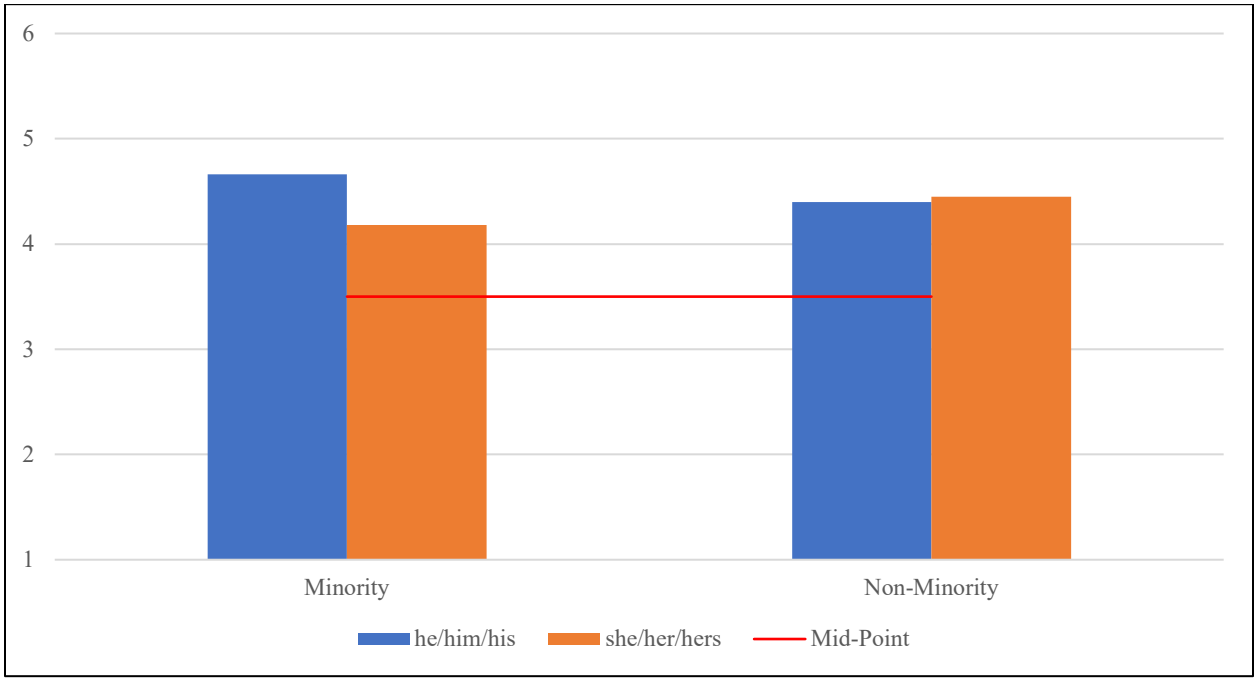


Table 4.11

Independent-Sample t-test of Minority Status on Job Satisfaction Measure by Gender Identity

	Minority			Non- Minority					
Gender Identity	*n*	*M*	*SD*	*n*	*M*	*SD*	*t*	*df*	Sig. (2-tailed)
he/him/his	20	4.66	.62	112	4.40	.80	1.36	130	.176
she/her/hers	43	4.18	.95	146	4.45	.79	-1.86	187	.065

Neither minority status showed a statistically significant difference within a gender category. However, Table 4.12 shows an independent-samples *t*-test of gender within a minority status. A statistically significant difference is found between men and women who identify as a minority.

Table 4.12

Independent-Sample t-test of Gender Identity on Job Satisfaction Measure by Minority Status

Minority Status	he/him/his			she/her/hers					
	n	*M*	*SD*	*n*	*M*	*SD*	*t*	*df*	Sig. (2-tailed)
Minority	20	4.66	.62	43	4.18	.95	2.35	53.72	.023*
Non-Minority	112	4.40	.80	146	4.45	.79	-.5	256	.615

* Difference is significant at the 0.05 level (2-tailed).

Research Question 5: How does job satisfaction with intrinsic job factors (motivators) differ from satisfaction with extrinsic job factors (hygiene factors)?

It was found that motivators were rated significantly higher than hygiene factors. However, the two hygiene factors of 'good relationships with co-workers' and 'effective supervisor' consistently rated above most motivators. The lowest scores often seen in benefits and salaries were also present here; yet, the rating for 'effective senior management' was the one factor consistently below the mid-point of the range. Each factor had a statistically significant positive correlation with all other factors.

There are multiple ways to compare the data collected when looking for differences between motivators and hygiene factors. For this study, a paired sample *t*-test used the mean of all questions categorized as motivators and compared it against the mean of all questions categorized as hygiene factors. As with the overall job satisfaction measure, the categories were given equal weight in determining the mean.

Table 4.13

Paired Samples t-test of Motivation and Hygiene Factors

Motivators			Hygiene Factors						
n	*M*	*SD*	*n*	*M*	*SD*	*Correlation*	*t*	*df*	Sig. (2-tailed)
359	4.58	.80	359	4.10	.88	.84	18.65	358	.000**

** Difference is significant at the 0.01 level (2-tailed).

Table 4.13 shows a statistically significant difference between motivators and hygiene factors. Although the difference is statistically significant, the difference between the two means is only .48 on a 6-point scale.

Further analysis of the categories shows the median in 10 of 11 categories is higher than the mean, indicating the mean is skewed in favor of those with higher job satisfaction (Table 4.14). The highest score is in Work Itself (m); whereas the lowest score appears in Effective Senior Management (h).

Table 4.14

Descriptive Statistics for Motivator and Hygiene Variables

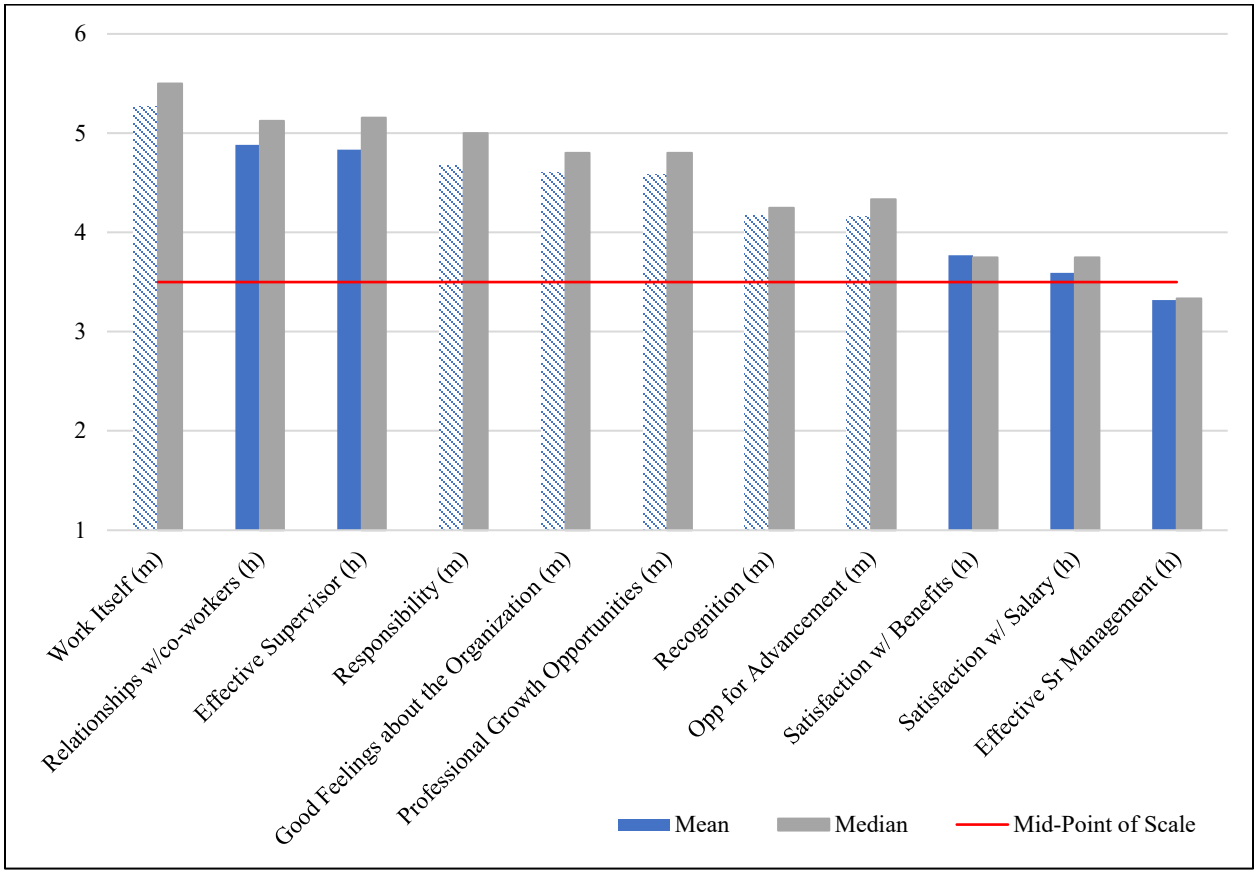
Two-Factor Theory Categories	*n*	*M*	*SD*	Median
Work Itself (m)	359	5.27	.75	5.50
Good relationships w/co-workers (h)	361	4.88	.95	5.13
Effective Supervisor (h)	357	4.83	1.13	5.15
Responsibility (m)	359	4.67	.97	5.00
Good Feelings about the Organization (m)	359	4.61	1.14	4.80
Professional Growth Opportunities (m)	359	4.58	1.02	4.80
Recognition (m)	355	4.17	1.04	4.25
Opp for Advancement (m)	350	4.16	1.05	4.33
Satisfaction w/ Benefits (h)	326	3.77	1.17	3.75
Satisfaction w/ Salary (h)	361	3.59	1.18	3.75
Effective Sr Management (h)	353	3.32	1.56	3.33

Note. Categories are listed in order from highest to lowest by mean.

Figure 4.7 shows the illustration of the mean and median compared to the mid-point of the range.

Figure 4.7

Plot of Mean and Median of Motivator and Hygiene Variables



Note. Means for motivators are striped, means for hygiene factors are solid.

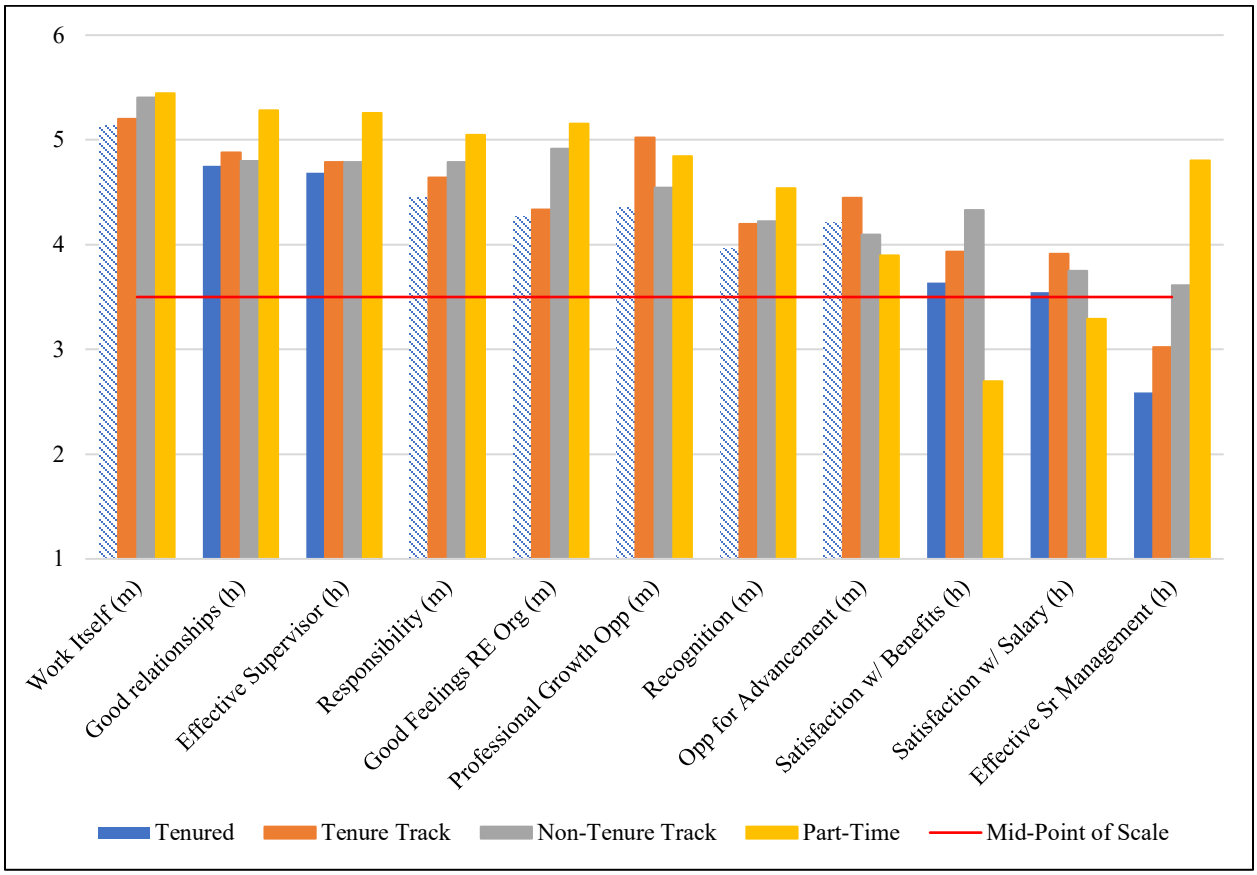
Although the data shows the aggregate of each factor mean is above the mid-point, the data examined by faculty status, college, gender, and minority status may give different information.

Table D.1 in Appendix D gives descriptive statistics for the two-factor theory categories by faculty status. The highest score was Part-Time Faculty and the Work Itself ($M = 5.45$, $SD = .60$). The lowest score was with Tenured Faculty and their satisfaction with Effective Senior Management ($M = 2.59$, $SD = 1.40$).

A graphical representation of the scores is shown in Figure 4.8.

Figure 4.8

Plot of Job Satisfaction Measure by Two-Factor Theory Categories and Faculty Status



Note. Means for motivators are striped, means for hygiene factors are solid for tenured faculty.

Although it appears there is a difference in scores among faculty ranks, to determine if a statistically significant difference existed among faculty status levels within an individual factor, one-way ANOVAs were run for each Two-Factor Theory category.

All categories showed a statistically significant difference at the $p < .05$ level (Table 4.15). Of 11 Two-Factor Theory categories of job satisfaction, Tenured Faculty and Part-Time Faculty had a statistically significant difference in 9 categories, as shown in Figure 4.9.

Table 4.15

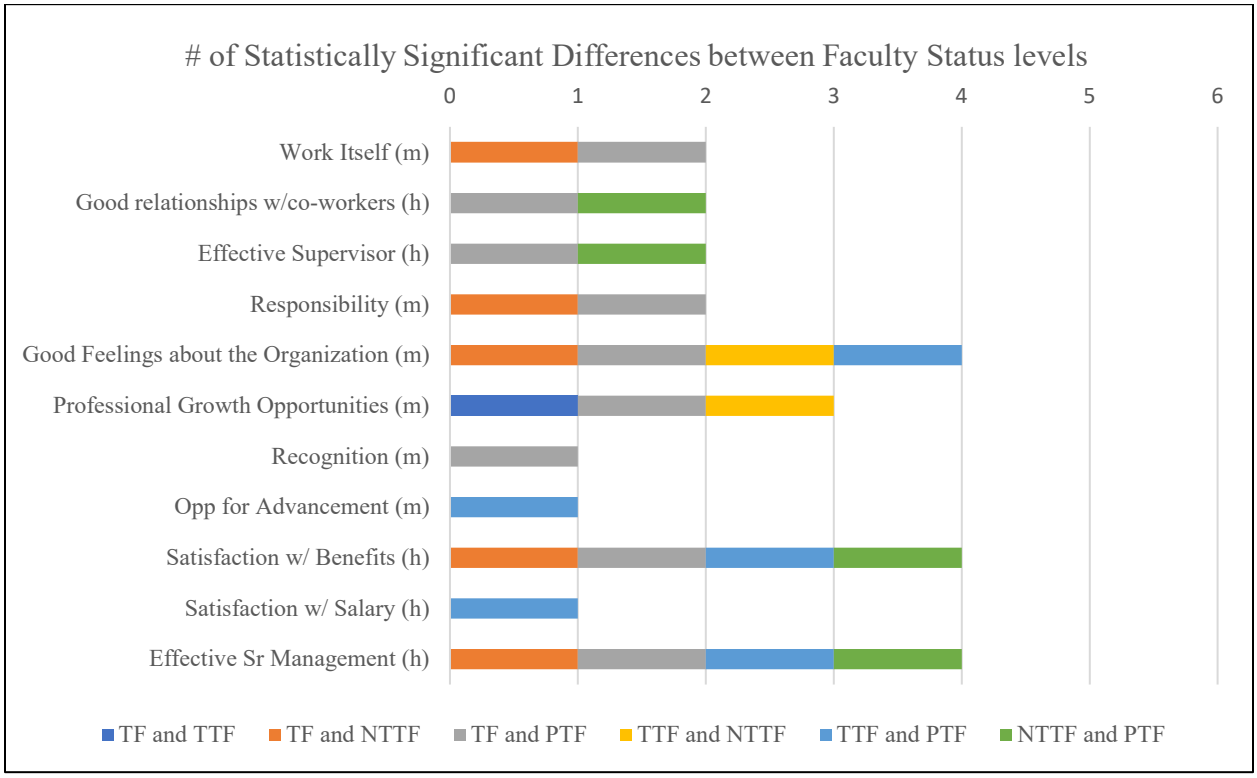
F tests for Faculty Status by Two-Factor Theory Category

Two-Factor Theory Categories	*df* between	*df* within	*F*	*p*	*η2*
Work Itself (m)	3	355	4.02	.008**	.03
Good Relationships with Co-Workers (h)	3	357	5.46	.001**	.04
Effective Supervisor (h)	3	353	4.27	.006**	.04
Responsibilities (m)	3	355	6.78	< .001**	.05
Good Feelings about the Organization (m)	3	355	14.09	< .001**	.11
Professional Growth Opportunities (m)	3	355	7.5	< .001**	.06
Recognition (m)	3	351	5.02	.002**	.04
Opportunity for Advancement (m)	3	346	2.66	.048*	.02
Satisfaction with Benefits (h)	3	322	20.68	< .001**	.16
Satisfaction with Salary (h)	3	357	3.29	.021*	.03
Effective Senior Management (h)	3	349	45.3	< .001**	.28

* Difference is significant at the 0.05 level (2-tailed).
** Difference is significant at the 0.01 level (2-tailed).

Figure 4.9

Plot of Statistically Significant Differences Between Faculty Status Levels



When using the college of appointment as the grouping, the results (Appendix D, Table D.2) show the highest score with the Work Itself in the College of Nursing and Health Sciences (M = 5.43, SD = .58). The lowest score is with Effective Senior Management and the College of Liberal Arts (M = 2.71, SD = 1.62). One-way ANOVAs show fewer differences among colleges than seen in the faculty status levels (Table 4.16).

Table 4.16

F tests for College by Two-Factor Theory Category

Two-Factor Theory Categories	*df* between	*df* within	*F*	*p*	*η2*
Work Itself (m)	6	343	1.24	.283	.02
Good Relationships with Co-Workers (h)	6	345	2.83	.011*	.05
Effective Supervisor (h)	6	341	1.68	.124	.03
Responsibilities (m)	6	343	2.08	.055	.04
Good Feelings about the Organization (m)	6	343	4.18	< .001**	.07
Professional Growth Opportunities (m)	6	343	1.06	.385	.02
Recognition (m)	6	339	1.00	.429	.02
Opportunity for Advancement (m)	6	334	1.48	.183	.03
Satisfaction with Benefits (h)	6	311	2.50	.023*	.05
Satisfaction with Salary (h)	6	345	1.36	.228	.02
Effective Senior Management (h)	6	337	6.33	< .001**	.10

* Difference is significant at the 0.05 level (2-tailed).
** Difference is significant at the 0.01 level (2-tailed).

Good Relationships with Co-Workers (h) had statistically significant differences between the colleges of Liberal Arts (*M* = 4.55, *SDs* = 1.16) and Science/Engineering (*M* = 5.15, *SD* = .80).

Recognition (m) had statistically significant differences between the colleges of Business (*M* = 4.22, *SD* = 1.05) and Liberal Arts (*M* = 3.98, *SD* = 1.20); Communication (*M* = 3.88, *SD* = 1.11) and Nursing (*M* = 4.30, *SD* = 1.02); and Liberal Arts (*M* = 3.98, *SD* = 1.20) and Nursing (*M* = 4.30, *SD* = 1.02).

Satisfaction with Benefits (h) had statistically significant differences between the colleges of Liberal Arts (*M* = 3.37, *SD* = 1.21) and Nursing (*M* = 4.04, *SD* = 1.11).

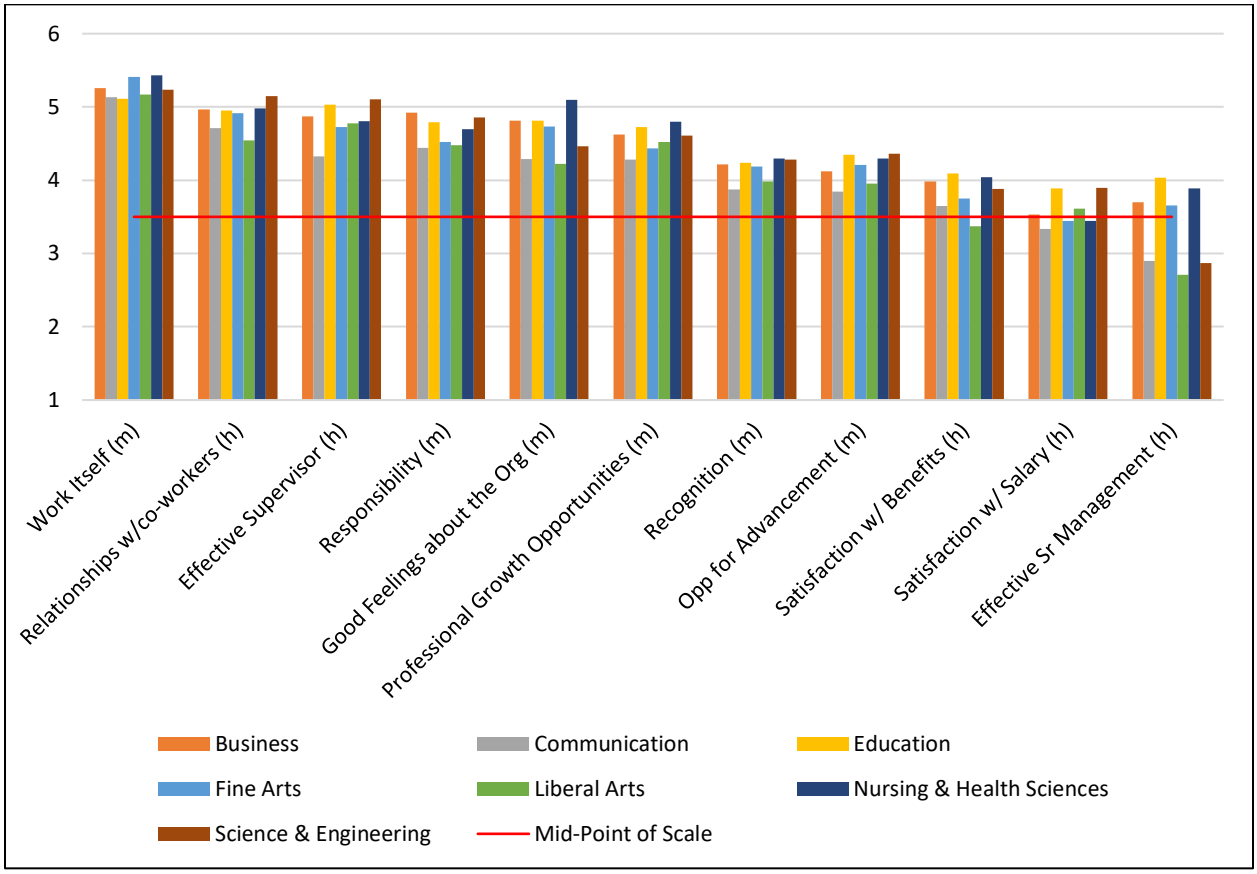
Finally, Effective Senior Management (h), had statistically significant differences between the college of Liberal Arts (*M* = 2.71, *SD* = 1.62) and colleges of Business (*M* = 3.70, *SD* = 1.47), Education (*M* = 4.04, *SD* = 1.45), Fine Arts (*M* = 3.66, *SD* = 1.43), and Nursing (*M*

= 3.89, *SD* = 1.51). Additional differences that were statistically significant exist between the college of Science/Engineering (*M* = 2.87, *SD* = 1.23) with both Business (*M* = 3.70, *SD* = 1.47) and Nursing (*M* = 3.89, *SD* = 1.51).

For visual inspection, Figure 4.10 shows the means of each category by college in comparison to the mid-point of the scale. Here it is easier to spot the lower scores in Effective Senior Management where 3 colleges fall below the mid-point. Other scores below the mid-point are found in salary and benefits.

Figure 4.10

Plot of Job Satisfaction Measure by Two-Factor Theory Categories and College



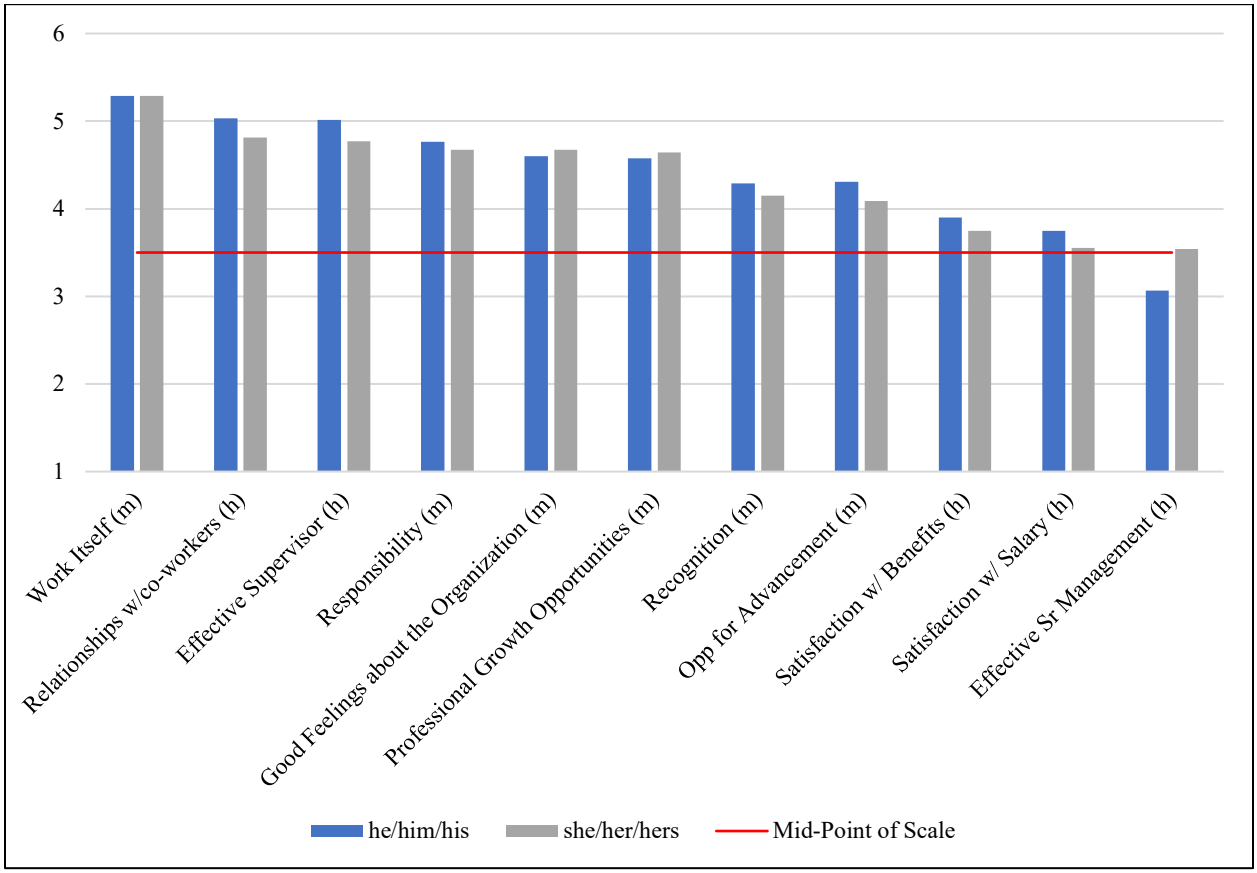
To consider additional information hidden in the aggregate, the analysis turned to the Two-Factor Theory categories by gender using an independent-sample *t*-test for gender

(independent variable) and the mean of each category (dependent variable). Results may be found in Appendix D, Table D.3.

Three categories show a statistically significant difference in the mean measured for men and women: Effective Senior Management ($t(321) = -2.67$, $p = .008$, two-tailed), Effective Supervisors ($t(320.82) = 2.09$, $p = .037$, two-tailed), and Good Relationships with Co-Workers ($t(321.77) = 2.13$, $p = .034$, two-tailed). It is interesting to note that men have higher satisfaction in all but three categories (Good Feelings about Organization, Professional Growth Opportunities, and Effective Senior Management) . In Effective Senior Management, the higher satisfaction for women ($M = 3.54$, $SD = 1.56$) is statistically significant from men ($M = 3.06$, $SD = 1.58$). For the Work Itself, men and women have the same mean and standard deviation ($M = 5.29$, $SD = .75$). This is illustrated in Figure 4.11.

Figure 4.11

Plot of Job Satisfaction Measure by Two-Factor Theory Categories and Gender

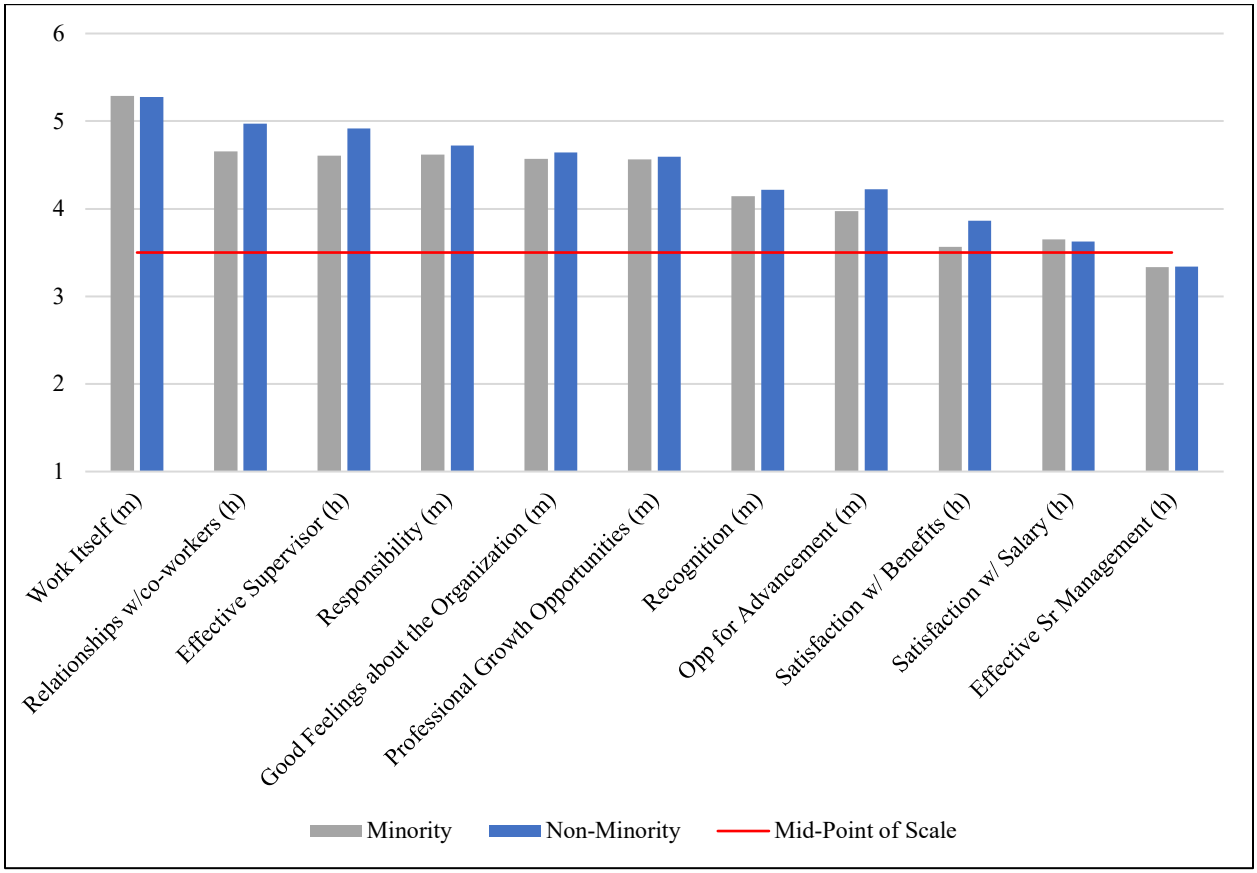


The last test conducted for this analysis was an independent-samples *t*-test for each Two-Factor Theory category and minority status. Results may be found in Appendix D, Table D.4

The only category with a statistically significant difference between those identifying as minorities and those who did not was the category of Good Relationship with Co-Workers, $t(83.4) = -2.09$, $p = .039$, two-tailed. Although Effective Supervisor had nearly the same difference in means as Good Relationship, the difference failed to meet statistical significance. See Figure 4.12 for an illustration of means by category against the mid-point of the range.

Figure 4.12

Plot of Job Satisfaction Measure by Two-Factor Theory Categories and Minority Status



Finally, the Two-Factor Theory categories were analyzed for correlations with age and time of employment at TCU (Table 4.17) and with one another (Table 4.18).

Table 4.17

Correlation of Two-Factor Theory Variable with Age and Years of Employment

Measure	Age	Years at TCU
Work Itself (m)	.094	-.023
Good relationships w/co-workers (h)	.124*	.038
Effective Supervisor (h)	.056	.022
Responsibility (m)	.060	-.068
Good Feelings about the Organization (m)	.145**	-.019
Professional Growth Opportunities (m)	.010	-.095
Recognition (m)	.146**	-.007
Opp for Advancement (m)	.125*	.009
Satisfaction w/ Benefits (h)	.174**	-.006
Satisfaction w/ Salary (h)	.090	.035
Effective Sr Management (h)	-.007	-.237**
Motivators	.123*	-.044
Hygiene Factors	.093	-.085
Job Satisfaction Measure	.106*	-.065

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

Table 4.18

Correlation of Two-Factor Theory Variables

Measure	Work Itself (m)	Good relationships w/co-workers (h)	Effective Supervisor (h)	Responsibility (m)	Good Feelings about the Organization (m)	Professional Growth Opportunities (m)	Recognition (m)	Opp for Advancement (m)	Satisfaction w/ Benefits (h)	Satisfaction w/ Salary (h)	Effective Sr Management (h)	Motivators	Hygiene Factors
Work Itself (m)	-												
Good relations… (h)	.476**	-											
Effective Supervisor (h)	.447**	.706**	-										
Respons… (m)	.548**	.650**	.645**	-									
Good Feelings… Org (m)	.556**	.514**	.452**	.580**	-								
Profess. Growth Opp (m)	.605**	.583**	.631**	.687**	.523**	-							
Recognition (m)	.568**	.656**	.664**	.715**	.579**	.726**	-						
Opp for Advmt (m)	.398**	.445**	.439**	.535**	.442**	.571**	.552**	-					
Satisfaction w/ Benefits (h)	.322**	.261**	.291**	.420**	.465**	.436**	.438**	.509**	-				
Satisfaction w/ Salary (h)	.317**	.320**	.366**	.467**	.407**	.534**	.455**	.513**	.660**	-			
Effective Sr Mmgmt (h)	.348**	.342**	.325**	.506**	.638**	.408**	.463**	.350**	.383**	.351**	-		
Motivators	.738**	.691**	.684**	.845**	.773**	.853**	.862**	.734**	.541**	.562**	.574**	-	
Hygiene Factors	.520**	.694**	.717**	.737**	.698**	.704**	.725**	.604**	.725**	.732**	.736**	.835**	-
Job Satisfaction Measure	.676**	.711**	.719**	.835**	.775**	.813**	.827**	.695**	.647**	.672**	.671**	.964**	.943**

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed)

Research Question 6: How does TCU's part-time faculty job satisfaction compare to the results and conclusions found in the literature?

Findings for this research question were mixed, reflecting what was found in literature and the opposite of what is typical with part-time faculty. TCU's part-time faculty shared many of the same concerns expressed in the literature. However, there were several concerns that TCU part-time faculty did not share with the literature, including co-worker relationships, available resources, and control over the courses they teach. Although the demographics of TCU's part-time faculty reflected what was found in the literature, the majority of part-time faculty have been employed in this capacity for more than two years at TCU.

Part-Time Faculty (PTF) comprise roughly 50% of faculty in higher education (Kezar & Bernstein-Sierrra, 2016; Yakoboski, 2018). At TCU they comprise roughly 30% of faculty. This does not account for the percentage of courses taught by Part-Time Faculty, only the number of people.

Research shows that most part-time faculty report they are offered contracts on a course/term basis and do not have benefits that full-time employees have through the institution. This is true at TCU as well.

Part-Time Faculty seeking full-time employment have numerous complaints about the condition of their employment (Kezar & Bernstein-Sierra, 2016; Maynard & Joseph, 2008; Yakoboski, 2018). The PTF in this study who reported they desired full-time employment when accepting the part-time role numbered 30 people or 44.12% of PTF responding. Their desire for full-time employment may have influenced their overall job satisfaction, as seen with the independent-samples *t*-test (Table 4.19).

Table 4.19

Independent-Samples t-test of Job Satisfaction Measure by Desire for FT Employment in PTF

Desired Full-Time Employment								
Yes			No					
n	*M*	*SD*	*n*	*M*	*SD*	*t*	*df*	Sig. (2-tailed)
30	4.35	.65	38	4.93	.59	-3.83	66	.000**

** Difference is significant at the 0.01 level (2-tailed).

Those in the PTF role involuntarily are reportedly more dissatisfied with areas of advancement, salary, and job security than those employed voluntarily as PTF (Kezar & Bernstein-Sierra, 2016; Maynard & Joseph, 2008; Yakoboski, 2018). To see if there was a statistically significant difference in those who desired full-time employment, independent-sample *t*-tests were run for each of the job satisfaction measures (Table 4.20).

Table 4.20

Independent-Samples t-test of Job Satisfaction Measure and Two-Factor Theory Variables

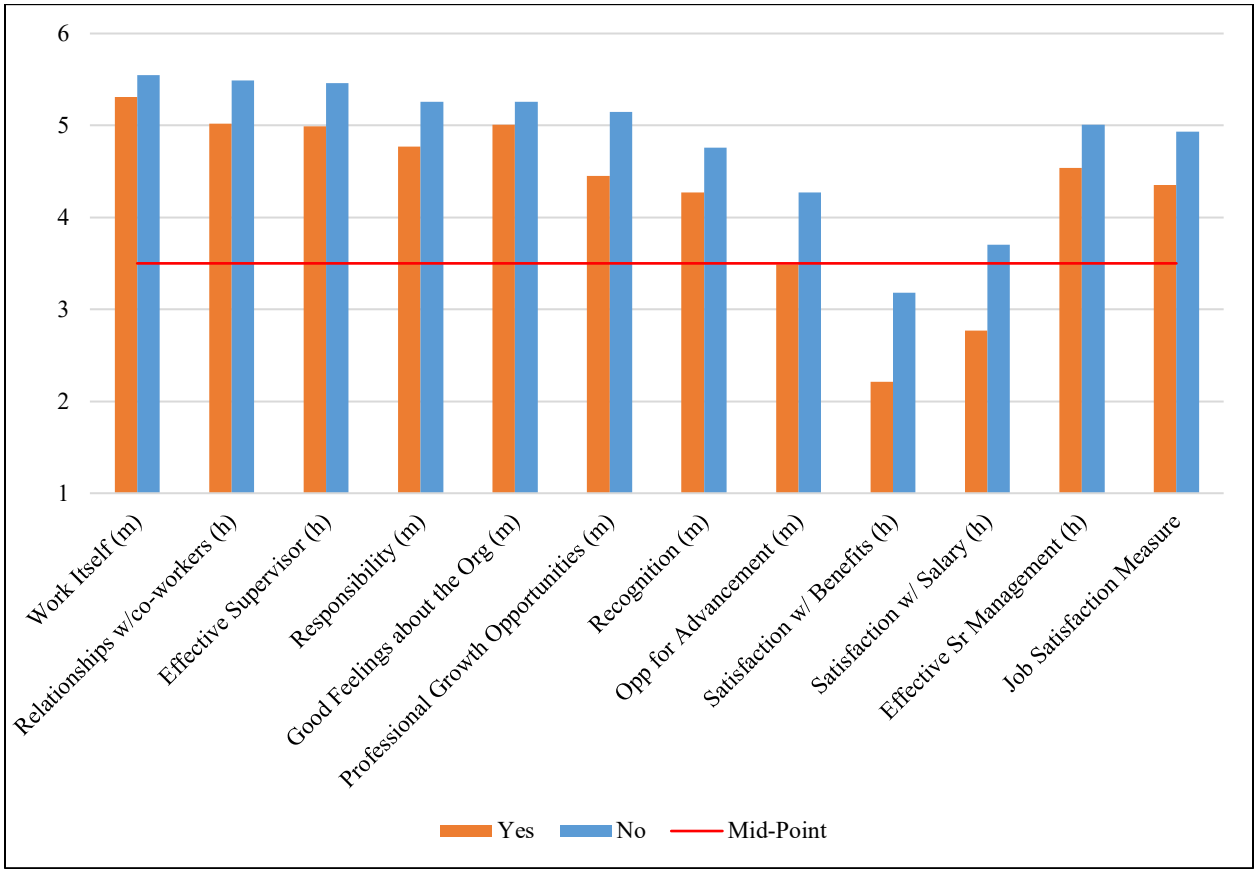
	Desired Full-Time Employment								
	Yes			No					Sig.
Measures	*n*	*M*	*SD*	*n*	*M*	*SD*	*t*	*df*	(2-tailed)
Work Itself (m)	30	5.31	.66	38	5.55	.53	-1.66	66	.102
Good relationships w/co-workers (h)	30	5.02	.77	38	5.49	.38	-3.11	39.83	.004**
Effective Supervisor (h)	30	4.99	.99	38	5.46	.56	-2.48	66	.016*
Responsibility (m)	30	4.77	.84	38	5.26	.06	-2.8	66	.007**
Good Feelings about the Organization (m)	30	5.01	.80	38	5.26	.87	-1.23	66	.225
Professional Growth Opportunities (m)	30	4.45	.86	38	5.15	.70	-3.69	66	.000**
Recognition (m)	30	4.27	.96	37	4.76	.75	-2.37	65	.021*
Opp for Advancement (m)	30	3.49	1.07	33	4.27	1.35	-2.51	61	.015*
Satisfaction w/ Benefits (h)	17	2.21	1.24	17	3.18	1.62	-1.97	32	.057
Satisfaction w/ Salary (h)	30	2.77	1.12	38	3.7	1.22	-3.24	66	.002**
Effective Sr Management (h)	30	4.54	1.07	37	5.01	.98	-1.85	65	.068

* Difference is significant at the 0.05 level (2-tailed).
** Difference is significant at the 0.01 level (2-tailed).

As noted in the research, the difference in satisfaction with opportunities for advancement was statistically significant for those voluntarily employed part-time versus those involuntarily employed part-time, $t(61) = -2.51$, $p = .015$, two-tailed. Satisfaction with salary also showed a statistically significant difference, $t(66) = -3.24$, $p = .002$, two-tailed. Although not all variables have a statistically significant difference between those who desire full-time employment and those who do not, it is evident that those who desire full-time employment have lower job satisfaction in every category. This is visually represented in Figure 4.13.

Figure 4.13

Plot of Job Satisfaction Variables and PTF Desire for Full-Time Employment



Note. Order of factors is in decreasing order based on satisfaction reported for all faculty.

PTF often complain of low wages, lack of benefits, little or no social interaction with other faculty, no integration in campus culture, lack of resources, no control over course and syllabus creation, and little or no notice for course assignment (Kezar & Bernstein-Sierra, 2016). An independent-sample *t*-test of the Satisfaction with Salary between Full-Time Faculty (M = 3.67, SD = 1.15) and Part-Time Faculty (M = 3.29, SD = 1.26) shows a statistically significant difference, $t(359) = 2.38$, $p = .018$, two-tailed. Satisfaction with Benefits also showed a statistically significant difference between Full-Time Faculty (M = 3.90, SD = 1.05) and Part-Time Faculty (M = 2.69, SD = 1.50), $t(36.86) = 4.54$, $p < .001$, two-tailed. Although both of these report a mean on a group of questions (Two-Factor Theory categories), there were specific

questions in the survey addressing co-worker relationships, control over course materials, and resources. Independent-sample *t*-tests for these questions are reported in Table 4.21.

Although there is a statistically significant difference in the measures for the two benefit questions, the difference in questions regarding salary is varied. The question specific to competitive pay is above the mid-point (3.5) for Part-Time Faculty ($M = 3.78$, $SD = 1.69$). Although PTF responded the actual pay is not 'fair' ($M = 3.16$, $SD = 1.74$), they also responded it was competitive with the market.

The general population of Part-Time Faculty complains about no social interaction with other faculty; however, the two questions regarding co-workers at TCU have means on the upper end of the scale. Part-Time Faculty indicate a higher score of teamwork ($M = 5.16$, $SD = 1.04$) than Full-Time Faculty ($M = 4.61$, $SD = 1.34$) and has statistically significant difference.

Three survey questions covered resources and control of the course. All three questions had higher scores for Part-Time Faculty with two being statistically significant.

Although Part-Time Faculty at TCU share the same complaints as the general Part-Time Faculty population, in the areas of co-worker relationships, course control, and resources, TCU Part-Time Faculty survey responses do not indicate these are problem areas. It is unclear how much impact the composition of the Part-Time Faculty influences this statement with the majority of TCU Part-Time Faculty voluntarily in the part-time role. In addition, the majority of responding Part-Time Faculty have been on faculty at TCU for more than two years. This may also affect survey responses. See Figure 4.14 for a visual representation of PTF responses compared to Full-Time Faculty.

Table 4.21

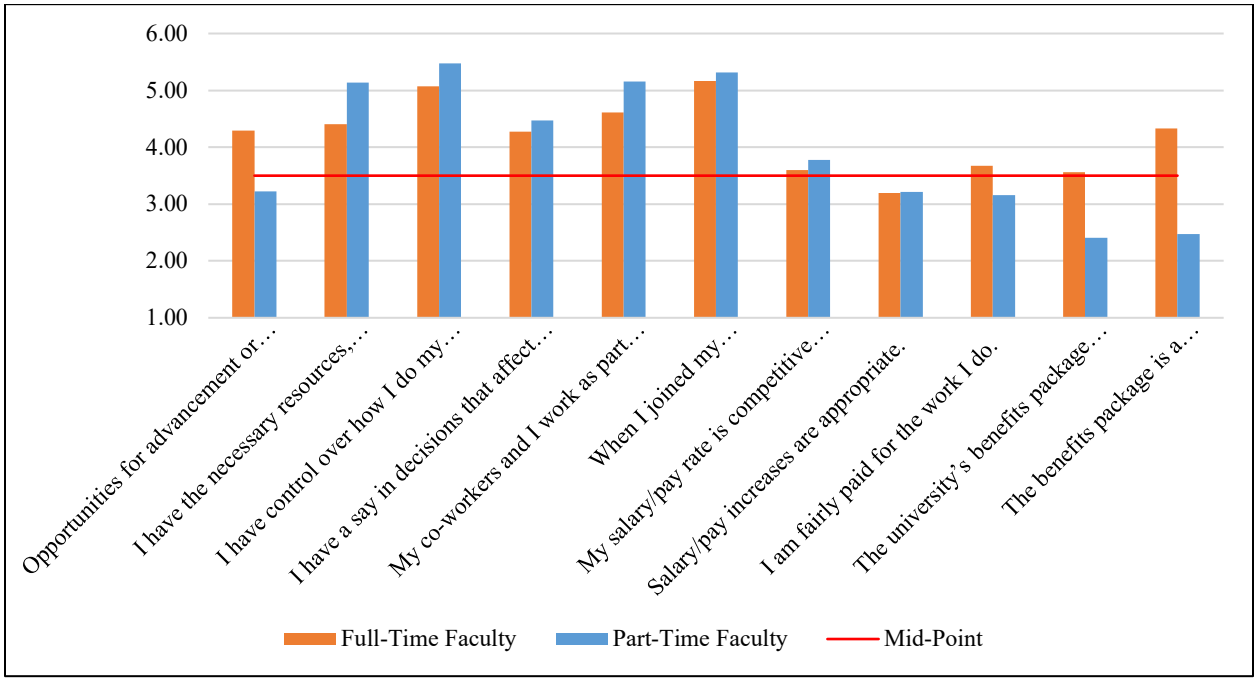
Independent-Sample t-test for Faculty Employment and Survey Questions

Questions	Full-Time Faculty			Part-Time Faculty			*t*	*df*	Sig. (2-tailed)
	n	*M*	*SD*	*n*	*M*	*SD*			
Opportunities for advancement or promotion exist within the university.	283	4.29	1.22	45	3.22	1.54	4.46	53.17	.000**
I have the necessary resources, tools, or equipment to do my job.	284	4.40	1.36	64	5.14	.97	-5.04	125.1	.000**
I have control over how I do my work.	289	5.07	1.03	68	5.47	.66	-3.97	155.4	.000**
I have a say in decisions that affect my work.	285	4.27	1.41	62	4.47	1.42	-.98	345	.327
My co-workers and I work as part of a team.	280	4.61	1.34	58	5.16	1.04	-3.42	100.7	.001**
When I joined my department/college, I was made to feel welcome.	284	5.16	1.17	63	5.32	1.03	-.98	345	.330
My salary/pay rate is competitive when compared to similar jobs at other universities.	283	3.60	1.53	64	3.78	1.69	-.85	345	.394
Salary/pay increases are appropriate.	276	3.20	1.52	46	3.22	1.60	-.07	320	.941
I am fairly paid for the work I do.	293	3.68	1.62	68	3.16	1.74	2.32	359	.021*
The university's benefits package meets my needs.	291	3.56	1.50	27	2.41	1.69	3.77	316	.000**
The benefits package is a significant factor in my decision to stay at the university.	279	4.33	1.45	17	2.47	1.37	5.13	294	.000**

* Difference is significant at the 0.05 level (2-tailed).
** Difference is significant at the 0.01 level (2-tailed).

Figure 4.14

Plot of Survey Questions for Full-Time Faculty and Part-Time Faculty



A common perception painted by the media is that PTF are young, recent doctorate graduates teaching multiple classes at multiple institutions trying to make a living while hoping for a TTF position (Yakoboski, 2018). Although these PTF exist, they are not the norm. Data show that PTF are most likely women, over the age of 40, teach one or two classes at one institution, are married or living with a partner, have a Master's degree, and are in a household earning more than $50,000 a year (Yakoboski, 2018). Part-Time Faculty at TCU, according to this survey, have an average age of 46, are female, are not a minority, and have been faculty at TCU for 5.23 years. Figures 4.15, 4.16, 4.17, and 4.18 show the composition of TCU PTF by age, gender, minority status, and years of employment at TCU.

Figure 4.15

Age of Part-Time Faculty

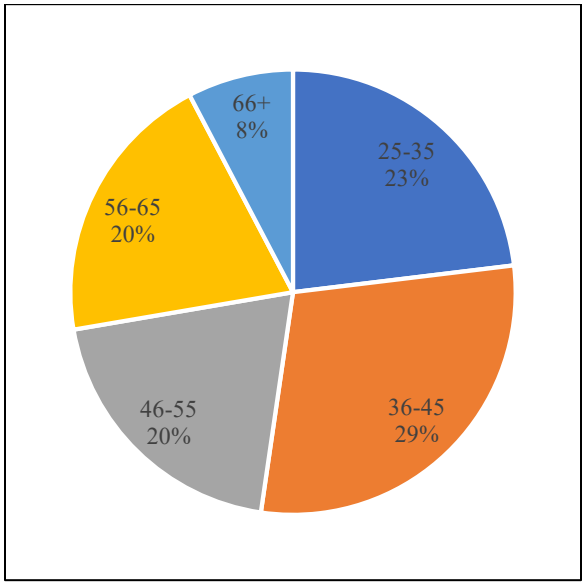


Figure 4.16

Gender of Part-Time Faculty

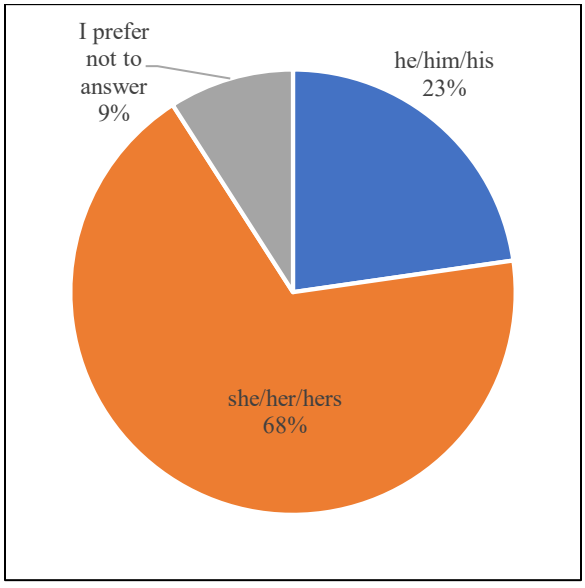


Figure 4.17

Minority Status of Part-Time Faculty

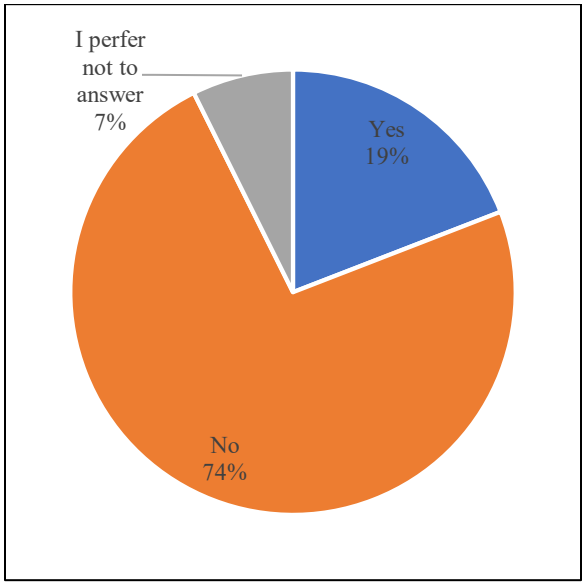
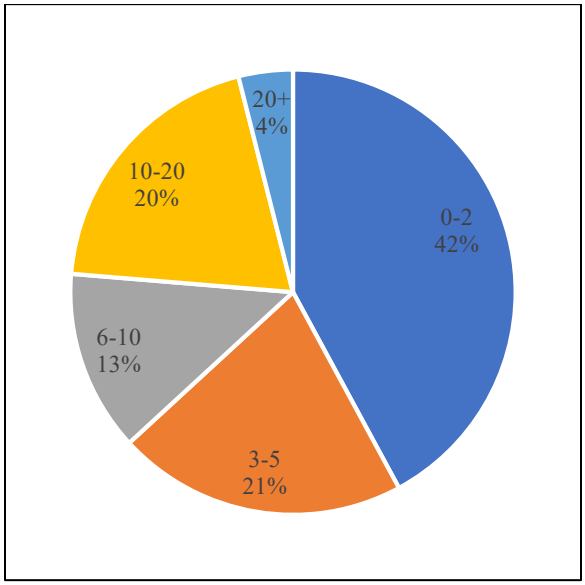


Figure 4.18

Years of Employment at TCU as Part-Time Faculty



Additional Considerations

Measuring job satisfaction during a global pandemic, shortly after changes in campus academic leadership, and while various cuts to the campus expenditures are being mandated

provides a unique opportunity to look at events impacting certain job satisfaction measures. Listed in Table 4.22 are sixteen events experienced by the faculty prior to the survey. Participants were asked to rate the impact of each event on their job satisfaction, ranging from ‘extremely negative’ (1) to ‘extremely positive’ (7), with a neutral response of ‘no impact’ (4). Findings using this data indicated the individual events had variable impact on job satisfaction. However, events resulting from decisions by senior administration had a larger negative impact on job satisfaction than other events. This reflects earlier findings of low satisfaction with ‘effective senior management.’

Table 4.22

Descriptive Statistics for Events

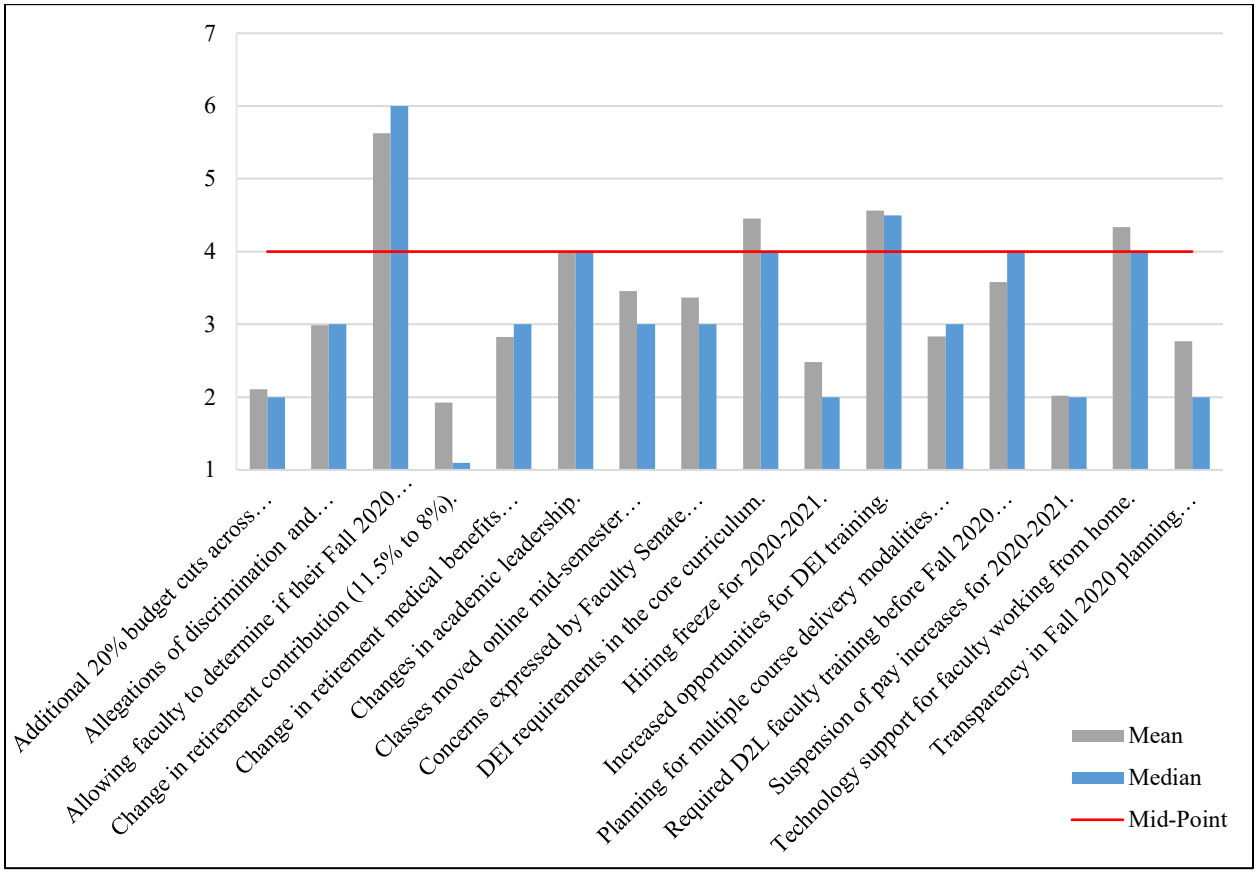
Event	*n*	*M*	*SD*
Additional 20% budget cuts across all units of the university.	345	2.11	1.06
Allegations of discrimination and pending lawsuits.	346	2.99	1.34
Allowing faculty to determine if their Fall 2020 courses were online or in-person.	346	5.63	1.63
Change in retirement contribution (11.5% to 8%).	346	1.93	1.37
Change in retirement medical benefits for those aged 44 and younger.	346	2.83	1.46
Changes in academic leadership (Dept Chair, Dean, and/or Provost).	346	3.99	1.82
Classes moved online mid-semester in Spring 2020 due to COVID-19.	346	3.45	1.62
Concerns expressed by Faculty Senate about shared governance.	345	3.37	1.92
DEI requirements in the core curriculum.	346	4.46	1.50
Hiring freeze for 2020-2021.	346	2.48	1.19
Increased opportunities for faculty and staff DEI training.	346	4.57	1.39
Planning for multiple course delivery modalities for Fall 2020.	345	2.83	1.51
Required D2L faculty training before Fall 2020 course delivery.	346	3.58	1.75
Suspension of pay increases for 2020-2021.	344	2.02	1.09
Technology support for faculty working from home.	346	4.34	1.59
Transparency in Fall 2020 planning in response to COVID-19.	346	2.77	1.68

Note. Events are listed in alphabetical order.

As seen in Figure 4.19, only four events rated a positive impact on job satisfaction (midpoint is 4).

Figure 4.19

Event Impact on Job Satisfaction.



As seen with the research questions presented here, the aggregate can hide details in the data. To consider the impact of these events on faculty, results were analyzed using the categories of faculty status, college, gender, and minority status.

Analyzing the events by faculty status (Appendix D, Table D.5), showed a distinction between the three full-time faculty categories and the part-time faculty. To better understand where differences may be within the faculty, only full-time categories are considered further. A one-way ANOVA was used to determine if there was a statistically significant difference among the full-time faculty within each event. The following events showed a statistically significant difference:

Additional 20% budget cuts, $F(2, 280) = 5.42$, $p = .005$, $\eta^2 = .04$, with a difference between Tenured Faculty ($M = 1.78$, $SD = .91$) and Non-Tenure Track ($M = 2.20$, $SD = 1.06$).

Allowing faculty to determine if Fall classes were online, $F(2, 280) = 3.07$, $p = .048$, $\eta^2 = .02$, with no statistically significant differences reported between any 2 specific faculty categories.

Change in retirement contributions, $F(2, 281) = 11.13$, $p < .001$, $\eta^2 = .07$, with differences occurring with Tenured Faculty ($M = 1.27$, $SD = .61$) and both Tenure Track ($M = 1.75$, $SD = 1.47$) and Non-Tenure Track Faculty ($M = 1.80$, $SD = 1.00$).

Change in retirement medical benefits, $F(2, 281) = 3.97$, $p = .020$, $\eta^2 = .03$, with a statistically significant difference between Tenured Faculty ($M = 2.41$, $SD = 1.35$) and Non-Tenure Track Faculty ($M = 2.93$, $SD = 1.44$).

Changes in academic leadership, $F(2, 281) = 4.63$, $p = .010$, $\eta^2 = .03$, with a statistically significant difference between Tenured Faculty ($M = 3.59$, $SD = 1.90$) and Non-Tenure Track Faculty ($M = 4.32$, $SD = 1.76$).

Hiring freeze, $F(2, 281) = 4.04$, $p = .019$, $\eta^2 = .03$, with no statistically significant differences reported between any 2 specific faculty categories.

Required D2L training, $F(2, 280) = 4.49$, $p = .012$, $\eta^2 = .03$, with a statistically significant difference between Tenured Faculty ($M = 3.23$, $SD = 1.68$) and Non-Tenure Track Faculty ($M = 3.87$, $SD = 1.64$).

Transparency in planning, $F(2, 280) = 4.03$, $p = .019$, $\eta^2 = .03$, with a statistically significant difference between Tenured Faculty ($M = 2.30$, $SD = 1.45$) and Non-Tenure Track Faculty ($M = 2.85$, $SD = 1.63$).

Considering events and college of faculty appointment, ten of the sixteen events showed statistically significant differences among colleges (Appendix D, Table D.6). A few of the most notable include:

Additional 20% budget cuts, $F(6, 329) = 5.57$, $p < .001$, $\eta^2 = .09$, with differences between Business ($M = 2.78$, $SD = 1.01$) and Fine Arts ($M = 1.86$, $SD = 1.02$).

Changes in academic leadership, $F(6, 330) = 4.17$, $p < .001$, $\eta^2 = .07$, with differences between Business ($M = 4.55$, $SD = 1.70$) and both Communication ($M = 3.21$, $SD = 1.56$) and Science/Engineering ($M = 3.34$, $SD = 1.57$). Interestingly, the mean for Education was higher ($M = 4.67$, $SD = 1.50$), but did not show a statistically significant difference with Communication and Science/Engineering.

DEI requirements in the core curriculum, $F(6, 330) = 9.33$, $p < .001$, $\eta^2 = .15$, with a statistically significant difference between Education ($M = 5.06$, $SD = .94$) and Science/Engineering ($M = 3.69$, $SD = 1.54$).

Required D2L faculty training, $F(6, 330) = 2.75$, $p = .013$, $\eta^2 = .05$, with a statistically significant difference between Education ($M = 4.00$, $SD = 1.61$) and Communication ($M = 2.42$, $SD = 1.61$).

Transparency in Fall 2020 planning, $F(6, 330) = 3.86$, $p = .001$, $\eta^2 = .07$, with a statistically significant difference between Education ($M = 4.06$, $SD = 2.10$) and Communication ($M = 2.21$, $SD = 1.41$).

Looking at the events and gender, an independent-sample *t*-test was used to look for statistically significant differences between men and women (Appendix D, Table D.7). This analysis found statistically significant differences in the impact of both retirement events and both events pertaining to DEI. For all four events, women rated these events higher, meaning

they had either less of a negative impact (retirement) or more of a positive impact (DEI) on job satisfaction.

Change in retirement contribution (11.5% to 8%), $t(310) = -.4.24$, $p < .001$, two-tailed.

Change in retirement medical benefits for those aged 44 and younger, $t(315) = -2.19$, $p = .029$, two-tailed.

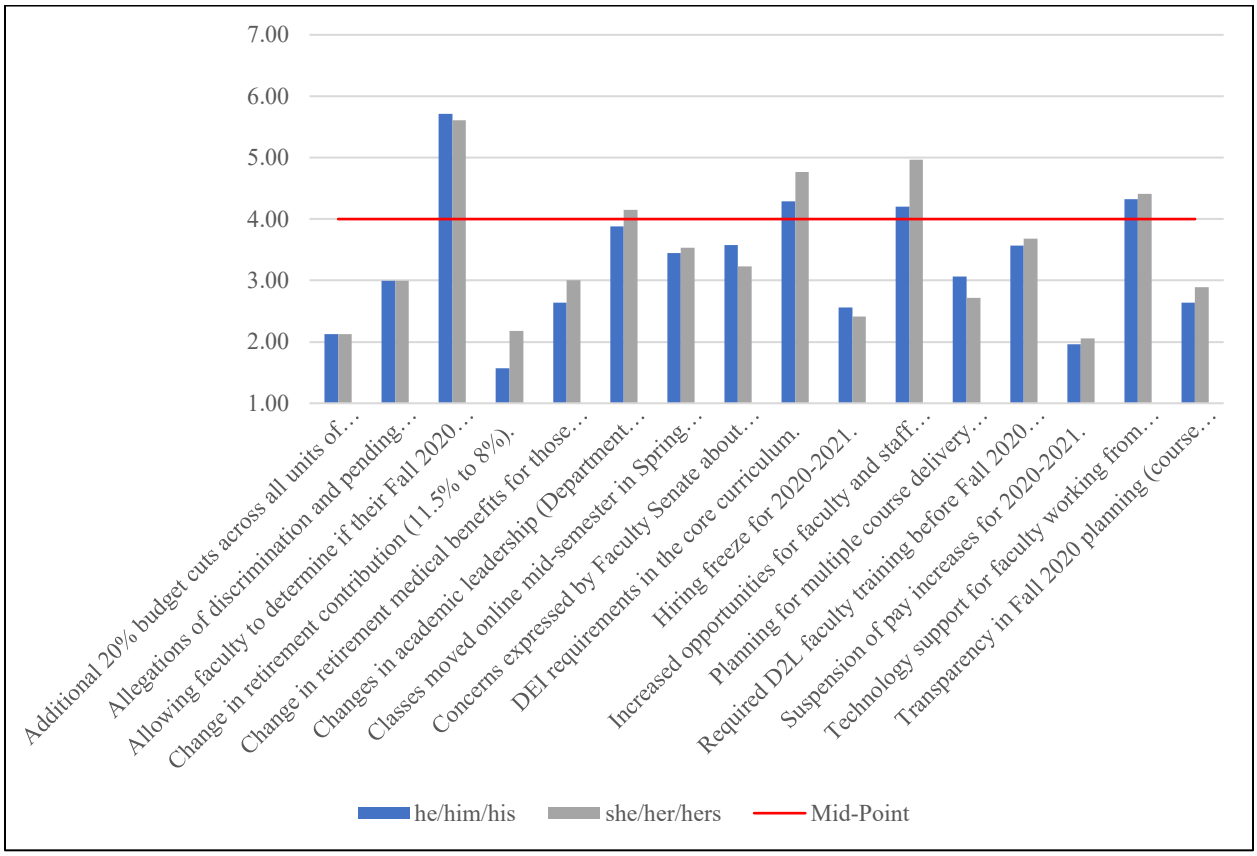
DEI requirements in the core curriculum, $t(315) = -2.90$, $p = .004$, two-tailed.

Increased opportunities for faculty and staff DEI training, $t(315) = -5.05$, $p < .001$, two-tailed.

Figure 4.20 shows these means of both genders in relation to the mid-point of the range.

Figure 4.20

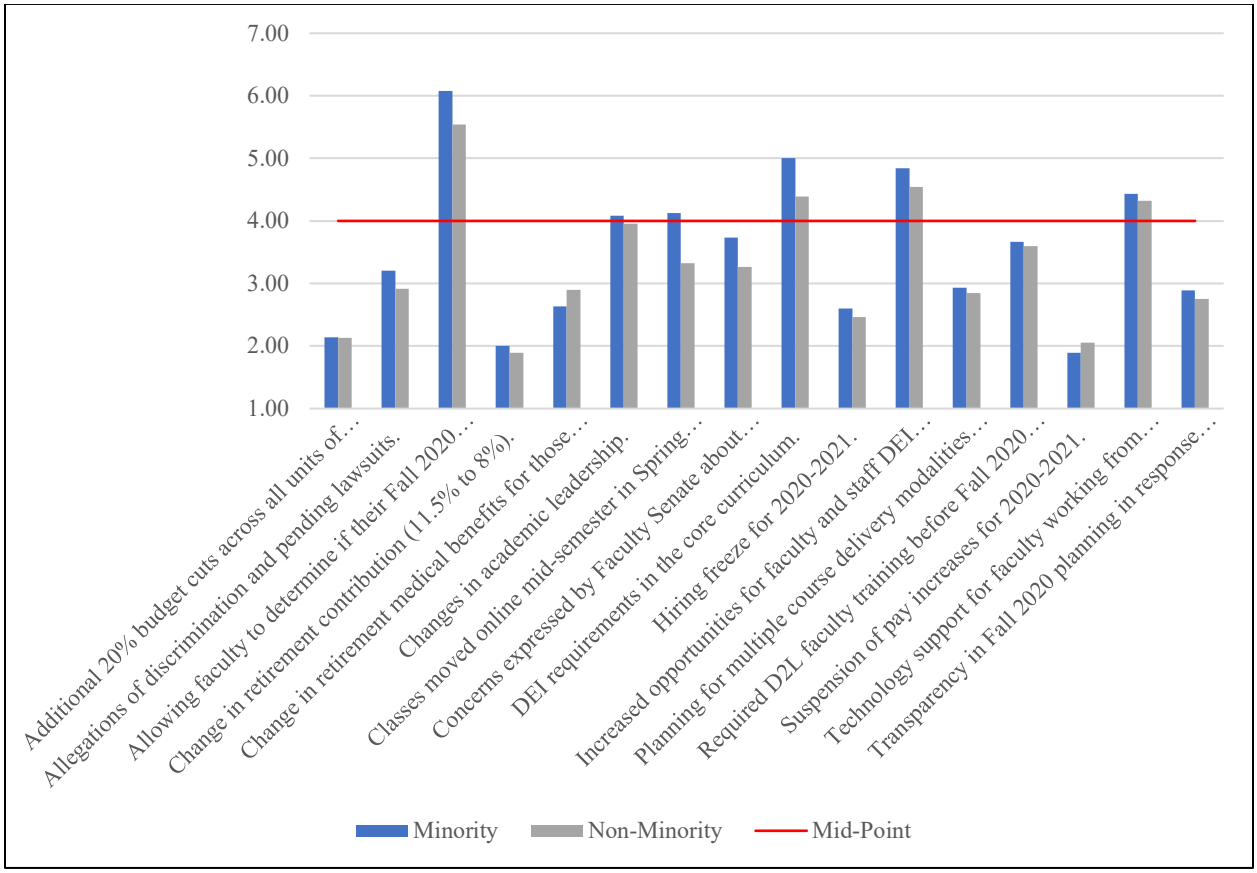
Plot of Event Means by Gender



Finally, an independent-samples *t*-test was utilized to look at the events and minority status (Appendix D, Table D.8). Statistically significant differences were found in the change to online courses during Spring 2020 ($t(82.65) = 3.13$, $p = .0024$, two-tailed), allowing faculty to determine if their courses were online in Fall 2020 ($t(320) = 2.35$, $p = .0196$, two-tailed), and in the addition of DEI core requirements in the curriculum ($t(319) = 2.96$, $p = .0033$, two-tailed). As seen with events and women, where statistically significant differences were present, minorities reported a more positive impact on their job satisfaction for these events. Figure 4.21 shows the results in relation to the mid-point of the range.

Figure 4.21

Plot of Event Means by Minority Status



Taking a look at the other relationships hidden in the aggregate, correlations were run on the events (Table 4.23), events with age and years of employment at TCU (Table 4.24), and events with the Two-Factor Theory categories (Table 4.25).

Table 4.23

Correlation of Events

Events	Additional 20% budget cuts	Allegations of discrimination	Allowing faculty… courses were online	Change in retirmt contribution	Change in retirmt med benefits	Changes in acad leadership	Classes moved online	Concerns expressed by Faculty Senate	DEI requirements	Hiring freeze	Increased DEI training	Planning multiple course modalities	Required D2L faculty training	Suspension of pay increases	Technology support	Transparency in Fall 2020
Additional 20% budget cuts	-															
Allegations of discrim…	.268**	-														
Allowing faculty… online	.085	.159**	-													
Change in retirmt contrib	.407**	.290**	.040	-												
Change in retirmt med benefits	.336**	.222**	.014	.577**	-											
Changes in acad leaders	.227**	.171**	.057	.241**	.177**	-										
Classes moved online	.087	.205**	.253**	.056	-.041	.088	-									
Concerns expressed by Faculty Senate	.096	.196**	.318**	.167**	.083	.107*	.213**	-								
DEI require…	-.004	.006	.144**	.001	-.049	.202**	.310**	.047	-							
Hiring freeze	.521**	.209**	.008	.230**	.201**	.144**	.046	.049	.013	-						
Increased DEI training	.059	.073	.182**	.031	.003	.237**	.205**	.071	.688**	-.004	-					
Planning multiple course modes	.301**	.263**	.148**	.206**	.072	.168**	.336**	.319**	.167**	.202**	.110*	-				
Required D2L faculty training	.304**	.195**	.226**	.190**	.135*	.166**	.187**	.229**	.252**	.191**	.274**	.558**	-			
Suspension of pay increases	.631**	.299**	.070	.510**	.365**	.209**	.098	.132*	-.024	.426**	-.002	.298**	.243**	-		
Technology support	.240**	.234**	.203**	.230**	.115*	.153**	.321**	.101	.138**	.125*	.111*	.333**	.354**	.252**	-	
Transparency in Fall 2020	.521**	.334**	.156**	.374**	.328**	.319**	.136*	.171**	.106*	.327**	.222**	.392**	.439**	.433**	.325**	-

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table 4.24

Correlation of Events with Age and Years of Employment

Event	Age	Years at TCU
Additional 20% budget cuts across all units of the university.	-.018	-.140*
Allegations of discrimination and pending lawsuits.	.007	-.084
Allowing faculty to determine if their Fall 2020 courses were online or in-person.	-.105	-.002
Change in retirement contribution (11.5% to 8%).	-.106	-.325**
Change in retirement medical benefits for those aged 44 and younger.	.089	-.128*
Changes in academic leadership.	.009	-.069
Classes moved online mid-semester in Spring 2020 due to COVID-19.	-.060	-.008
Concerns expressed by Faculty Senate about shared governance.	.004	.044
DEI requirements in the core curriculum.	-.117*	-.075
Hiring freeze for 2020-2021.	.007	-.075
Increased opportunities for faculty and staff DEI training.	-.135*	-.138*
Planning for multiple course delivery modalities for Fall 2020.	-.010	-.094
Required D2L faculty training before Fall 2020 course delivery.	-.055	-.070
Suspension of pay increases for 2020-2021.	.007	-.111*
Technology support for faculty working from home.	.061	-.035
Transparency in Fall 2020 planning in response to COVID-19.	-.013	-.136*

*. Correlation is significant at the 0.05 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed).

Table 4.25

Correlation of Two-Factor Theory Variables and Events

Events	Work Itself (m)	Good rel.. co-workers (h)	Effective Spvsr (h)	Responsi-bility (m)	Good Feel… Org (m)	Prof. Growth Opp…(m)	Recognition (m)	Opp for Advac… (m)	Sat w/ Benefits (h)	Satisfaction w/ Salary (h)	Effective Sr Mgmt (h)	Motivators	Hygiene Factors	Job Sat Measure
Additional 20% budget cuts	.173**	.281**	.268**	.425**	.349**	.309**	.277**	.238**	.321**	.368**	.534**	.375**	.519**	.466**
Allegations of discrim …	.144**	.231**	.127*	.266**	.320**	.182**	.204**	.127*	.158**	.168**	.346**	.263**	.314**	.300**
Allowing faculty	.155**	.213**	.158**	.144**	.084	.168**	.185**	.123*	.096	.146**	.069	.176**	.184**	.183**
Change in retiret cont	.134*	.170**	.149**	.233**	.266**	.164**	.195**	-.024	.081	.069	.503**	.206**	.334**	.274**
Change in retiret med	.108*	.182**	.099	.229**	.240**	.156**	.156**	.044	.188**	.130*	.396**	.197**	.312**	.261**
Changes in academic leaders	.210**	.187**	.318**	.336**	.284**	.213**	.257**	.190**	.177**	.163**	.412**	.312**	.370**	.352**
Classes moved online	.078	-.004	.056	.121*	.045	.160**	.154**	.055	-.034	.122*	.067	.129*	.080	.111*
Concerns by Faculty Senate	.102	.056	.022	.019	.125*	.035	.090	.039	-.068	-.034	.129*	.088	.054	.072
DEI require in curr..	.195**	.053	.108*	.087	.057	.187**	.196**	.059	.057	.100	.019	.158**	.093	.126*
Hiring freeze	.156**	.121*	.120*	.335**	.211**	.207**	.201**	.166**	.180**	.236**	.321**	.268**	.296**	.302**
Increased… DEI training	.295**	.138*	.186**	.149**	.211**	.265**	.260**	.190**	.158**	.163**	0.096	.280**	.198**	.247**
Planning… course delivery	.154**	.147**	.181**	.255**	.266**	.234**	.258**	.211**	.152**	.230**	.306**	.293**	.304**	.309**
Required D2L faculty training	.183**	.125*	.160**	.220**	.226**	.201**	.239**	.097	.215**	.158**	.240**	.243**	.259**	.253**
Suspension of pay increases	.160**	.227**	.232**	.338**	.306**	.243**	.250**	.186**	.219**	.336**	.528**	.313**	.467**	.406**
Tech support	.181**	.196**	.158**	.279**	.298**	.249**	.261**	.241**	.264**	.216**	.271**	.318**	.320**	.333**
Transp…	.300**	.288**	.276**	.382**	.458**	.292**	.314**	.241**	.252**	.257**	.627**	.415**	.514**	.482**

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

Summary

The data collected from this survey were used to analyze the job satisfaction of faculty in several ways. Looking through the lens of job satisfaction by faculty status, by the college of appointment, by gender, and by minority status, one can see the overall job satisfaction measure hides differences and variances within and across these categories.

Initial calculations provided a mean job satisfaction measure for faulty at 4.38 on a 6 scale. However, further analysis showed statistically significant differences among the faculty ranks. Specifically, as the faculty rank increased, the job satisfaction measure decreased.

The differences in college of appointment were statistically significant but failed to produce any single relationship where that difference is evident.

The analysis did not find differences in job satisfaction measure by gender or minority status; however, there was a difference between men and women who identified as minorities.

Upon considering the Two-Factor Theory categories, the analysis found that faculty rated the 'work itself' highest and 'effective senior management' the lowest. 'Effective senior management' was the only factor with a mean below the midpoint. A correlation found a negative relationship between the length of employment at TCU and the score in 'effective senior management.'

Part-Time Faculty results do not fully align with research in this area. Where research shows PTF are unhappy with resources and support, the PTF at TCU did not report the same concerns. Some categories were similar to research, including lower scores in benefits, salary, and opportunity for advancement. All PTF in the role who desire full-time employment reported lower scores in every category compared to those who were in the PTF role voluntarily.

Finally, events in the year prior to the survey were analyzed for differences by faculty status, college, gender, and minority status. Several statistically significant differences were found that mirrored the analysis with the job satisfaction measure.

In the next chapter, these results will be evaluated for contribution to the research knowledge in the field and what they mean for faculty job satisfaction at TCU.

Chapter 5 - Review and Conclusions

Summary of the Study

This study used applied research that measures faculty job satisfaction with an analysis of various demographic categories beyond the aggregate. The data were categorized by job satisfaction components, broken down into motivators and hygiene factors, per the Two-Factor Theory (Herzberg et al., 1959). This detailed information allows for conclusions that confirm overall faculty job satisfaction as suggested by the aggregate measurement and to identify areas where there is room for improvement.

To determine the job satisfaction of faculty the following research questions served as the guide for this study.

1. How does job satisfaction differ by faculty status?
2. How does job satisfaction differ by college?
3. How does job satisfaction differ by gender pronouns?
4. How does job satisfaction differ for ethnic or racial minorities?
5. How does job satisfaction with intrinsic job factors (motivators) differ from satisfaction with extrinsic job factors (hygiene factors)?
6. How does TCU's part-time faculty job satisfaction compare to the results and conclusions found in the literature?

All TCU Faculty at the main campus in Fort Worth, Texas, were invited to participate in this study utilizing a survey created by Smerek and Peterson (2007), modified to fit the population. The survey questions were grouped by job factors identified in the Two-Factor Theory by Herzberg et al. (1959) and included additional questions to assess the impact of recent events on job satisfaction.

Discussion

Overall, TCU faculty have job satisfaction of 4.38 on a 6-point scale. However, hiding in the aggregate job satisfaction measure was a finding that job satisfaction decreases as the faculty rank increases with part-time faculty job satisfaction measuring significantly higher statistically than tenured faculty's job satisfaction. This decrease in satisfaction with increase in rank held true when looking at faculty by college, by gender, and by minority status. The job satisfaction factors in the Two-Factor Theory and the additional survey questions on events that impacted job satisfaction show the same pattern as the overall job satisfaction results in regards to faculty rank. Although job satisfaction results align with Seifert & Umbach's (2008) results of a positive correlation between age and job satisfaction, contrarily, the number of years of employment at TCU has a negative correlation with job satisfaction. Both age and years of employment typically increase with faculty rank, so these results are somewhat contrary. These findings are substantial as they indicate there are additional factors at play in this population as faculty who have been with the university longer have less satisfaction but have stayed with the university. The results and personal conversations with long-term faculty point to faculty working conditions being seen as better in years prior to this study. Faculty members who have been employed at the university for more than a decade compare working conditions today with those they remember ten years ago. A statement often repeated by long-term faculty is, "the university has changed." They cite changes in the way senior administration interacts with faculty including campus decision making and a slow erosion of the "community feel" on campus. These factors influencing the negative correlation between job satisfaction and years of employment were likely not present in the positive correlations presented by Seifert & Umbach (2008). The positive correlation with age and the negative, but not significant, correlation with length of

service appear contrary if considering age and length of service increase at the same rate. In this study, it is the older part-time faculty employed for a shorter time that gives the seemingly contrary results.

Overall, men had higher job satisfaction than women, but results were not significant. In alignment with research reported by Hagedorn (2000), this study found men were more satisfied with the hygiene factors (extrinsic) than women, with one exception. Males have lower satisfaction than women with 'effective senior management.' Tenured male faculty (TF) outnumbered tenured female faculty 252:174 in Fall of 2019 (TCU Institutional Research, 2019). However, in non-tenured ranks, women outnumber men in every category. This finding, along with decreasing satisfaction with increase in faculty rank, may explain why faculty at TCU who are outspoken about issues with senior administration are often tenured men. However, there is no evidence to support that the two genders have significantly different measurements of job satisfaction. This aligns with Lee et al.'s (2020) observation that when it comes to determining job satisfaction, what people share in common is more important than any differences in their demographics.

Webber & Rogers (2018) reported women will accept lower-paying and non-tenure track positions more often than men. This study shows non-tenured positions had more women than men in all three categories (TTF, NTTF, and PTF). While one may believe the results confirm Webber & Rogers' finding, there is a belief that more women in lower-ranking positions is indicative of historic discrimination against women in academe, specifically at TCU. Further research would be needed to determine if it is true that the cause of this gender inequity by rank at this university is due to female tendencies, as indicated by Webber & Rogers, or a result of prior discrimination by the institution.

Webber & Rogers (2018) also indicate that female faculty tend to choose work environments that are more collegial and offer positive social interaction. This study showed a lower score for women in the Two-Factor Theory category of 'good relationships with co-workers' and lower overall job satisfaction for women, although not significant. Given that, because of the COVID-19 outbreak, the campus had been closed for six months at the time of data collection, this result may be lower due to a lack of interaction with colleagues. A cause/effect relationship was not established in this study but could be the subject of future research.

Although the literature reviewed describes faculty of color as having lower overall job satisfaction (Hagedorn, 2000; Seifert & Umbach, 2008), this study found no statistically significant difference between minorities and non-minorities. This was true across faculty rank, by the college of appointment, and by gender when compared to non-minorities. The job satisfaction measure for minorities was not significantly lower than non-minorities and failed to align with reported findings of statistical differences in other studies. The one significant statistical difference found in this study exists between men and women within the minority identity with minority women's job satisfaction significantly lower than minority men's job satisfaction. Seifert & Umbach (2018) report that any deviation from the prior faculty norm (white men without a disability from a higher socio-economic class) may negatively influence job satisfaction. However, this study found no significant difference between the non-minority men and both minority men and non-minority women. During the current global pandemic, minorities have reported experiencing a larger negative impact on their personal and work lives than non-minorities report. Research indicates that minorities cite poor workplace social interactions as a reason for voluntary turnover (Hofhuis et al., 2014). With limited on-campus

activity in the six months prior to the survey and increased stress resulting from the pandemic, these contextual limitations may be the reason for the lower score for minority women. However, these results could be a result of the context or the intersectionality of being a minority and female as reported by Lee et al. (2020). Likewise, the results could be due to diversity, equity, and inclusion (DEI) issues on campus, as indicated in the news (Johnson, E., 2020) The result in this study could be due to the pandemic or a darker issue on the campus. Regardless, the results do not indicate a significant difference in job satisfaction for minorities as predicted in the literature. As no causal relationship has been established with pandemic restrictions, leadership, or job duties, this is an area for further research.

Using the Two-Factor Theory as a guide for analyzing different components (factors) of job satisfaction produced few insights into the theory and its validity. As each factor had a statistically significant positive correlation with all other factors, no evidence suggests that dissatisfaction and satisfaction are on different scales, whether motivators contribute to dissatisfaction, or if hygiene factors are present for satisfaction (Halpern, 1966; Lindsay et al., 1967; Maidani, 1991). There is no formula to combine factor results to produce an overall satisfaction rating; therefore, liberty was taken in assuming all factors have equal weight for the overall job satisfaction measure.

The results of job satisfaction by factor show that the 'Work Itself' is the highest-rated factor when viewed by faculty rank, by college, by gender, and by minority status. These results support Yousaf's (2020) conclusion that the work itself is the utmost important factor in determining job satisfaction. Ranked next were the factors of 'Good relationship with Co-workers' and 'Effective Supervisor.' Jungert et al. (2018) found that co-workers had a positive impact on employee motivation by providing support to one another. This manifested in

improved organizational performance. Wieseke et al. (2011) established a strong link between supervisors' motivation and employee motivation. The Society for Human Resource Management (2015) concluded that culture and relationships are the largest components of job satisfaction and engagement. These studies all speak to the job satisfaction created in good working relationships among employees, coworkers, and their immediate supervisors. As department chairs and deans are usually faculty who accept an administrative role, even direct supervisors may be considered colleagues in higher education. These positive relationships and job satisfaction result in job motivation and institutional productivity. Even in difficult times, faculty stay on the job and produce because they love the work and whom they work with. Results here align directly with this research. While these two factors are both hygiene factors, together they represent a sense of community. A sense of belonging or a feeling of community can be considered a motivator. The Two-Factor Theory states that motivators alone give rise to job satisfaction. Therefore, if these two factors together act as a motivator, the resulting high aggregate value for job satisfaction would be expected. The satisfaction with these two categories survived over six months of pandemic quarantines, online classes, and a closed campus before the data was collected. Although one would expect these Two-Factor Theory categories would be lower with the pandemic and quarantine mandates, the higher ratings indicate these feelings are long-term rather than short-term. Additionally, the sense of community transcends a single department or college as the ratings are high across all categories under study: faculty rank, college, gender, and minority status.

On the low end of the ranked factors resides 'satisfaction with benefits' and 'satisfaction with salary.' Both of these were expected to be at the lower end of the rankings as hygiene factors and because of the university's decisions to decrease retirement contributions, further

reductions in retiree benefits, and a suspension of annual pay raises (McDonald, B., 2020). Pay is often a point of contention on campus as the TCU Chancellor is the 6th highest-paid college president in the United States, according to The Chronicle of Higher Education and the rankings of 2019 salaries (Bauman et al., 2020). However, 'effective senior management' was the lowest-rated factor, falling below the mid-point of the scale. This low score, punctuated by events describing senior administration's actions and decisions, resulted in a negative impact on job satisfaction. These actions and decisions were challenged as contrary to the shared governance model (McDonald, 2020). As outlined in Pierce's explanation of shared governance,

> Although campuses often experience conflicts over governance, the major points of contention more often than not occur when a substantial portion of the faculty believes that the institution's president has made decisions about what those faculty members believe to be academic matters without involving them adequately in the decision-making process. (Pierce, 2014, p. 89).

A low score in 'effective senior management' tells a story of its own. TCU Faculty are unhappy with senior administration and expressed it in multiple responses within the survey. This suggests faculty have more than one issue with senior administration, rather than displeasure with a single event or decision. Combined with high ratings in the work itself and a sense of community, faculty will continue to experience motivation to do the work and produce for the university despite restrictions and changes due to the pandemic and their dissatisfaction with senior administration.

The most surprising results were for part-time faculty. This group is often hired for a single class or semester at a time, but those who desire this type of arrangement are significantly more satisfied than those who desire full-time employment, the underemployed. Although some

results within the data show similar job satisfaction to that found in the literature, some results were contrary. In the areas of co-worker relationships, course control, and resources, TCU Part-Time Faculty survey responses indicate these are not problem areas as indicated in the literature. In fact, the part-time faculty scored these areas with a higher satisfaction rating than full-time faculty. Granted, most part-time faculty have issues with low pay, no benefits, and a lack of advancement, the data show the part-time faculty at TCU have a better working environment than those referenced in the literature. TCU may already have the reputation of being a preferred employer, but the data indicate part-time faculty enjoy the job and environment enough to make a long-term commitment to the university as noted by the length of employment, even when the university only commits to them for a semester at a time. This finding is noteworthy given the short-term nature of the part-time faculty job. An analysis of the part-time faculty demographics shows that older part-time faculty have higher job satisfaction, corresponding with working professionals seeking a part-time role in addition to their full-time job elsewhere and retired academics/professionals seeking part-time employment. The older demographic in the part-time faculty gives reason for the contrary results mentioned earlier with a positive correlation between age and job satisfaction while the length of employment had a negative correlation with job satisfaction. The key finding for this research question is that to maximize part-time faculty job satisfaction and reduce turnover, universities should hire part-time faculty who desire only part-time work and make resources and support available to them.

Outside of the six stated research questions, the responses to questions on events may give insight on recent changes in job satisfaction, given that a benchmark comparison is not possible. The number of events with a negative impact on satisfaction outnumbers the positive events 11 to 4, with 1 neutral event. The results do not give information on the actual impact,

only perceived impact to job satisfaction by the participant, similar to the design utilized by Herberg and team in the formation of the Two-Factor Theory (Herzberg et al., 1959). Most of the events have statistically significant correlations with other events and have similar initiating events, such as decisions by senior administration. Yet, the data cannot confirm if there is a causal relationship or simply a similarity in the impact on job satisfaction.

Implications for Practice

Job satisfaction surveys are common in the workplace. However, as seen in this study, it is imperative to look beyond the aggregate to verify if the overall job satisfaction rating is reflective of job satisfaction components or if it is an average of divergent factors. Perhaps the most impressive results of this study are the clear issues presented in the analysis by the Two-Factor Theory categories. The results show that the perception of senior administration is an immense weakness in the faculty experience at TCU.

The most pressing matter for this population and administration is addressing the low score for 'effective senior management.' This is a complicated issue without a simple solution. The concerns expressed by faculty are numerous but can best be summarized as a lack of shared governance, a lack of transparency, and a lack of communication. Several events have enraged the faculty over the last couple of years which prompted a motion in the Faculty Senate for a vote of no confidence in the Chancellor and several members of his cabinet (McDonald, 2020; TCU Faculty Senate, n.d.). Additionally, a new chapter of the American Association of University Professors (AAUP) was formed in response to actions taken by the senior administration (D. Stewart, personal communication, August 20, 2020). Interestingly, the Chancellor has been in office since 2003, but these concerns with him and his administration were only expressed in the last couple of years. As long-term faculty have expressed, they

believe the university has changed over the last decade. This aligns with the results of a negative correlation between length of employment and satisfaction with 'effective senior management' as longer-term employees compare current conditions with conditions experienced earlier in their employment. The events playing out on campus between the Chancellor and faculty mirror the example given by Bolman and Gallos (2011) in their book on academic leadership. In their example, a new campus president seeks to make the fictional university a national star but fails to get the faculty on board with his mission. For a few years, the president believes he is making progress towards this goal while faculty talk amongst themselves about the initiative and the flaws in the plan. Seemingly out of the blue, faculty vote "no confidence" in the President, and he is forced to resign. The media coverage paint the faculty as the bad guy and treat their plea for shared governance as an outrageous demand. However, the president knew he didn't have faculty support from the beginning and pressed forward anyway, ultimately failing because of his "inability to master the political complexities of academic leadership" (Bolman & Gallos, 2011, p. 71). While TCU called for a vote of no confidence, no vote was taken. Otherwise, this fictional situation mirrored TCU's situation with a lack of shared governance, lack of transparency, and a more corporate approach to decision making.

Actions by TCU senior administration have resulted in lower job satisfaction for faculty, and it will likely continue if senior administration takes no corrective action. The concerns expressed by faculty are well documented, and senior administration has been made aware of these concerns. Should senior administration not address the negative perception faculty have of 'effective senior management,' it is likely faculty will continue to express their unhappiness. The typical reasons for voluntary terminations are the job duties and the immediate supervisor. Both of those factors were highly rated by faculty in this study. Therefore, faculty will most likely

express their displeasure with the working environment rather than exit the institution as seen in this quote from a textbook on higher education shared governance:

> In response, those faculty members who believe that they no longer have a say in academic matters, matters of institution significance, or both are apt publicly to protest presidential and even board decisions. In what appear to be increasing numbers, members of the faculty are going so far as to vote that they have no confidence in their president. (Pierce, 2014, p. 2).

Public displays of discontent have already occurred. They include a 1,900-word open letter by the Chair of the Faculty Senate published in the local paper and circulated on social media (Johnson, K., 2020). Another open letter to the Chancellor and Board of Trustees was distributed by email and social media with over 350 signatures of current faculty members (Ledbetter, 2020). TCU faculty were quoted in an Inside Higher Ed article on benefit cuts (Flaherty, 2020). Perhaps the most visual example was an interview with a faculty member fighting to teach online instead of in-person in order to protect his child who is in a high-risk category. This interview ran in multiple newspapers and on multiple television news programs (Douglas-Gabriel, 2020; Engel, 2020; New, 2020; Zoga, 2020). There are many more displays of current faculty discontent on social media that are available to the general public.

With tenured faculty being exempt from at-will-employment, they may feel greater freedom in their criticism of senior administration. Should the tenured faculty become a united vocal critic of senior administration, it would likely have negative long-term effects on the perception of the university. This perception would likely impact student applications, job applicants, and university rankings (Pierce, 2014, p. 3). This single component of job satisfaction is not one senior administration should ignore or continue to hide in the aggregate measurement

of job satisfaction. Instead, senior administration should "understand and leverage the political realities that are present" by embracing the shared governance model and practicing shared decision-making (Bolman & Gallos, 2011, p. 72). Pierce provides a list of ten recommendations for college presidents, including the need to listen to faculty. Other recommendations include encouraging dissent, being transparent, articulating who has responsibilities for decisions, and "develop[ing] reputations for being truth-tellers rather than people who cater to their audience" (Pierce, 2014, p. 121). Faculty often give these recommendations as examples of where senior administration could improve, specifically around responsibility for decision making and shared governance (Johnson, K., 2020). Should senior administration embrace and practice these recommendations by Pierce, it is likely the low score seen in 'effective senior administration' will rise and the public displays of discontent will diminish. This may be the only option to ensure this issue with faculty does not derail the long-term success of the university.

A common theme present in conversations with long-term faculty is the sense of community at the institution. This is confirmed with the high scores in 'good relationships with co-workers' and 'effective supervisor.' This sense of community is essential to the working environment to balance the negative response to the senior administration. As the world passes a full year under pandemic restrictions, media outlets have been covering stories and reports of mental health issues arising from prolonged isolation and physical distancing. This has especially been true on college campuses. Therefore, the sense of community should be cultivated and celebrated to foster support and inclusion for all demographics of faculty, especially when they are required to be physically apart. A recent interview with faculty in the business college revealed their desire for hallway conversations – the ones they had with colleagues they happen to run into in the hall. Since faculty have been working remotely, they miss these hallway

conversations. Yet, there has been no replacement for the impromptu social gatherings. As the precautions continue and physical distancing is still in effect, the social aspect of the community needs to be cultivated to ensure it does not falter during this time. Otherwise, one should expect the ratings reflective of the community will lower over time.

The lower ratings by minority women are concerning and should be promptly addressed by administration at all levels. While the institution is launching diversity, equity, and inclusion (DEI) initiatives, this is one area that may need special attention. As discussed in a personal interview with a minority staff member, minority employees are often tapped for committees and task force participation focused on DEI initiatives. Therefore, they may have a greater burden for university service and to act as representatives for their demographic. This burden, real or imagined, could give rise to negative feelings for the working environment and the work itself, resulting in a lower aggregate score for this segment of the population. Minority women should be engaged to create concrete actions to increase all component ratings for this demographic as it is unlikely that solutions can be found without their specific input. Therefore, while the additional burden may continue, the administration should recognize and vocalize it as an issue. Some of the lower ratings may include contextual-based results outside of the control of the university due to the pandemic, making this group of minority women especially vulnerable to lower motivation, lower productivity, and increased turnover due to lower job satisfaction. As this is counter to the initiative for a more diverse faculty, raising minority women's job satisfaction will be key to ensuring the success of the university's DEI initiatives.

The high ratings in job satisfaction by part-time faculty is an area that the university should capitalize on. A key factor in this outcome is that part-time faculty who desire only part-time employment are much more satisfied in their job than those who desire full-time

employment. This should serve as a primary question in the hiring process as those who desire full-time employment will not be satisfied with the compensation, benefits, lack of advancement, or lack of inclusion with full-time faculty. The university can use this data to target part-time faculty candidates who have a better chance of being successful in their work and at experiencing higher job satisfaction. Hiring part-time faculty who desire full-time employment may result in lower job satisfaction and lead to their declining motivation thus affecting the student (customer) experience.

Regardless of how the institution uses this information, it needs to act on the results of any job satisfaction survey since any "…survey implies a promise that you're going to take action on whatever suggestions emerge. And because most [universities] don't do that, if your [universities] does, not only will you have more engaged people, but you will be a significantly more attractive place to work when it comes to recruiting" (Murphy, 2018).

Limitations

This study of a private, mid-size, research institution may not reflect the same results as an institution of similar circumstances. Additionally, job satisfaction scores will most likely change as time progresses due to the current global pandemic, senior administration decisions, and normal change in the workplace. While the results may not apply to other institutions, they do give insight to areas that need further investigation and possible remedy to ensure the institution continues to make the listing for Best College to Work For.

The unique characteristics of shared governance and employees rotating supervisory roles of their colleagues are unique to higher education. Therefore, the results and implications for practice do not apply to industry and CEO model leadership structures.

Future Research

There are numerous topics for further research that emerge from the results of this study. First, it would be beneficial to investigate if college-level interactions and events have a greater impact on job satisfaction than university-level interactions and events. While an assumption is made they both impact job satisfaction at both the college and university levels, looking further at the interaction and impact each one has on faculty job satisfaction is needed to understand how to best improve job satisfaction going forward.

The global pandemic has multiple possible research inquiries for this population. It is assumed the pandemic has changed the way faculty do their jobs, yet there is only anecdotal information on how the pandemic restrictions and requirements have impacted job satisfaction and the components outlined in the Two-Factor Theory. Course delivery, research requirements, decision-making, and service requirements are all factors of the job that hold research potential in the context of the pandemic.

With the institution's DEI initiative comes a call for more women and minority faculty. Further research is needed in understanding the cause of the lower score in 'good relationships with co-workers' for women in faculty and the lower job satisfaction for minority women. Without this understanding, DEI initiatives to hire and retain qualified women and minorities could see long-term failure if issues impacting these scores exist and are not addressed within the institution.

Additional research could include an investigation into the components of job satisfaction and their impact on the overall score. For instance, with 'effective senior management' rated the lowest, to what extent does this impact the overall job satisfaction? Are there components that are more influential and can significantly change the overall job satisfaction score? With all three

factors at the bottom of the ranking being hygiene factors, would a motivator at the bottom of the ranking have a significant impact on the overall job satisfaction score?

Finally, additional job satisfaction research is needed on this institution as an ongoing project. Meaningful results would need trends to compare with current measures broken out by components rather than the masking aggregate. One cannot truly understand job satisfaction without data showing how single measurement points change over time in relation to changes in context, policies, practices, and campus initiatives.

Concluding Remarks

This study is the first step in understanding faculty job satisfaction at TCU. Although senior administration may continue to pursue a listing in Great Colleges to Work For, they need to consider the reality that it does not reflect the true job satisfaction of this large workforce. In fact, relying on an aggregate measure hides specific issues and does not accurately reflect the feelings of the faculty. Although not irrefutable, the data show that despite negative perceptions of total compensation and senior administration, faculty have job satisfaction driven by satisfaction with the work itself and good relationships with co-workers and direct supervisors. In other words, faculty find satisfaction in the work and the sense of community, but not the work environment. Continued assessment and attention to job satisfaction, motivation, and resulting productivity are key to institutional success. After all, faculty working conditions are student learning conditions (Ott & Cisneros, 2015).

Appendix A

Smerek & Peterson's (2006) Questionnaire with Modifications

Job Satisfaction (α = .874)	**Loading**
Imagine your ideal job. How well does your current position compare to that ideal job?	0.690
**My current position is my ideal job*	
Overall, how satisfied are you with your job?	0.670
** I am satisfied with my current job*	
Consider all the expectations you had when you started your current job. To what extent does your current job fall short or exceed those expectations?	0.662
**My job matches my expectations when I accepted the position*	

Motivators (under Two-Factor Theory)

Recognition (α = .823)	
My customers recognize my good work	0.715
** My students recognize my good work*	
My contributions are valued by members of the Univ. community outside of business & operations	0.635
** My contributions are valued by members of the university community outside of my college*	
In the last 7 days I have received recognition or praise for doing good work	0.528
I get appropriate recognition when I have done something extraordinary	0.446
Expressions of thanks and appreciation are common in my unit/department	0.405
** Expressions of thanks and appreciation are common in my department/college*	

Work Itself (a = .920)	
I enjoy the type of work I do	0.758
My job is interesting	0.731
My job gives me a sense of accomplishment	0.633
I make a difference in my unit/department	0.507
** I make a difference in my department/college*	

Opportunities for Advancement (a = .920)	
Opportunities for advancement or promotion exist within the University	0.798
I know what is required of me to advance within the University	0.797
Internal candidates receive fair consideration for open positions	0.650
** All employees receive fair consideration for open positions*	
Information about job vacancies within the University is readily available	0.528

Professional Growth Opportunities (a = .893)	
My unit/department offers the training or education that I need to grow in my job	0.823
** I am offered the professional development support that I need to grow in my job*	
I have received the necessary training to do my job well	0.768
I have had opportunities at work to learn and grow in the past year	0.748

There is someone at work who encourages my development 0.702
Someone has talked to me about my progress in the past year 0.666

Responsibility (a = .870)
I have control over how I do my work 0.699
My opinion counts at work 0.590
I have a say in decisions that affect my work 0.640
The physical environment allows me to do my job 0.624
I have the necessary resources, tools or equipment to do my job 0.613

Good Feelings about Organization (a = .946)
I feel a strong sense of belonging to the University 0.817
I enjoy discussing the University with people who do not work here 0.810
I have a strong commitment to the University 0.776
I am proud to work for the University 0.751
I care about the future of the University 0.730

Clarity of Mission (a = .913)
I understand how my work supports the mission of business operations 0.754
* *Question removed*
I understand how my work supports the University's mission of research, teaching and service 0.745
* *Question removed*
I understand how my work supports the mission of my unit/department 0.701
* *Question removed*
I know what is expected of me at work 0.535
* *Question removed*
Work is organized so that each person can see the rel. between his/her job and the goals of the org. 0.519
* *Question removed*
The goals of my unit/department are clear to me 0.435
* *Question removed*

Hygiene Factors (under Two-Factor Theory)

Effective Senior Management (a = .955)
Senior management keeps employees informed 0.764
* *University senior administration keeps faculty informed*
Senior management effectively communicates the goals and strategies of our unit/department 0.722
* *University senior administration effectively communicates our goals and strategies*
Senior management demonstrates leadership practices that are consistent with the stated values of our unit/department 0.689
* *University senior administration demonstrates leadership practices that are consistent with the stated values of our university*

Effective Supervisor (a = .970)	
My supervisor communicates well	0.891
**My administrator communicates well*	
My supervisor manages people effectively	0.878
**My administrator manages people effectively*	
My supervisor is an effective decision-maker	0.858
**My administrator is an effective decision-maker*	
Overall, how would you rate your supervisor?	0.851
**Question removed*	
My supervisor creates an environment that fosters trust	0.836
**My administrator creates an environment that fosters trust*	
My supervisor is approachable and easy to talk with	0.819
**My administrator is approachable and easy to talk with*	
My supervisor cares about me as a person	0.766
**My administrator cares about me as a person*	
My supervisor is ethical in day-to-day practices	0.764
**My administrator is ethical in day-to-day practices*	
My supervisor gives me constructive feedback on my performance	0.749
**My administrator gives me constructive feedback on my performance*	
My supervisor deals effectively with poor performance	0.748
**My administrator deals effectively with poor performance*	
My supervisor treats me with respect	0.743
**My administrator treats me with respect*	
My supervisor recognizes me for doing good work	0.697
**My administrator recognizes me for doing good work*	
My supervisor considers my ideas	0.682
**My administrator considers my ideas*	
My supervisor trusts me	0.649
**My administrator trusts me*	
My supervisor has a clear view of where our department is going and how to get there	0.567
* *Question removed*	
Good Relationships with Co-workers (a = .933)	
I trust my co-workers	0.904
I am consistently treated with respect by my co-workers	0.888
I can count on my co-workers to help out when needed	0.882
My co-workers and I work as part of a team	0.849
People care about each other in my unit/department	0.787
* *People care about each other in my department/college*	
Someone in my unit/department cares about me as a person	0.586
* *Someone in my department/college cares about me as a person*	
When I joined my unit/department, I was made to feel welcome	0.566
* *When I joined my department/college, I was made to feel welcome*	
My workgroup collaborates effectively with other workgroups or departments	0.525
* *My department collaborates effectively with other departments within the college*	

Satisfaction with Salary (a = .833)	
My salary/pay rate is competitive when compared to similar jobs at other organizations	0.860
* *My salary/pay rate is competitive when compared to similar jobs at other universities*	
I am fairly paid for the work I do	0.846
Salary/pay increases are appropriate	0.795
I understand how my base salary is determined	0.636
* *I understand how my salary increases are determined*	
My salary/pay rate is a significant factor in my decision to stay at the University	0.617
Satisfaction with Benefits (a = .840)	
The University's benefits package meets my needs	0.855
My costs associated with the benefits plan (co-pays, deductibles, premiums) are reasonable	0.796
The benefits package is a significant factor in my decision to stay at the University	0.761
The University's benefits package has been adequately explained to me	0.636
Presence of Core Values (a = .756)	
Ignoring business & operations core values at work will get you in trouble	0.826
* *Question removed*	
There is a clear and consistent set of values that governs the way we do business.	0.648
* *Question removed*	
All units/departments of business & operations share common values	0.514
* *Question removed*	

Appendix B

The Survey with Consent Form

Screen 1:

You are invited to participate in a research study titled, A Comparative Study of Faculty Job Satisfaction. To participate, you must be a current faculty member of any rank at TCU's main campus. Taking part in this research project is voluntary.

The purpose of the research is to identify and quantify components of faculty job satisfaction or dissatisfaction. If you agree to be in the study, we will ask you to fill out the following questionnaire related to your job satisfaction. We expect your participation to take about 15 minutes.

Your responses will be anonymous and we will not collect identifying information such as your name, email address or IP address with your survey responses. We do not believe there are any risks from participating in this research that are different from risks in your current job.

Although you may not directly benefit from being in this study, others might benefit if factors impacting job dissatisfaction are identified and steps are taken to rectify these concerns.

Participants will be eligible for a drawing for one of two $50 Amazon gift cards. At the end of the survey, participants will receive access to a different link to enter their name and email address for entry in the drawing. All identifying information is gathered and kept separate from the survey responses.

We will do our best to keep your individual responses confidential. All data is stored in a password protected electronic format. To help protect your confidentiality, the surveys will not contain information that will personally identify you. The results of this study will be used for scholarly purposes only and may be shared in aggregate form.

It is totally up to you to decide to participate in this research study. Participating in this study is voluntary. Even if you decide to be part of the study now, you may change your mind and stop at any time. You do not have to answer any questions you do not want to answer. If you decide to withdraw before this survey is completed, simply close out your Internet browser. Any answers already collected may be used. If you would like your answers deleted, please email the researcher listed below.

You may contact Danyelle Williams Ackall at d.ackall@tcu.edu and 817.257.6919 or Don Mills at d.mills@tcu.edu and 817.257.6938 with any questions that you have about the study. This research has been reviewed according to TCU IRB procedures for research involving human subjects.

For inquires about rights as study participants, please contact: Dr. Dru Riddle, Chair, TCU Institutional Review Board, (817) 257-6811, d.riddle@tcu.edu or Dr. Floyd Wormley, Associate Provost of Research, research.tcu.edu.

ELECTRONIC CONSENT: Please select your choice below.

Clicking on the "agree" button below indicates that:
- you have read the above information
- you voluntarily agree to participate
- you are at least 18 years of age

If you do not wish to participate in the research study, please decline participation by clicking on the "disagree" button.

[AGREE] [DISAGREE]

Screen 2:

Demographic Data: To complete the analysis we desire, it is important to gather a few demographic points of data.

In which college do you work? *Check all that apply.*

AddRan College of Liberal Arts
Bob Schieffer College of Communication
Brite Seminary School
College of Education
College of Fine Arts
College of Science & Engineering
Harris College of Nursing & Health Sciences
John V. Roach Honors College
Neeley School of Business
School of Interdisciplinary Studies
TCU and UNT School of Medicine
University Programs

Which description best describes your faculty status?

Tenured Faculty (TF)
Tenure Track Faculty (TTF)
Non-Tenure Track Faculty (NTTF)
Part-Time Faculty (PTF), this includes instructional staff and any instructor of record, if not full-time faculty)

(Only if answering PTF above) When accepting the part-time faculty appointment, did you want full-time faculty employment?

Yes

No

What is your age? *(Please answer in a whole number)*

How many years have you completed as a faculty member at TCU? *(Please answer in a whole number)*

What gender pronouns do you identify with?
he/him/his
she/her/hers
they/them/their
I prefer not to answer

Do you consider yourself an ethnic or racial minority?
Yes
No
I prefer not to answer

Screen 3:

For the statements below, please answer according to your role as a faculty member. The term 'administrator' may be your Department Chair, Assistant/Associate Dean, or Dean, depending on your faculty role. Please reference the administrator with whom you interact the most when answering.

1. My current position is my ideal job.
2. My job matches my expectations when I accepted the position.
3. I am satisfied with my current job.
4. I trust my co-workers.
5. I am consistently treated with respect by my co-workers.
6. My administrator manages people effectively.
7. The university's benefits package meets my needs.
8. I am fairly paid for the work I do.

Screen 4:

For the statements below, please answer according to your role as a faculty member. The term 'administrator' may be your Department Chair, Assistant/Associate Dean, or Dean, depending on your faculty role. Please reference the administrator with whom you interact the most when answering.

1. My administrator creates an environment that fosters trust.
2. I feel a strong sense of belonging to the University.
3. My administrator is an effective decision-maker.
4. I have received the necessary training to do my job well.
5. I enjoy the type of work I do.

6. My job is interesting.
7. I have control over how I do my work.
8. My opinion counts at work.

Screen 5:

For the statements below, please answer according to your role as a faculty member. The term 'administrator' may be your Department Chair, Assistant/Associate Dean, or Dean, depending on your faculty role. Please reference the administrator with whom you interact the most when answering.

1. University senior administration keeps faculty informed.
2. My administrator is approachable and easy to talk with.
3. University senior administration effectively communicates the goals and strategies.
4. Opportunities for advancement or promotion exist within the University.
5. My administrator communicates well.
6. My students recognize my good work.
7. My salary/pay rate is competitive when compared to similar jobs at other universities.
8. I am offered the professional development support that I need to grow in my job.

Screen 6:

For the statements below, please answer according to your role as a faculty member. The term 'administrator' may be your Department Chair, Assistant/Associate Dean, or Dean, depending on your faculty role. Please reference the administrator with whom you interact the most when answering.

1. My costs associated with the benefits plan (co-pays, deductibles, premiums) are reasonable.
2. My contributions are valued by members of the university community outside of my college.
3. I know what is required of me to advance within the university.
4. I enjoy discussing the university with people who do not work here.
5. There is someone at work who encourages my development.
6. Someone has talked to me about my progress in the past year.
7. My job gives me a sense of accomplishment.
8. My administrator treats me with respect.

Screen 7:

For the statements below, please answer according to your role as a faculty member. The term 'administrator' may be your Department Chair, Assistant/Associate Dean, or Dean, depending on your faculty role. Please reference the administrator with whom you interact the most when answering.

1. Information about job vacancies within the university is readily available.

2. In the last 7 days I have received recognition or praise for doing good work.
3. My administrator deals effectively with poor performance.
4. I make a difference in my department/college.
5. I have had opportunities at work to learn and grow in the past year.
6. I have a say in decisions that affect my work.
7. I get appropriate recognition when I have done something extraordinary.
8. Expressions of thanks and appreciation are common in my department/college.

Screen 8:

For the statements below, please answer according to your role as a faculty member. The term 'administrator' may be your Department Chair, Assistant/Associate Dean, or Dean, depending on your faculty role. Please reference the administrator with whom you interact the most when answering.

1. All employees receive fair consideration for open positions.
2. I have a strong commitment to the university.
3. My administrator cares about me as a person.
4. I am proud to work for the university.
5. I care about the future of the university.
6. My administrator gives me constructive feedback on my performance.
7. The physical environment allows me to do my job.
8. My administrator is ethical in day-to-day practices.

Screen 9:

For the statements below, please answer according to your role as a faculty member. The term 'administrator' may be your Department Chair, Assistant/Associate Dean, or Dean, depending on your faculty role. Please reference the administrator with whom you interact the most when answering.

1. I have the necessary resources, tools or equipment to do my job.
2. University senior administration demonstrates leadership practices that are consistent with the stated values of our university.
3. I can count on my co-workers to help out when needed.
4. My co-workers and I work as part of a team.
5. Salary/pay increases are appropriate.
6. My administrator recognizes me for doing good work.
7. People care about each other in my department/college.
8. Someone in my department/college cares about me as a person.

Screen 10:

For the statements below, please answer according to your role as a faculty member. The term 'administrator' may be your Department Chair, Assistant/Associate Dean, or Dean,

depending on your faculty role. Please reference the administrator with whom you interact the most when answering.

1. When I joined my department/college, I was made to feel welcome.
2. My department collaborates effectively with other departments within the college.
3. I understand how my salary increases are determined.
4. My administrator considers my ideas.
5. My salary/pay rate is a significant factor in my decision to stay at the university.
6. The benefits package is a significant factor in my decision to stay at the university.
7. My administrator trusts me.
8. The university's benefits package has been adequately explained to me.

Screen 11:

For the statements below, please answer according to your role as a faculty member.

In the last 2 years, how have the following changes, events, or matters impacted your job satisfaction?

1. Changes in academic leadership (Department Chair, Dean, and/or Provost).
2. Classes moved online mid-semester in Spring 2020 due to COVID-19.
3. Technology support for faculty working from home (hardware, software, connectivity).
4. DEI requirements in the core curriculum.
5. Allegations of discrimination and pending lawsuits (employees and students).
6. Increased opportunities for faculty and staff DEI training.
7. Change in retirement contribution (11.5% to 8%).
8. Change in retirement medical benefits for those aged 44 and younger.

Screen 12:

For the statements below, please answer according to your role as a faculty member.

In the last 2 years, how have the following changes, events, or matters impacted your job satisfaction?

1. Hiring freeze for 2020-2021.
2. Suspension of pay increases for 2020-2021.
3. Additional 20% budget cuts across all units of the university.
4. Transparency in Fall 2020 planning (course delivery, athletics, orientation, etc.) in response to COVID-19.
5. Required D2L faculty training before Fall 2020 course delivery.
6. Planning for multiple course delivery modalities for Fall 2020.
7. Concerns expressed by Faculty Senate about shared governance.
8. Allowing faculty to determine if their Fall 2020 courses were online or in-person.

Screen 13:

Thank you for your participation. Your responses have been recorded.

The link below will redirect you to a new screen, providing an opportunity for you to enter the drawing for one of two $50 Amazon gift cards. Your identifying information will be kept separate from your responses to this survey and deleted once the drawing is completed.

ENTER THE DRAWING

If you do not wish to enter the drawing, simply advance to the end of this survey.

Again, thank you for your participation.

Appendix C

Permission to use the Smerek and Peterson (2007) survey

From: Ryan Edward Smerek
To: Ackall, Danyelle
Subject: Re: Request to Use Job Satisfaction Survey
Date: Thursday, February 13, 2020 3:04:47 PM

Danyelle:

Certainly. Happy to hear it will be helpful for you. The whole survey can be reconstructed from the article itself using Table 2.

Ryan Smerek
Associate Professor & Assistant Director of Academic Affairs
Northwestern University
1800 Sherman Avenue, Suite 3500 Evanston,
Illinois 60208 ryan.smerek@northwestern.edu
P: 847-467-0831

From: Ackall, Danyelle <d.ackall@tcu.edu>
Sent: Thursday, February 13, 2020 8:52 AM
To: Ryan Edward Smerek <ryan.smerek@northwestern.edu>
Subject: Request to Use Job Satisfaction Survey

Dr. Smerek,

I am a doctoral candidate at TCU in Fort Worth, Texas. My dissertation topic is faculty job satisfaction, using Herzberg's Two Factor Theory as a framework for assessment. I'd like to use your survey as published in "Examining Herzberg's Theory: Improving Job Satisfaction Among Non-Academic Employees at a
University" article.

If you approve, I would be happy to share the results of my study.

Thank you for your consideration.
Regards,
Danyelle Williams Ackall, SPHR
Instructor
Department of Management and Leadership
M. J. Neeley School of Business
d.ackall@tcu.edu

Appendix D

Table D.1

Descriptive Statistics for Two-Factor Theory Categories by Faculty Status

Two-Factor Theory Categories	Tenured			Tenure Track			Non-Tenure Track			Part-Time		
	n	*M*	*SD*	*n*	*M*	*SD*	*n*	*M*	*SD*	*n*	*M*	*SD*
Work Itself (m)	155	5.14	.85	46	5.20	.69	90	5.40	.66	68	5.45	.60
Good relationships w/co-workers (h)	156	4.76	1.00	46	4.88	.90	91	4.80	1.00	68	5.28	.63
Effective Supervisor (h)	152	4.69	1.24	46	4.79	.90	91	4.79	1.17	68	5.26	.81
Responsibility (m)	155	4.45	.97	46	4.64	.93	90	4.79	1.06	68	5.05	.75
Good Feelings about the Organization (m)	155	4.27	1.20	46	4.33	1.25	90	4.92	.93	68	5.15	.84
Professional Growth Opportunities (m)	155	4.35	1.05	46	5.02	.72	90	4.54	1.09	68	4.84	.85
Recognition (m)	154	3.97	1.08	45	4.20	.95	89	4.22	1.08	67	4.54	.88
Opp for Advancement (m)	154	4.21	1.01	45	4.45	.70	88	4.10	1.08	63	3.90	1.27
Satisfaction w/ Benefits (h)	156	3.64	1.07	46	3.93	.98	90	4.33	.91	34	2.69	1.50
Satisfaction w/ Salary (h)	156	3.54	1.15	46	3.91	1.03	91	3.75	1.21	68	3.29	1.26
Effective Sr Management (h)	154	2.59	1.40	43	3.02	1.52	89	3.61	1.30	67	4.80	1.04

Table D.2

Descriptive Statistics for Two-Factor Theory Categories by College

Two-Factor Theory Categories	Business			Communication			Education			Fine Arts		
	n	*M*	*SD*	*n*	*M*	*SD*	*n*	*M*	*SD*	*n*	*M*	*SD*
Work Itself (m)	61	5.26	.77	26	5.13	.85	18	5.11	.61	59	5.41	.63
Good Rel w/Co-Workers (h)	61	4.96	.90	26	4.71	.93	18	4.95	.84	59	4.92	.82
Eff. Supervisor (h)	61	4.87	1.08	26	4.32	1.53	17	5.03	.54	59	4.72	1.12
Responsibility (m)	61	4.93	.97	26	4.44	1.00	18	4.79	.75	59	4.52	.91
Good Feelings about Org (m)	61	4.81	1.00	26	4.29	1.32	18	4.81	.80	59	4.73	1.12
Prof Growth Opp (m)	61	4.63	1.06	26	4.28	1.14	18	4.73	.98	59	4.44	1.03
Recognition (m)	60	4.22	1.05	25	3.88	1.11	18	4.24	.93	59	4.19	.94
Opp for Advancement (m)	59	4.12	1.19	25	3.85	1.05	18	4.35	.88	55	4.21	1.07
Satisf. w/Benefits (h)	54	3.98	1.31	22	3.65	1.03	16	4.09	.93	52	3.75	1.26
Satisf. w/Salary (h)	61	3.53	1.33	26	3.34	1.37	18	3.89	1.17	59	3.45	1.01
Eff. Sr Mgmt (h)	60	3.70	1.47	25	2.90	1.80	18	4.04	1.45	59	3.66	1.43

Two-Factor Theory Categories	Liberal Arts			Nursing & Health Sciences			Science & Engineering		
	n	*M*	*SD*	*n*	*M*	*SD*	*n*	*M*	*SD*
Work Itself (m)	78	5.17	.86	49	5.43	.58	59	5.24	.81
Good Rel w/Co-Workers (h)	79	4.55	1.16	50	4.98	.91	59	5.15	.80
Eff. Supervisor (h)	76	4.78	1.20	50	4.81	1.20	59	5.10	.91
Responsibility (m)	78	4.48	1.10	49	4.69	1.06	59	4.85	.80
Good Feelings about Org (m)	78	4.23	1.26	49	5.10	.86	59	4.46	1.17
Prof Growth Opp (m)	78	4.52	1.08	49	4.80	.97	59	4.61	.87
Recognition (m)	76	3.98	1.20	49	4.30	1.02	59	4.28	.93
Opp for Advancement (m)	76	3.96	1.12	49	4.29	.90	59	4.36	.92
Satisf. w/Benefits (h)	73	3.37	1.21	42	4.04	1.11	59	3.88	.94
Satisf. w/Salary (h)	79	3.61	1.12	50	3.44	1.22	59	3.89	1.08
Eff. Sr Mgmt (h)	75	2.71	1.62	49	3.89	1.51	58	2.87	1.23

Table D.3

Independent-Sample t-test for Two-Factor Theory Categories by Gender

Two-Factor Categories	he/him/his			she/her/hers					Sig. (2-tailed)
	n	*M*	*SD*	*n*	*M*	*SD*	*t*	*df*	
Work Itself (m)	135	5.29	.75	194	5.29	.75	-.01	327	.990
Good Relationships w/Co-Workers (h)	136	5.03	.83	195	4.81	1.02	2.13	322	.034*
Eff. Supervisor (h)	133	5.01	.92	194	4.77	1.20	2.09	321	.037*
Responsibility (m)	135	4.76	.91	194	4.67	1.02	.82	327	.411
Good Feelings about Organization (m)	135	4.60	1.07	194	4.67	1.18	-.55	327	.580
Prof. Growth Opportunities (m)	135	4.58	.97	194	4.64	1.03	-.58	327	.561
Recognition (m)	134	4.29	.99	191	4.15	1.06	1.18	323	.239
Opp. for Advancement (m)	132	4.30	.95	188	4.09	1.12	1.86	307	.064
Satisf. w/Benefits (h)	130	3.90	1.03	168	3.75	1.24	1.15	294	.251
Satisf. w/Salary (h)	136	3.75	1.09	195	3.55	1.20	1.55	329	.123
Eff. Sr Mgmt (h)	133	3.06	1.58	190	3.54	1.56	-2.67	321	.008**

* Difference is significant at the 0.05 level (2-tailed).
** Difference is significant at the 0.01 level (2-tailed).

Table D.4

Independent-Sample t-test for Two-Factor Theory Categories by Minority Status

Two-Factor Categories	Minority			Non-Minority			*t*	*df*	Sig. (2-tailed)
	n	*M*	*SD*	*n*	*M*	*SD*			
Work Itself (m)	65	5.29	.76	268	5.28	.76	.11	331	.916
Good Relationships w/Co-Workers (h)	65	4.66	1.13	270	4.97	.87	-2.09	83.4	.039*
Eff. Supervisor (h)	64	4.60	1.34	267	4.92	1.04	-1.74	82.1	.085
Responsibility (m)	65	4.62	1.10	268	4.72	.94	-.72	87.7	.472
Good Feelings about Organization (m)	65	4.57	1.07	268	4.64	1.15	-.49	331	.625
Professional Growth Opportunities (m)	65	4.57	1.04	268	4.59	.99	-.21	331	.836
Recognition (m)	64	4.14	1.16	265	4.21	1.00	-.49	327	.622
Opportunities for Advancement (m)	63	3.97	1.10	261	4.22	1.04	-1.66	322	.098
Satisf. w/Benefits (h)	57	3.56	1.30	243	3.86	1.12	-1.58	76.7	.118
Satisf. w/Salary (h)	65	3.65	1.20	270	3.62	1.16	.15	333	.882
Eff. Sr Mgmt (h)	64	3.33	1.67	263	3.34	1.56	-.02	325	.984

* Difference is significant at the 0.05 level (2-tailed).

Table D.5

Descriptive Statistics of Events by Faculty Status

	Tenured Faculty			Tenure Track Faculty			Non-Tenure Track Faculty			Part-Time Faculty		
Events	*n*	*M*	*SD*	*n*	*M*	*SD*	*n*	*M*	*SD*	*n*	*M*	*SD*
Additional 20% budget cuts	153	1.78	.91	44	1.98	.88	86	2.20	1.06	62	2.89	1.15
Allegations of discrimination	153	2.69	1.26	44	3.00	1.49	87	3.02	1.16	62	3.65	1.45
Allowing faculty to …Fall 2020 courses	153	5.67	1.67	44	5.91	1.33	86	5.22	1.79	63	5.89	1.38
Change in retirement contribution	153	1.27	.61	44	1.75	1.47	87	1.80	1.00	62	3.84	1.38
Change in retirement medical benefits	153	2.41	1.35	44	2.61	1.45	87	2.93	1.44	62	3.89	1.22
Changes in academic leadership	153	3.59	1.90	44	4.02	1.66	87	4.32	1.76	62	4.50	1.59
Classes moved online	153	3.50	1.61	44	3.57	1.65	87	3.21	1.56	62	3.61	1.67
Concerns expressed by Faculty Senate	153	3.18	2.16	44	3.36	1.74	86	3.17	1.76	62	4.13	1.42
DEI requirements in the core curriculum	153	4.52	1.43	44	4.48	1.44	87	4.41	1.64	62	4.34	1.50
Hiring freeze for 2020-2021	153	2.20	1.12	44	2.64	1.14	87	2.55	1.19	62	2.97	1.21
Increased opportunities … DEI training	153	4.52	1.26	44	4.68	1.68	87	4.57	1.46	62	4.58	1.42
Planning for multiple course delivery modes	153	2.62	1.44	44	2.80	1.30	86	2.81	1.47	62	3.40	1.75
Required D2L faculty training	153	3.23	1.68	44	3.27	1.50	86	3.87	1.64	63	4.25	1.98
Suspension of pay increases for 2020-2021	153	1.73	.88	43	1.77	1.00	86	2.00	1.07	62	2.95	1.12
Technology support	153	4.16	1.62	44	3.95	1.40	87	4.52	1.56	62	4.79	1.59
Transparency in Fall 2020 planning	153	2.30	1.45	44	2.30	1.37	86	2.85	1.63	63	4.11	1.75

Table D.6

Descriptive Statistics of Events by College

Events	Business			Communication			Education			Fine Arts		
	n	*M*	*SD*	*n*	*M*	*SD*	*n*	*M*	*SD*	*n*	*M*	*SD*
Additional 20% budget cuts	58	2.78	1.01	24	1.88	.99	18	2.28	1.13	56	1.86	1.02
Allegations of discrimination	58	3.41	1.11	24	2.63	1.14	18	2.56	1.42	56	3.18	1.27
Allowing faculty to …Fall 2020 courses	58	5.59	1.38	24	5.17	2.04	18	5.50	2.01	57	5.63	1.63
Change in retirement contribution	58	2.21	1.39	24	1.96	1.57	18	1.67	.97	56	2.13	1.42
Change in retirement medical benefits	58	3.16	1.32	24	2.50	1.64	18	3.17	1.92	56	2.98	1.53
Changes in academic leadership	58	4.55	1.70	24	3.21	1.56	18	4.67	1.50	56	4.39	1.78
Classes moved online	58	3.34	1.52	24	3.08	1.38	18	3.72	1.87	56	3.21	1.55
Concerns expressed by Faculty Senate	58	3.53	1.71	24	2.96	2.14	18	3.28	1.67	56	4.00	2.10
DEI requirements in the core curriculum	58	3.91	1.35	24	3.88	1.45	18	5.06	.94	56	4.71	1.47
Hiring freeze for 2020-2021	58	2.86	1.15	24	2.71	1.12	18	2.56	1.04	56	2.54	1.22
Increased opportunities … DEI training	58	4.19	1.28	24	4.00	1.14	18	5.11	1.13	56	4.91	1.28
Planning for multiple course delivery modes	58	3.09	1.38	24	2.08	1.38	18	3.44	1.42	56	2.75	1.67
Required D2L faculty training	58	3.66	1.56	24	2.42	1.61	18	4.00	1.61	57	3.37	2.03
Suspension of pay increases for 2020-2021	58	2.41	1.11	24	1.79	1.10	18	2.39	1.09	55	2.04	1.12
Technology support	58	4.14	1.58	24	4.00	1.79	18	4.11	1.64	56	4.13	1.57
Transparency in Fall 2020 planning	58	3.19	1.52	24	2.21	1.41	18	4.06	2.10	57	2.89	1.58

Events	Liberal Arts			Nursing & Health Sciences			Science & Engineering		
	n	*M*	*SD*	*n*	*M*	*SD*	*n*	*M*	*SD*
Additional 20% budget cuts	74	1.95	1.03	48	1.94	1.14	58	2.02	.91
Allegations of discrimination	74	2.85	1.71	49	3.14	1.21	58	2.81	1.18
Allowing faculty to …Fall 2020 courses	74	5.93	1.56	48	5.27	1.63	58	5.83	1.63
Change in retirement contribution	74	1.73	1.39	49	2.20	1.65	58	1.47	.80
Change in retirement medical benefits	74	2.65	1.53	49	3.08	1.32	58	2.48	1.20
Changes in academic leadership	74	3.78	2.01	49	4.10	1.85	58	3.34	1.57
Classes moved online	74	3.99	1.68	49	3.55	1.76	58	3.17	1.51
Concerns expressed by Faculty Senate	74	3.49	2.10	48	3.06	1.66	58	3.05	1.89
DEI requirements in the core curriculum	74	5.15	1.33	49	4.78	1.42	58	3.69	1.54
Hiring freeze for 2020-2021	74	2.39	1.23	49	2.14	1.26	58	2.33	1.10
Increased opportunities … DEI training	74	4.93	1.25	49	4.82	1.42	58	4.00	1.63
Planning for multiple course delivery modes	74	2.86	1.52	48	2.79	1.53	58	2.74	1.46
Required D2L faculty training	74	3.93	1.78	48	3.65	1.67	58	3.45	1.58
Suspension of pay increases for 2020-2021	74	1.84	1.07	48	1.81	1.05	58	1.91	.96
Technology support	74	4.31	1.65	49	4.78	1.61	58	4.71	1.43
Transparency in Fall 2020 planning	74	2.43	1.82	48	2.73	1.83	58	2.45	1.35

Table D.7

Descriptive Statistics of Events by Gender

Event	he/him/his			she/her/hers			*t*	*df*	Sig. (2-tailed)
	n	*M*	*SD*	*n*	*M*	*SD*			
Additional 20% budget cuts	131	2.12	1.02	186	2.12	1.13	-.01	315	.990
Allegations of discrimination	131	2.99	1.29	186	2.99	1.39	-.02	315	.988
Allowing faculty to …Fall 2020 courses	131	5.71	1.59	187	5.61	1.66	.54	316	.589
Change in retirement contribution	131	1.57	.97	186	2.18	1.57	-4.24	310	.000**
Change in retirement medical benefits	131	2.64	1.31	186	3.00	1.51	-2.19	315	.029*
Changes in academic leadership	131	3.88	1.95	186	4.15	1.74	-1.28	259	.200
Classes moved online	131	3.45	1.51	186	3.53	1.72	-.44	315	.661
Concerns expressed by Faculty Senate	131	3.57	2.07	186	3.23	1.85	1.51	259	.133
DEI requirements in the core curriculum	131	4.29	1.55	186	4.77	1.37	-2.90	315	.004**
Hiring freeze for 2020-2021	131	2.56	1.10	186	2.41	1.25	1.12	299	.264
Increased opportunities … DEI training	131	4.21	1.39	186	4.96	1.26	-5.05	315	.000**
Planning for multiple course delivery modes	131	3.06	1.58	186	2.72	1.48	1.96	315	.051
Required D2L faculty training	131	3.56	1.65	187	3.68	1.82	-.60	316	.550
Suspension of pay increases for 2020-2021	131	1.96	.96	185	2.06	1.15	-.82	305	.413
Technology support	131	4.32	1.60	186	4.41	1.59	-.49	315	.628
Transparency in Fall 2020 planning	131	2.64	1.53	187	2.89	1.81	-1.34	305	.180

* Difference is significant at the 0.05 level (2-tailed).
** Difference is significant at the 0.01 level (2-tailed).

Table D.8

Independent-Samples t-test of Events by Minority Status

Events	Minority			Non-Minority			*t*	*df*	Sig. (2-tailed)
	n	*M*	*SD*	*n*	*M*	*SD*			
Additional 20% budget cuts	63	2.14	1.12	258	2.13	1.07	.10	319	.921
Allegations of discrimination	63	3.21	1.62	258	2.91	1.26	1.34	81.3	.186
Allowing faculty to …Fall 2020 courses	63	6.08	1.54	259	5.54	1.64	2.35	320	.020*
Change in retirement contribution	63	2.00	1.51	258	1.90	1.31	.55	319	.582
Change in retirement medical benefits	63	2.63	1.59	258	2.90	1.40	-1.19	87.1	.237
Changes in academic leadership	63	4.08	1.96	258	3.96	1.78	.48	319	.633
Classes moved online	63	4.13	1.90	258	3.32	1.53	3.13	82.7	.002**
Concerns expressed by Faculty Senate	63	3.73	1.99	258	3.27	1.92	1.70	319	.090
DEI requirements in the core curriculum	63	5.00	1.43	258	4.39	1.49	2.96	319	.003**
Hiring freeze for 2020-2021	63	2.60	1.17	258	2.47	1.19	.83	319	.407
Increased opportunities … DEI training	63	4.84	1.29	258	4.54	1.40	1.54	319	.125
Planning for multiple course delivery modes	63	2.94	1.66	258	2.84	1.49	.43	319	.670
Required D2L faculty training	63	3.67	1.90	259	3.60	1.72	.28	320	.782
Suspension of pay increases for 2020-2021	63	1.89	1.14	257	2.06	1.08	-1.11	318	.269
Technology support	63	4.43	1.62	258	4.32	1.59	.49	319	.622
Transparency in Fall 2020 planning	63	2.89	1.89	259	2.75	1.64	.59	320	.557

* Difference is significant at the 0.05 level (2-tailed).
** Difference is significant at the 0.01 level (2-tailed).

Appendix E

Email Announcing the Survey

From: Atkinson, Sean
Sent: Monday, September 7, 2020 2:17 PM
To: TCU All Faculty <TCUAllFaculty@tcu.edu>
Subject: We Need Your Help: Job satisfaction survey

Sent on behalf of Don Mills and Danyelle Ackall

Dear Faculty,

In two days TCU faculty of all ranks will be invited to participate in a survey. This survey explores job satisfaction, components of job satisfaction, and the impact of changes and events on job satisfaction.

Please take 10 minutes to respond to this survey. The survey is part of a research project independent of TCU administration.

Survey responses are anonymous. Results from this survey will only be reported in aggregate form and not with individual responses.

Your participation is greatly appreciated.

Follow-up to the Announcement

From: Atkinson, Sean
Sent: Monday, September 7, 2020 3:04 PM
To: TCU All Faculty <TCUAllFaculty@tcu.edu>
Subject: Re: We Need Your Help: Job satisfaction survey

Clarification about the survey:

The survey is part of the research for a comparative study on faculty job satisfaction. It is designed to deconstruct the components of satisfaction and identify specific elements where satisfaction/dissatisfaction may occur using Herzberg's Two Factor Theory.

The doctoral student conducting the study is working towards a PhD in higher ed leadership. The committee chair is Don Mills, PPP in the College of Ed. The proposal has been approved by TCU's IRB.

All individual responses are confidential. Identifying information (name, email, IP address, etc.) will not be collected. Any publications or data sharing will use only aggregate data. Faculty Senate has requested a copy of the results in aggregate form.

Email Invitation

From: Atkinson, Sean
Sent: Wednesday, September 9, 2020 10:08 AM
To: TCU All Faculty <TCUAllFaculty@tcu.edu>
Subject: We Need Your Help: Job satisfaction survey

Sent on behalf of Danyelle Ackall and Don Mills

Dear Faculty,

As part of a study on job satisfaction, TCU faculty of all ranks are invited to participate in a survey. This survey explores job satisfaction, components of job satisfaction, and the impact of changes and events on job satisfaction.

This study is independent of TCU administration but is being conducted by a TCU faculty member and doctoral student. Survey responses are anonymous. Results from this survey will only be reported in aggregate form and not with individual responses.

The expected time to complete the survey is 20 minutes.

In exchange for completing the survey, participants may be entered into a drawing for one of two $50 Amazon gift cards. Names will be collected separately from survey responses.

Thank you for your participation!

https://tcu.co1.qualtrics.com/jfe/form/SV_5do7OZZ84tSIjWZ

You may contact Danyelle Williams Ackall at d.ackall@tcu.edu and 817.257.6919 or Don Mills at d.mills@tcu.edu and 817.257.6938 with any questions that you have about the study. This research has been reviewed according to TCU IRB procedures for research involving human subjects.

Reminder Email

From: Atkinson, Sean
Sent: Monday, September 21, 2020 12:35 PM
To: TCU All Faculty <TCUAllFaculty@tcu.edu>
Subject: Don't delay – deadline approaching for job satisfaction survey

Sent on behalf of Danyelle Ackall and Don Mills

If you have not done so, please respond to the survey below before it closes on Wednesday.

Thank you.

Regards,

Danyelle Williams Ackall, SPHR
817-257-6919
d.ackall@tcu.edu

From: Sean Atkinson <sean.atkinson@tcu.edu>
Date: Wednesday, September 9, 2020 at 10:08 AM
To: TCU All Faculty <TCUAllFaculty@tcu.edu>
Subject: We Need Your Help: Job satisfaction survey

Sent on behalf of Danyelle Ackall and Don Mills

Dear Faculty,

As part of a study on job satisfaction, TCU faculty of all ranks are invited to participate in a survey. This survey explores job satisfaction, components of job satisfaction, and the impact of changes and events on job satisfaction.

This study is independent of TCU administration but is being conducted by a TCU faculty member and doctoral student. Survey responses are anonymous. Results from this survey will only be reported in aggregate form and not with individual responses.

The expected time to complete the survey is 20 minutes.

In exchange for completing the survey, participants may be entered into a drawing for one of two $50 Amazon gift cards. Names will be collected separately from survey responses.

Thank you for your participation!

https://tcu.co1.qualtrics.com/jfe/form/SV_5do7OZZ84tSIjWZ

You may contact Danyelle Williams Ackall at d.ackall@tcu.edu and 817.257.6919 or Don Mills at d.mills@tcu.edu and 817.257.6938 with any questions that you have about the study. This research has been reviewed according to TCU IRB procedures for research involving human subjects.

Email Announcing Gift Card Winners

From: Ackall, Danyelle
Sent: Thursday, September 24, 2020 4:31 PM
To: Mills, Donald <d.mills@tcu.edu>; Ackall, Danyelle <d.ackall@tcu.edu>
Subject: Gift Card Drawing

Thank you for participating in the job satisfaction survey.

Our 2 gift card winners are

Matthew Smith and Kimberly Owczarski

Please check your TCU email for your Amazon gift card.

Again, thank you for your participation.

Regards,

Danyelle Williams Ackall, SPHR
Instructor
Business in Society Course Coordinator
Department of Management and Leadership
M. J. Neeley School of Business
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ABSTRACT

A COMPARATIVE STUDY OF FACULTY JOB SATISFACTION:
LOOKING BEYOND THE AGGREGATE

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This study considers the job satisfaction of faculty at a private, four-year, large university. As faculty are forward-facing, customer-serving, grant-receiving employees who directly impact the bottom line, monitoring their job satisfaction is similar to a wellness check; done regularly, one can find otherwise unknown issues before they become detrimental to the health of the organization. A survey created by Smerek and Peterson (2007) was modified to fit the population under study. The survey questions were grouped by job factors identified in the Two-Factor Theory by Herzberg et al. (1959) and used a 6-point Likert scale. Additional questions were employed to assess how recent events impacted job satisfaction. Data were analyzed by faculty status, college of appointment, gender, and minority status. Although not irrefutable, the data show that despite negative perceptions of total compensation and senior management, faculty have job satisfaction driven by satisfaction with the work itself and good relationships with co-workers and direct supervisors. In other words, faculty find satisfaction in the work, but not the work environment.