The effect of technology on work-life balance: Women in higher education

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The Effect of Technology on Work-Life Balance: Women in Higher Education

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Abstract

This study aimed to contribute to the literature on women, technology, and work-life balance (WLB). By identifying both instructional and non-instructional female employees at an institution of higher education, the study facilitated a comparison between the perceived levels of WLB and technology’s impact on the balance. A mixed methods survey was sent to all female employees to identify potential commonalities or differences between the groups. Questions inquired about employees’ experiences with, and outlooks on, WLB and information and communication technologies (ICTs). For the purpose of the study, ICTs included technologies such as email, accessed through computers, cell-phones or tablets. The results show differences between the perceptions of WLB in regard to the instructional and non-instructional employees surveyed. Though there was a significant difference, rather than negative perceptions, instructional faculty viewed ICTs as helpful for WLB. A lower perception of control for instructional faculty was anticipated because of the different pressures that come with their careers. The results from the study strengthen the understanding of technology’s implications on WLB. Moreover, the study adds to the literature of gender differences and WLB in the context of higher education. Future research should be conducted on the perspectives of female employees in the corporate sector. From the results, it is clear that part-time employees struggle to maintain balance because of limited access to the policies and benefits full-time employees are able to take advantage of. Future research should investigate strategies to eradicate this struggle.

Keywords: Work-life balance, female employees, gender, information and communication technology, instructional faculty, non-instructional staff
The Effect of Technology on Work-Life Balance: Women in Higher Education

Chapter 1: Introduction

Work-life balance has sparked interest on the national and international level, gaining attention all over the globe. Wattis, Standing, and Yerkes (2013) highlight the emergence of work-life balance as a rising concern among employers, trade unions, academics, and policy-makers alike. Popular periodicals such as *Fortune, Wall Street Journal,* and *Newsweek* often publish articles on the topic, along with book stores whose shelves are full of tips, suggestions and insight for individuals to achieve such balance (Grzywacz & Carlson, 2007). What’s more, there are several blogs, TED Talks, and self-help resources available about the issue, some even career specific. One such field is that of academia, because the nature of the job requires professionals to wear several different hats including educator, researcher, and advisor.

In her widely popular book *Lean In,* Facebook’s chief operating officer, Sheryl Sandberg explores eleven ideas and recommendations to inspire and empower women to take leadership of their lives and achieve their goals (“LeanIn.Org,” 2016). As COO, and founder of LeanIn.Org, Sandberg’s ideas are widely recognized because of her dedication to inspire female professionals, and her lead by example work ethic. LeanIn.Org partnered with McKinsey and Company in 2014 to publish the study “Women in the Workplace,” which examined the current state of women in corporate America (McKinsey & Company, 2014); three key findings from the study highlight the continued struggle for women in the workplace and at home.

One finding indicated women are more likely than men to say they make sacrifices in their career to support their partners career (McKinsey & Company, 2014).
In addition, according to the study, women continue to shoulder a disproportionate amount more of child care and house chores (McKinsey & Company, 2014). Women are partly plagued by this “homework” because of their traditionally prescribed gender role as the primary caretaker within a family (West & Zimmerman, 1987). Another finding from the study discussed a phenomenon called the “maternal bias,” wherein motherhood triggers assumptions that women are less committed to their careers (McKinsey & Company, 2014); consequently, they are held to higher standards and presented with fewer opportunities (Correll, Bernard, & Paik, 2007).

The McKinsey and Company findings, and findings from similar research, highlight the difference in experiences between females and males who attempt to gain balance within their work and life domains. Societal expectations and biases such as the one aforementioned, may work as reasons maintaining work-life balance is a greater challenge for females than males. Thus, a multitude of support and resources for work-life balance, both “hard” and “soft,” are dedicated to women. Structural, or “hard,” supports may include organizational policies such as extended maternity leave, while “soft” supports may include blogs, magazines, forums and journals. Further, the nature of the support and resources offered may vary among organizations and professions.

Due to the demanding and fast-paced environment of academia, a number of blogs and forums explore challenges specific to institutes of higher education. Blogs specific to women in academia explore efforts of discovering ways to be the best individual one can be, while also maintaining continuous achievement in their career. An example is the need to follow a rigid and demanding timeline to become a tenured professor. Academics are pulled in many directions; work involves commitment to
teaching, scholarship, and service (Comer & Stites-Doe, 2006). The host of blogs on work-life balance offer tips to sustain a healthy lifestyle both at home and at the office. *The Chronicle of Higher Education*, a news and job-information source for university faculty, administrators, and students, has regularly published pieces about gender equity, work-life balance and awareness of these issues in the academy (June, 2014; Baenninger, 2011).

Technology has shaped the way we organize and maintain many different aspects of our personal and work lives. Individuals rely on technology to schedule appointments, store important documentation, run business operations, communicate with others, and keep in touch. In a 2014 study, Nielson reported that the average American spent approximately three hours a day using electronic media such as cell phones, the Internet, and multimedia devices for entertainment and activities (Nielsen, 2014). This is not including the countless hours spent using technology during work hours, which can reach up to 8 hours a day depending on one's job. Many, if not most organizations have shifted to an electronic approach which makes all organizational operations and functions digital. Technology of all varieties are prevalent in our lives now more than ever.

Nationally, the data published regarding benefits and side effects of work-life balance are scarce. However, organizations such as the Queensland Government, in Australia, have identified many benefits of achieving or experiencing instances of balance between work and life including: reduced stress levels at both work and home, greater focus and overall concentration, higher levels of job satisfaction, more time to pursue personal goals and hobbies, and improved health (Queensland Government, 2013).
Poor management of work and personal life may result in high levels of stress among other conditions; the Queensland Government provides signs and symptoms of stress, which include: poor judgment and concentration, trouble thinking clearly, low attention span, feeling overwhelmed, loss of appetite, lack of sleep, isolation from others, and procrastination (Queensland Government, 2013).

Research studies have been conducted to explore and better understand work-life balance in an international context. For example, in 2012 The International Journal of Human Resource Management published a study titled, “Work-life balance: Eastern and western perspectives,” which compared and contrasted general outlooks (Chandra, 2012). The Organization of Economic Co-operation Development (2014), an international economic organization, and Ernest & Young (Twaronite, 2015), a multinational professional services organization, have also conducted work-life balance research to gain a better understanding of the impact it has on the economy and individuals.

Employee’s work and life domains may be shifting, causing a change in their work-life balance as a result of spending longer days at work than ever before. Ernest & Young’s 2014 Global Generation survey examined generational workplace issues in the U.S., Germany, Japan, China, Mexico, Brazil, India, and the U.K., and found that 49% of German workers who participated in the study experienced the most difficulty overall managing work, family, and personal responsibilities (Twaronite, 2015). Among the countries surveyed, all of which follow a 40-hour workweek, approximately 50% of managers reported working more than 40 hours a week worldwide; the United States reported an average of 58% of managers putting in more than the standard 40-hour week.
The statistics above reveal that the number of hours’ individuals are working is increasing worldwide.

The survey also shows how the global economy has impacted the work-life balance of many employees internationally; more than one-third of those surveyed said they had to change jobs due to the economy (Twaronite, 2015). Around 15% of full-time workers got divorced or separated and almost 13% delayed getting a divorce because of the economy (Twaronite, 2015). The Global Generation survey highlights how the economy, job status, and relationship status are all influential aspects of one’s overall work-life balance.

The Organization of Economic and Co-operation Development’s, Better Life Initiative, focuses their research and inquiry on aspects of life that matter to people and shape their quality of life (Organization of Economic Co-operation and Development, 2014). A set of regularly updated well being indicators and analyses are published in the *How’s Life?* Report along with other information aimed towards gaining a better understanding of well being and their drivers; the following information presented was titled *How’s Life in the United States* (OECD, 2014)? The initiative outlines 11 internationally comparable well being indicators including: income and wealth; jobs and earnings; housing; health status; work-life balance; education and skills; social connections; civic engagement and governance; environmental quality; personal security; and subjective well being in which they examine how the countries stand up against each other (OECD, 2014).

When compared with other countries, the United States performed well in quite a few of the 11 categories considered essential to a good life (OCED, 2014). Among health
status, jobs and earnings, personal security, subjective well being, environmental quality, civic engagement, education and skills, and social connections, the United States ranked above the average of 36 countries in 2014 (OECD, 2014); however, the United States ranked below every country, other than Germany, in work-life balance (OECD, 2014). This finding is validated by Ernest and Young’s Global Generations survey that was conducted in 2014 which stated that Germany had the most difficulty managing each life domain (Twaronite, 2015).

With an overwhelming amount of new technologies emerging, the boundary between work and life is becoming blurred. Individuals are able to stay connected virtually 24 hours of the day with both work and their personal lives through a variety of different mediums. In addition to highlighting the emerging concern regarding work-life balance, Wattis, Standing, and Yerkes (2013) identify the escalation of demanding and stressful work experiences due to technological advances as potential influences. Technology has a progressively substantial impact on how people organize their work, while others are increasingly relying on similar technologies to organize and manage their personal lives.

Individuals have different perceptions of the depth and breadth of the boundaries between their personal and work lives, as well as different opinions as to whether or not the technology is seen as an intrusion into their life. While others disagree, some individuals welcome technology into their personal life, for work purposes, and view the convenience of the technology as an advantage to stay on top of work tasks when away from work. Work-life balance and the role technology plays are popular topics in the media; many organizations and news and entertainment outlets have posted articles and
columns, or conducted research on the matter. However, the literature shows minimal consensus on technology’s effect on work-life balance.

Christensen (1987) argues that telework and supplemental technologies generate greater work-family conflict because workplace demands are ever-present and easily accessible; several researchers oppose this view in which individuals believe these technologies further enable work-life balance through more flexible work arrangements (Anthias & Mehta, 2003; Felstead & Jeewson, 2000; Loscocco, 1997). Furthermore, technology’s impact can be seen as both positive and negative (Berg, Mörberg, & Jansson, 2005). In their work on work-life balance boundary management, Golden and Geslier (2007) suggest that while there is widespread agreement that such technologies complicate work-life boundaries, there is minimal empirical documentation of the specific form that it takes. Moreover, the specific ways in which individuals and organizations use these technologies to segment and integrate work and personal life differ greatly (Golden & Geisler, 2007).

The segmentation of work and personal life also differs by gender. As Jones and Taylor (2013) state, women are traditionally seen as the primary caregivers of a family while men typically go into the workforce and obtain careers to provide for their family; however, there has been enormous growth in the number of employed women in the second half of the twentieth century (Wattis, Standing, and Yerkes, 2013, p. 2). As more women enter full-time careers, the issue of balancing work and family matters is more pertinent, and challenging, than it has ever been for men. Researchers have suggested that work-life balance is defined by individuals’ current circumstances while being highly connected to sociocultural family norms (Lester, 2015). Lerner (2010) and O’Meara and
Campbell (2011) note, the argument among investigators that work-life balance will remain a woman’s issue until the family structure changes and the cultural norms associated with motherhood and femininity are changed as well.

Through a slow shift, women have made huge strides at work in terms of equality and inclusiveness, yet the stigma of women completing most housework is still present. The Bureau of Labor Statistics reported that from 2003 to 2014 the amount of time men spent doing food preparation and cleanup, on average, increased from 35% to 43%, and the amount of time women spent decreased from 54% to 49% (Bureau of Labor Statistics, 2014). However, an average of 20% of men, compared to 49% of women completed housework tasks such as cleaning or laundry, compared with 49% of women completing such tasks.

With the ability to telecommute and to work from home due to technological capabilities, the distinction between the two spheres is blurred, and instead, home becomes a mere extension of work (Edley, 2001). This kind of environment in which individuals are constantly bouncing from one sphere to the other may take a toll on an individual’s well being. Improved or successfully maintained work-life balance may help organizations operate more effectively and efficiently, while also aiding individuals with time management efforts (Cox, 2011). For this reason, it is important to identify the perceptions employees have of their work-life balance as a result of information and communication technologies (ICTs) such as email and telephone (Edley, 2001).

The introduction explored relevant ideas and concepts associated with work-life balance and information and communication technologies; next, background information as to how I became interested in the research is explained. My interest in work-life
balance stemmed from influential professors and leaders who encouraged the pursuit of a challenging career, as well as a healthy personal life. In addition, as a female who plans to one day have a family and children while continuing my professional career, I expect I may experience the same internal conflict of balancing work and life that many other women feel.

My assumptions about these ideas derive from observations of female professionals who are constantly making choices and prioritizing between their work and life spheres. My interest in information and communication technologies grew from the immense changes involved with utilizing technology for both work and personal use within the last few decades. I have varied experiences and complex conceptions of how ICTs effect work-life balance. Moreover, there is no anticipated halt in these technological advances, signifying the importance of understanding the relationship between these topics.

The following portion of this chapter discusses the purpose of the current study, lists the research questions and hypotheses, defines the key terms, explains the research gap, and highlights the significance of the research.

**Purpose of the Study**

The purpose of this study was to identify and examine the effects of technology on women workers’ work-life balance in a higher education setting. I examined the relationship by using a mixed methods research design; doing so added to the body of literature on gender and work-life balance in a comprehensive way. Further, identifying employees’ perceptions of technology’s influence on their work-life balance created supplemental information on the topic. Broadening the literature may potentially help
convince employers to consider integrating work-life balance policies into their organization. Moreover, organizations should strive to create cultures in which people are able to use, and feel supported using, work-life balance policies.

As the researcher, I assumed in a higher education setting, technology would have an effect on women workers’ perception of their work-life balance. I also assumed, in general, that women workers would perceive an imbalance between their work and life domains. I assumed some women workers saw technology as an intrusion into their personal lives, while others welcomed the integration of technology, for work purposes, into their personal lives. Current research is inconclusive as to the matter about whether technology helps or hinders work-life balance, and this study was an attempt to address the issue. In addition, I inquired about how successful integration of work and personal life would look to participants.

**Problem Statement**

This study was an attempt to address the issue of technology’s impact on women’s work-life balance. To investigate the issue, instructional and non-instructional employees’ perceptions were recorded to identify the differing pressures various jobs have. In regard to technology, full-time instructional and non-instructional staff may perceive various levels of work-life balance conflict when attempting to manage and fulfill the requirements their job tasks demand. Without such imperative research, employers may not come to observe employee needs or take the proper action to fulfill those needs.
Research Questions

- What percent of participants perceive an imbalance between their work and life domains because of information and communication technologies?
- Is there a difference in the perceived work-life balance of female instructional and non-instructional employees?
- Is the distribution of perceptions of work-life balance approximately normal for both instructional and non-instructional employees?

Hypotheses

- There is a perceived imbalance between participants work and life domains because of information and communication technologies.
- There is a difference in the perceived work-life balance of female instructional and non-instructional employees.
- Work-life balance is not distributed approximately normally for instructional and non-instructional employees.

Overview of the Study

The population included female employees of all Virginia institutions of higher education, though the sample consisted of female faculty and staff of James Madison University. Employees were asked to complete a survey pertaining to their perception of their work-life balance, perceived control of their work-life balance, and the effect information and communication technologies have on their work-life balance. The survey also inquired about whether information and communication technologies are viewed as an intrusion on their personal life, or if technology is welcomed and consistently integrated into their personal life.
Due to the ease of access to employees of James Madison University, I had the opportunity to obtain a robust sample size for the study. Moreover, a heavy presence of female employees on the campus increased the likelihood of a high response rate. The rate of response was relatively high because individuals may have found the topic interesting. In addition, some participants may also conduct their own research through the university, in hopes of responses to their own surveys in return.

**Significance and Research Gap**

Grzywacz and Carlson (2007) note work-life balance’s core position in human resource development (HRD). Employee commitment and job satisfaction are indicators that have been associated with balance (Allen, Herst, Bruck, & Sutton, 2000; Kossek & Ozeki, 1999), along with organizational citizenship behavior (Bragger, Rodriguez-Srednicki, Kutcher, Indovino, & Rosner, 2005). High levels of work-family conflict have been associated with greater turnover intentions (Allen et al., 2000; Kossek & Ozeki, 1999), as well as greater sickness absence (Jansen, Kant, van Amelsvoort, Kristensen, Swaen, & Nijhuis, 2006). The authors suggest that evidence presented shows that work-family balance is at the core of HRD’s major functions and it may serve as a leverage point for promoting effectiveness at the individual and organizational levels (Grzywacz & Carlson, 2007).

With the continuous emergence of new technologies, the pressures for individuals to complete work tasks, or immediately respond to work inquiries, are constantly increasing. The current research contributes to the literature on women, work-life balance, and the effects technology has on these constructs. Little research in these areas and their relationship to each other result in the need to identify the ways in which the
constructs are associated to, and react with, each other. The work-life balance research on women is of particular importance as women are still constricted by the societal portrayal of sexual roles including the division of household labor (Guillaume & Pochic, 2009).

I aimed to identify the effect technology has on the work-life balance of female instructional and non-instructional employees at James Madison University. By identifying these effects, future researchers should be able to generate ways to further maintain the balance between work and life domains in regard to the integration or segmentation of technologies. Adding to this field of research could potentially stimulate employers’ motivation to establish work-life balance policies within their organizations to support their employees.

Grawitch et al. (2006) argue that for such healthy workplace practices to be successful, the needs of employees must be taken into consideration. Further, employee involvement typically leads to higher policy success rates in which employees are able, and encouraged, to utilize these benefits. More so than just implementing policies, the research aimed to prove that cultural change is essential for the success of policies put in place. Studies have proposed the idea that policies make cultural change seemingly unnecessary (Lester, 2015); however, simply because a policy is put in place does not signify its usage. Work-life balance policies are frequently necessary in the protection of employees while also contributing to the organizational conversation of cultural change, but are not the panacea to establishing work-life balance cultures (Lester, 2015).

This study adds to the current body of literature on technology, gender, and work-life balance. Though studies have highlighted the diverse perceptions of work-life balance and the use of technology, no study has a specific focus on women workers in
higher education. As Olson-Buchanan and Boswell (2006) note, it is important to understand how individuals divide or segment their work and life roles, including the degree to which individuals perceive intrusion of one role into the other by way of technology. Further, the main focus of the current research is on female instructional staff, in comparison to non-instructional staff perceptions of work-life balance (Jones & Taylor, 2013). In order for readers to understand key concepts, Table 1 defines the central terms of the research.

**Key Term Definitions**

Table 1.

*Key terms and definitions*

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
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| **Work-Life Balance**                        | • The continuous negotiation and efforts of individuals to maintain equilibrium between the realms of personal life and work life.  
• The individual perception that work and non-work activities are compatible and promote growth in accordance with one’s current life priorities (Kalliath & Brough, 2008).  
• The extent to which an individual’s effectiveness and satisfaction in work and family roles are compatible with their life priorities (Greenhaus & Allen, 2006). |
| **Gender**                                   | • Culturally constructed beliefs and attitudes about the traits and behaviors of females and males (Deaux & Lewis, 1984; Lott, 1997) |
| **Female Employees**                         | • Full-time or part-time female employees. |
| **Information and Communication Technologies** | • Devices used to digitally contact individuals via email, or instant message, such as phones, tablets, or computers (Tremblay & Genin, 2008). |
| **Instructional Faculty**                   | • A faculty position with primary responsibilities that include teaching. |
The conceptual and theoretical frameworks used to ground the study are discussed next. Further, an in-depth examination of the influential literature associated with the study is reviewed. Literature on work-life balance, women in higher education (both instructional and non-instructional) and technology have been examined.
Chapter 2: Literature Review

This chapter provides a thematic review of the literature and an explanation for both the conceptual and theoretical frameworks of the study. The framework included contains an overview of the main components and research variables associated with the study. At the conclusion of the review, the existing research gap is identified and discussed. Keywords identified to investigate the area of study include: work-life balance, technology, gender, higher education, flexible work, female faculty, policies, culture, well-being, satisfaction, conflict, boundaries, integration and communication.

James Madison University’s library resources were utilized to locate the literature that grounded the study. Searching through the databases of various fields allowed for a comprehensive review of current literature across multiple fields. Among the prominent databases included: business, psychology, education, technology, and communication studies. Google Scholar was also utilized to identify relevant sources. The literature came from a number of publications and reports A majority of the literature was found in six notable journals, which includ: The Academy of Management Review, the Journal of Business and Psychology, the Journal of Human Resource Management, Gender, Work, and Organization, Review of Higher Education, and the Journal of Vocational Behavior.

Conceptual and Theoretical Framework

The conceptual framework for this study explores experiences and perceptions regarding work-life balance and information and communication technologies (ICTs) among women in higher education. The theoretical framework attempted to outline and explain the key theories that grounded the study. The study at hand was guided by three learning theories, Constructivism, Cognitive Theory, and Social Cognitive Theory, with a
foundation in Feminism. Figure 1 illustrates the themes and theories that will be discussed in the literature review.

Figure 1: Conceptual framework

Feminism. Feminism and feminist theory are the overarching foundations of the theoretical framework for this study. Feminism is at the root of this research because of the fundamental role of gender in the work-life balance paradigm. American feminism is typically examined through three waves, although a fourth wave has recently begun (Wrye, 2009). The first wave focused on establishing opportunities for women and political change such as women’s suffrage, women’s education, and abolishment of slavery. From the 1960’s to the 1990’s, the second wave critiqued rigid gender roles and patriarchy, asserted economic parity, widened the scope of feminism, and increased the number of women in leadership positions in higher education, business and politics.
The third wave emphasized the human body as personal expression, queer sexuality, transgenderism and transsexuality, disability activism, and inclusion (Wrye, 2009); however, it died out because of the misconception that parity was achieved and there was little work left to do (Rampton, 2015). The fourth wave emerged from the realization of young women and men that there is still work to be done, because of the way society is gendered. Fourth wave feminists are expanding the movement’s efforts to encompass more than the singular struggles of women by highlighting the intersectionality wherein the suppression of women can only be completely understood in a context of the marginalization of other groups and genders. This wave of feminism has moved to a greater consciousness of oppression along with sexual orientation, racism, ageism, classism, and ableism.

From the 60’s to the 90’s, during the second wave feminism, the civil rights movement emerged in addition to an awareness of other minority groups around the world (Wrye, 2009). During this period, in the United States, Betty Friedan influenced the modern feminist movement with her 1963 published text *The Feminine Mystique*, which explored “housewives” of the 1950’s, and the dissatisfaction, unhappiness, and lack of reward they experienced in their daily lives (Parry, 2010, p. 5184). She argued that women were unfairly confined by the societal expectation to stay home and focus all energies on the family; Friedan labeled it, “the problem with no name” (p. 5184). The book was influential because after it was published, and women began reading and discussing it, they realized they were not alone in their discontent with the role society prescribed them. Before Friedan articulated “the problem with no name,” no one
questioned women staying home, and those who did were frowned upon; as a result of the publication, many women chose to return to work.

Feminism concentrates on the injustices that have historically emerged, and currently exist in society (Ropers-Huilman & Winters. 2011). Feminist theory places gender at the center of its analysis and views issues with a gendered lens as though it is a central organizing aspect of society. During the second wave, Flax (1987) explained basic assumptions of feminist theory which state, men and women have different experiences and women are oppressed because of the institutions and structure of society; feminist theory aims to explain how and why this structure evolved, in addition to analyzing how gender roles are constructed and experienced, and how we think about them. More recently, researchers Kelly Ropers-Huilman and Rebecca Winters (2011) explained feminism in a three-part definition:

“First, feminism asserts that women have something valuable to contribute to every aspect of our world. Second, since women as a group experience oppression, they have often been unable to develop their full potential or gain the related rewards of full participation in society; characterized as “the absence of choices” (hooks, 1984, p. 5), being caught in the birdcage (Frye, 1983), or having to wear masks to function in society (Montoya, 2003), permeates all aspects of society. Third, feminists assert that this situation should change, and that this change should be initiated in private and public spheres, in the many forms that activism, scholarship, policy-making, and individual action may take” (p. 670).

Despite noted progress in the feminist movement regarding legislation and more widely accepted cultural norms for women, there are still inequalities and challenges that
require attention. It is no longer viewed as strange for women to have the desire to work, yet a working woman with a husband and child is still pressured by society to be the primary caretaker and nurturer. Evidence of this phenomena is provided through research on the second-shift, the notion referring to responsibilities and tasks to be completed at home, after a day of paid work in the corporate sector (Wharton, 1994). When examining the distribution of labor, even within households where both partners are employed full-time, 30% of women reported doing more chores, and 41% of women reported doing more child care (McKinsey & Company, 2014). Thus, examining the issue with a gendered lens, generates greater understanding of these challenges.

Feminism supports freedom, autonomy and equal opportunities for all individuals to learn and grow. Feminist theory was used to ground the current study because of the gendered gap of opportunities in the workplace, including higher education. Higher education is of importance because of the traditional demanding and inflexible career path faculty must take to achieve tenured-professor, if individuals choose to pursue tenure at all (Clark & Hill, 2010). The track to tenure requires unremitting dedication and commitment to one’s research and teaching; which may consequently affect employees’ work-life balance.

Constructivism. Constructivism is grounded in the basic assumption that knowledge is a function of how individuals create meaning from their own experiences (Ertmer & Newby, 2013). Constructivism theorists believe the mind is the source of all meaning with a central importance placed on direct experiences with the environment. In other words, constructivism equates learning with creating meaning from experience; meaning can be created through personal reflection and discussions with others. A
constructivist approach could be taken to examine an individual’s perceived work-life balance, as each individual constructs their own ideas and establishes their own boundaries in regard to their work and life domains. Further, individuals construct their own perceptions of work-life balance and information and communication technologies through their unique experiences.

As some social constructivists suggest, individuals learn and create meaning through their interactions within their culture or community (Gredler, 2009); organizational cultures and communities may play a role in how individuals perceive and maintain their work-life balance. As Lester (2015) notes, a constructivist framework is important for culture and work-life balance because of the dramatic differences in the definitions of work-life balance, assorted experiences within the institution, department or unit, and the variety of subcultures that may exist (i.e. faculty v. staff). Although information is subjective and comes from individual experiences, employees may develop their perceptions of work-life balance based upon peer and supervisor support, as well (Ertmer & Newby, 2013).

Gender may be defined as culturally constructed beliefs and attitudes about the traits and behaviors of females and males (Deaux & Lewis, 1984; Lott, 1997), and many of these beliefs coincide with leading cultural norms (Worell & Remer, 2002). Instead of static, universal norms, there is great variance in gendered beliefs and attitudes across cultures, which may change throughout time (Worell & Remer, 2002). This constructivist point of view suggests individuals create their own reality and meaning of these constructs, which represent culturally shared agreements, and create self-images of who people are as females and males and how they should behave.
**Cognitive Theory.** Constructivism and cognitive theory are similar in that both theories conceive of learning as a mental activity (Ertmer & Newby, 2013). Cognitive Theory focuses on complex cognitive processes such as thinking, problem solving, language, concept formation and information processing (Snelbecker, 1983). Cognitive theories concentrate on the conceptualization of learning processes and examine how the information is received, organized, stored, and retrieved by the mind (Ertmer & Newby, 2013). From a cognitivist approach, each individual thinks about, and processes, their work-life balance differently. Further, individuals have different ideas about how their work-life balance should look, as well as different strategies for maintaining the balance. Individuals’ perceptions of work-life balance and information and communication technologies may be based upon what their organizations have taught them about the two constructs and how they fit into their workplace community.

**Social Cognitive Theory.** Albert Bandura’s Social Cognitive Theory suggests individuals have the capability for observational learning in which they expand individual knowledge and skills through modeling influences without personally going through a situation (Bussey & Bandura, 1999). Bandura also proposes a view of interactions between an individual’s behavior, internal personal factors, and environmental influences called “reciprocal determinism” in which the three operate as interlocking determinants of each other (Phillips & Orton, 1983).

Bandura’s Social Cognitive Theory can be used as a framework for this study; for example, individuals modeling their peers’ or supervisors’ behavior of using technology for work outside of work hours, or alternatively, maintaining a steady separation between the two domains. More so, individuals’ perceptions of work-life balance may be
influenced by their own (or their organizations) behavior, internal factors, and environmental influences such as their coworkers or supervisors. Perceptions of work-life balance are influenced by many different factors making them highly variable between individuals.

**Work-Life Balance**

Within recent years, how individuals balance their work and personal lives has become an increasingly popular topic among scholars and employers alike. Concerns about an imbalance between the two spheres, and the potential repercussions of the imbalance, are a catalyst for the rising interest. In their article, “Work-life balance: A review of the meaning of the balance construct,” Kalliath and Brough (2008) point out a shift in the literature in which work-life balance has previously been referred to as work-family balance. As the work force continues to diversify, organizations have made the shift to encompass employees who do not have children but seek balance between work and non-work activities including sports, travel, and study. The researchers note that although the body of literature is increasing, the field lacks a formal definition of the term ‘work-life balance.’

In their article, Kalliath and Brough (2008) analyzed six different definitions of work-life balance, and offered a formal definition including the most prominent aspects of the construct to satisfy all parameters that were deemed important. Through the years, work-life balance has been defined as multiple roles, equity across multiple roles, satisfaction between multiple roles, fulfillment of role salience between multiple roles, relationship between conflict and facilitation, and perceived control between multiple roles.
From the literature, Kalliath and Brough (2008) found two common themes within the definitions proposed: one involving the sense of ‘good balance,’ rather than framing the construct as a conflict, and the other involving the understanding that aspects of work-life balance are not static, and can change over time. Using these core themes, the researchers offered their own definition; “Work-life balance is the individual perception that work and non-work activities are compatible and promote growth in accordance with an individual’s current life priorities” (Kalliath & Brough, 2008, p. 326). Their definition incorporates the individual’s preference of the prominent role, while also recognizing that successful balance leads to positive growth and development within both domains, and one’s priorities can change to facilitate development in either.

In comparison, Greenhaus, Allen, and Spector (2006) suggest the balance can be defined as “the extent to which an individual’s effectiveness and satisfaction in work and family roles are compatible with the individual’s life priorities.” Grzywacz and Carlson (2007) dispute this definition by explaining practical issues that arise when defining work-life balance in terms of satisfaction. “Satisfaction is subjective, inherently retrospective, and under constant reconstruction based on recent and accumulated experiences” (p. 458); therefore, making it difficult to create effective and sustainable interventions to increase satisfaction (Grzywacz & Carlson, 2007).

As evidenced from the literature, individuals may have dramatically different definitions of work-life balance, varied experiences within the department or unit of their institution, and exist in multiple subcultures, which lead to assorted perceptions of the construct (Lester, 2015). It is important to note that levels of work-life balance are liable to change over time depending on current life circumstances (Kalliathe & Brough, 2008).
Employees in any given organization may be preparing for a newborn child or a big move, negotiating relationship difficulties, or dealing with a sudden change of income; individuals also experience unexpected life events, such as the loss of a family member, that may abruptly effect their work-life balance.

Lester (2015) mentions that work-life is connected to gender and is extremely contextual with fluctuating responsibilities of individuals outside of work, as previously mentioned, such as being a new parent or having an unexpected medical need. Mellner, Aronsson, and Kecklund (2014) note that with current and ongoing changes in modern working life, technology being at the heart, it is safe to assume that the pressure placed on employees to engage in integration, or boundary crossing, is continually increasing and making work-life balance more difficult to achieve. As Kalliath and Brough (2008) mention positive growth in both domains can result from successfully maintaining work-life balance, while unsuccessful balance may lead to negative outcomes for individuals.

**Work-Life Balance and Women.** Researchers have found that work-life balance is valued by a majority of employees and has important implications on individual’s well-being and work productivity (Haar, Russo, Suñe, & Ollier-Malaterre, 2014). However, there seems to be a higher rate of work-life conflict for women than men, partly because of institutionally embedded gender norms in which females must adjust their work role to meet the needs of their family role (Fahlén, 2014). Further, Fahlén (2014) states, “Family policies and gender norms shape men and women’s opportunities and expectations regarding work-life balance” (p. 387). Work-life balance itself is manufactured with complexities as each individual has different needs, definitions, and ways to manage their lives inside and outside of work (Lester, 2015). Like Fahlén, Lester (2015) emphasizes
that work-life balance is strongly shaped by gender roles and norms, social class, and sociocultural notions of family structures. Considering the number of influential factors of work-life balance, it is evident individuals in different situations may have varying perceptions of the construct.

Since the 1990’s, a trend has emerged suggesting dual income families becoming the norm (Emslie & Hunt, 2009). However, there is still a lack of equality in parents’ household contributions; women are still predominately responsible for domestic labor and childcare, which results in increased issues of work-life balance for women workers as compared to men. Supporting this claim, O’Meara and Campbell (2011) note findings of female faculty members’ tendencies to take on the childcare roles in their families regardless of their dual career status, which may be a result of the sociocultural norms.

Furthermore, the conflict is perceived at different levels for both men and women in different countries (Emslie & Hunt, 2009). In countries that had weaker work-family policy support and more traditional gender norms, the gender gap of role conflict was much larger; meaning, men experienced less conflict in balancing and maintaining their roles than women. From the results, the researchers suggest that individuals’ perceptions of work-to-home conflict and home-to-work conflict are institutionally embedded. That being said, it is important for employers to become aware of implications that follow having full time working couples without blatant support and acknowledgment of the responsibilities within their personal lives.

In her article, “To work or to care? Working women’s decision-making,” author Outi Jolanki (2015) takes a different approach to examining the demands and choices individuals must keep in mind when considering the integration or segmentation of work
and life. Jolanki mentions society’s move toward work-life balance regarding childcare, but has failed to take into consideration another component of the decisions middle-aged workers must make, which include the need to care for elders. Jolanki’s study focuses on addressing the question of how Finnish working women who care for their older parents argue for and against their decisions to work and provide care, and the meaning of work in these decisions (Jolanki, 2015).

The results of research show the complex combination of intertwining factors when making decisions about work and care (Jolanki, 2015); while the relationship between gender and care commitment is even more complex (Moen, 2011). Although women are usually more likely to engage in family-keeping affairs, which in turn strengthens their role as the primary caregiver (Gans & Silverstein, 2006); previous studies have shown that work is extremely important for women and few want to leave their work for child/elder care duties, which results in a desire for them to combine the two domains (Arksey & Glendinning, 2008).

The choice of caregivers to leave work, or reduce work hours, can result in the possibility of women’s work, career development, and health suffering, along with losing income and facing income insecurity later in life (Carmichael & Charles, 2003). It is common for parents and sons to expect daughters to take greater responsibility for care-taking tasks (Brody, 2004; Hequembourg & Brallier, 2005), women also seem to explain this role as a ‘nurturing instinct’ (Brody, 2004, p. 120). Moen (2011) suggests that the choice to leave work and take on the responsibility to care for another may be a result of women choosing to act in ways that conform to western stereotypical gender roles.
Jolanki (2015) closes by supporting the finding that though women assume care responsibilities many decline the thought of leaving work for care. Jolanki (2015) referenced the 2008 findings of Arksey and Glendinning who reported that women who have invested in care responsibilities may still be invested in developing and furthering their career; thus, choosing to find a balance between the fields of life. Difficult decisions such as these are commonly experienced and felt by female professionals around the world.

**Information and Communication Technologies and Work-Life Balance**

**Information and Communication Technologies and Telework.** Devices encompassed by information and communication technologies (ICTs), such as phones, laptops, and tablets, have many additional functions such as playing games, streaming music and videos, and connecting with social media. Although these devices, and ICTs in particular, are a critical aspect in work organization and management, they are also a main source of entertainments for all types of audiences. ICTs serve multiple purposes by enabling contact with those outside of work such as family members and friends. Even though these technologies have created a new level of connection for family and friends, the breakthrough of this technology has substantially impacted the business world.

Though numerous individuals hold jobs that necessitate fixed workspaces with rigid and explicit times to start and stop work, a number of individuals in the field of knowledge and information are able to use new technologies to make their work portable creating greater opportunities for where and when their work can be completed (Currie & Eveline, 2011). M.J. Niles was the first to coin the term “telecommuting” when referring to employees working away from the traditional office setting and communicating with it
by means of computer-based technology (Ng, 2006, p. 3). As a result of the shift in the ways work is organized and completed, the boundaries between home and work, both physical and temporal, are weakened causing increased difficulty in managing work-life balance (Currie & Eveline, 2011).

In their research, Currie and Eveline (2011) highlight technologies’ prompt to refine and reshape where individuals work and the speed at which they work. In light of this change, concerns about ways to limit the expansiveness of work have become increasingly important. In recent years, research has established that ICTs free workers from the confines of a typical work environment, enabling individuals to conduct work tasks ubiquitously, from any location.

Due to this technological advancement, telecommuting has emerged as a trend for workers in which some or all of their work is done outside a conventional office setting (Olson-Buchanan & Boswell, 2006). These technologies provide the opportunity for all workers to stay connected to their job while away or during non-work hours. Moreover, ICTs are creating a “hybridity” of workplaces, which allow workers to adjust and reorganize their working times and spaces to fit their personal needs (Tremblay & Genin, 2008, p. 705). Coupled with the capability to complete job tasks remotely, individuals may perceive a certain pressure to utilize these ICTs to maintain a connection to their jobs.

Tremblay and Genin (2008) reinforce the argument of some authors’ that telework and the use of information and communication technologies (ICTs) create higher levels of work-family conflict as a result of increased availability for work; while other researchers put posit that these same ICTs actually facilitate work-life balance
through more flexible work arrangements (Anthias & Mehta, 2003; Felstead & Jewson, 2000). With more innovative and affordable technologies, it is increasingly easy for employees to stay connected to work (Olson-Buchanan & Boswell, 2006).

Cox (2011), examines ways in which one may allow work integration into their personal life while also allowing their personal life to integrate into their work life, and thus offers the example of how telework may facilitate or thwart work-life balance. Telework resolves the issue of location by allowing an employee to work from home throughout a child’s sickness (Prasopoulou et al., 2006); while the blurred boundaries of flexible work may lead to abuse if the normal expectation is that individuals can be contacted about work related issues anywhere at anytime (Cox, 2011). In this scenario, issues of work-life balance shift from location-based to work-based, which is reflected in the need to be available to respond to work issues while at home.

As Edley (2001) notes, the boundaries between the work and life domains are permeable, demanding continuous efforts to keep a balance between the two. Further, there is a persistent paradox in which the same technologies that help individuals control the balance, also tethers them to their place of employment. Edley highlights the expectations employers have for their employees such as taking tasks home, meeting with clients or students after regular work hours, and being available by email, telephone, or pagers any time they are needed; at the same time, employees are expected to keep most aspects of their personal lives separate from their professional lives. Edley suggests that the boundaries between public and private spheres of life are a false dichotomy, as most employees never truly leave one sphere to enter the other.
Olson-Buchanan and Boswell (2006) examined how use of communication technologies outside normal working hours could relate to aspects of work and work-life outcomes. Individuals in traditional work settings were examined to understand the use of communication technologies (CT) to perform job-related functions during non-work time or, after hours. The authors described traditional work settings as those in which employees attend to their daily tasks at the organization, and spend approximately 40 hours a week working from within their office. The CTs the researchers examined were cell phones, emails, voice mail, personal data assistants, and pagers. Due to CTs, there is a robust connection between the media used to communicate within and apart from the workplace.

With the emergence of CTs, there is a greater possibility for work-life integration, blurring the line between the domains (Olson-Buchanan & Boswell, 2006). Through distribution of a variety of measures and surveys, the researchers focused on the use of CTs for work purposes during non-work time, identifying when an individual goes beyond traditional work boundaries. The researchers found evidence that roles individuals highly identify with are more readily integrated into other domains (i.e. work into life or life into work). Further, higher role-referencing is related to less negative reactions to role boundary interruptions, and high work to nonwork integrators set fewer boundaries for the use of CTs during nonwork time.

Olson-Buchanan and Boswell’s (2006) last finding suggested, high work to nonwork permeability is positively associated with high work-to-life conflict (Olson-Buchanan & Boswell, 2006). This means that, individuals who readily integrated their work into their personal lives were less likely to establish boundaries of when to use CTs
outside of regular work hours, and individuals who allowed permeability between their work and life domains experienced greater conflict of work-to-life. Work-life conflict is a form of inter-role conflict whereby the role demands of one domain interfere with meeting the demands of a role in another domain. The researchers suggest integration between nonwork to work helps reduce work-life conflict, while integration of work to nonwork increases work-life conflict.

Golden and Geisler (2007) conducted a study similar to my own, which focused on boundary management of work-life in regard to the personal digital assistant (PDA). For the study, the PDA was chosen because of its high functionality and mobility in that it resembles a hand-held computer, which allows the use of built in applications including access to notes, tasks, a calendar, and an address book. The goal of the study was to investigate individuals’ interpretations of PDA’s as a boundary management resource for work and personal life. By studying this phenomenon, researchers learned about boundary management behavior enabled by technological affordances while putting a focus on the dynamics of work-life boundary management that transcend specific technologies.

**Flexible Work and Higher Education.** Including other fields, the work done in higher education is among those impacted by technological advances. In an attempt to describe aspects of higher education that have shifted from the conventional university setting throughout the years, Bridges (2000) argues that the concept of “place” has shifted, partly because of technology. Learning management systems and email have both significantly impacted the way professors conduct their work, and the way students learn. Rather than attending office hours, students increasingly interact with professors through
email and other electronic communication. In the past, professors conducting research typically needed to be on campus in order to access information within the university’s library. Today, university affiliates have access to electronic library resources and databases, reducing the need for the physical presence of professors to complete their work responsibilities.

Though not all positions within a university can be categorized as knowledge and information driven, positions in academic affairs can. The majority of faculty work involves curriculum design, grading assignments, conducting and writing research, and communicating with their students and colleagues (Edley, 2001). Since most job tasks, aside from teaching, can be completed outside the traditional office setting, many academics have the opportunity to telework. Faculty may take work home to be completed, or to catch up. Many faculty members with children take advantage of this opportunity in order to fulfill both their work and home responsibilities.

**Higher Education, Work-Life Balance, and Women**

**Context of Higher Education.** Shaukat and Pell (2015) advise, “Higher Education contributes a substantial role in the development of a country. It is associated with the personal, social, economic, and cultural aspects of human beings, and underpins the goal of a substantial society” (p. 101). The authors continue by noting the opportunities provided by education, such as leading an educated life or contributing benefits to society. The benefits of knowledge and institutions of higher education develop individuals and increase the quality of life.

As previously mentioned, in his work, David Bridges (2000) listed four components that have historically defined the context of higher education: the identity of
place and time, and the scholarly and student communities within the institution. While the context of higher education has shifted, its structure is pervasively traditional in nature. Some job roles and tasks have persisted through the years, while others have foreshadowed the emerging changes in the organization of work duties and responsibilities.

Several distinctive positions lie within universities that come together to comprise a functional institute of higher education. As in any industry, there are employees whose job roles involve maintaining standard business operations such as finances, employees who are responsible for maintaining university facilitates, and the most widely recognized position of employment in higher education, professors. Individual universities have unique promotion and career path processes for professors, but are similar in overall structure (Comer & Stites-Doe, 2006).

Faculty are typically hired as either probationary or lecturers; lecturers are solely responsible for teaching, while probationary faculty assume teaching, research and service responsibilities. Within 5-7 years of employment, and based on contributions to each facet, probationary faculty are able to apply for tenure. If approved for tenure, faculty are granted “near permanent status within the university” (p. 244), so long as no policies or laws are violated. Among other categorizations, instructors’ positions are ranked as either assistant professor (lowest), associate professor, or full professor (highest). How faculty move through these positions is dependent upon a number of complex factors, including their dedication to their work. Though dedication does not guarantee tenure, research has found that faculty working 60 or more hours a week have greater publishing success (Jacobs & Winslow, 2004).
Comer and Stites-Doe (2006) published “Antecedents and consequences of faculty women’s academic-parental role balancing,” wherein they examined role balancing of the multifaceted responsibilities of being an academic and a parent. When discussing the theoretical focus, the authors use and define the term academic role as a broad encompassment of the activities relating to a faculty member’s teaching, research and scholarship, and both professional and institutional service; each of which are considered during evaluation, promotion and tenure of faculty.

The relationship of balancing life and work becomes increasingly complex for faculty raising children. Comer and Stites-Doe (2006) offer two outcomes of role balancing, individuals’ satisfaction with career and parenting, and success associated with career and parenting. Academics who struggle with excessive and demanding roles in either domain, may subsequently experience dissatisfaction with their career and parenting (Martins, Eddleston, & Veiga, 2002; Kinnunen & Mauno, 1998).

Affordable and accessible childcare is frequently mentioned among possible solutions to alleviate some of the burden on academics (Comer & Stites-Doe, 2006). However, there is growing evidence indicating the significant health benefits (mental, social, and physical) of extended parental exposure for infants (Schmied & Lupton, 2001); thus, some researchers suggest alternative solutions for supporting new parents/employees, which involve extended paid maternity or paternity leave, and a steady process of return to full-time. Dagher, McGovern and Dowd (2013) found, a positive linear association between leave duration and maternal physical health, especially during the first twelve weeks after childbirth (p. 399). In addition, mothers who took extra days off after returning to work had a lower chance of experiencing
postpartum depression. The results support the persistent and continuous need for opportunities such as those provided by the Family and Medical Leave Act; although, the researchers conclude the twelve week leave may not be adequate for mothers at risk for, or experiencing, postpartum depression.

Persistent findings identify the United States as one of the least progressive industrialized countries in regard to generosity of parental leave policies (Ray, Gornick, & Schmitt, 2010). Further, Heymann and Earle (2010) report, the United States is one of four countries in the world that do not provide paid maternity leave as a statutory right. The lack of societal support for benefits places the responsibility of creating and implementing such programs and policies on academic unit heads, deans, and other university leaders (Sorcinelli, 2000); however, every leader interprets and endorses university policies differently, resulting in inconsistent support throughout the institution. To facilitate role balancing, universities should consider adopting uniform family-friendly policies and explore flexible, or part-time, tenure tracks to lessen the demands of full-time academic jobs to reflect more reasonable expectations (Jacobs, 2004).

**Faculty Women in Higher Education.** Between 1984 and 2000, the amount of full-time female faculty members in the United States increased from 25% to 37% (Hamermesh, 2002). Further, in 1958 only five percent of women were doctoral recipients in STEM fields, in relation to 52 percent earned by women since 2006 (Clark & Hill, 2010). With an increased presence in academia, females work-family issues require attention (Comer & Stites-Doe, 2006).

Though women constitute a fair portion of academic positions, they struggle to progress to higher ranks in academia (Mason & Goulden, 2004). This may be for many
reasons; the authors suggest one reason may involve the rigid structure of the American workplace. They note, “The employment structures are constructed for the typical male career of the nineteenth century, in which the male was the primary breadwinner and the woman was responsible for raising children” (p. 88). This set structure presses women to choose between work and family. As an example, their research shows women who have children shortly after completing their doctorate program are less likely to achieve tenure than men who have children at the same point in their careers. The researchers suggest the circumstances of fast-track professions, such as long work hours and required travel, during the same phase most women are beginning families and child-rearing, as a central factor that presses women to leave rather than deliberate discrimination (Crittenden, 2002; Hochschild, 1989, 1997; Mason, 1988, 2000; Williams, 2000).

There is evidence showing female faculty report lower rates of marriage and have fewer children than male faculty (Pena, 2001). Moreover, female faculty are more likely than male faculty to marry other academics (Astin & Milem 1997). As stated previously, female faculty are conscious about the influence marriage and children may have on their academic careers (Armenti, 2004); females may also omit or postpone having children, or alternatively, plan births around the academic year so that childbirth occurs during the summer to avoid potential negative career repercussions (Finkel & Olswang, 1996). The delay of childbirth may negatively effect fertility (Varner, 2000); while stopping the tenure clock may negatively effect colleague’s perceptions of commitment and productivity (Armenti, 2004; Monroe, Ozyurt, Wrigley, & Alexander, 2008).

Potential reasons female faculty delay, or omit, having children may derive from failures of the academic profession to recognize the differences among the female and
male life courses (Armenti, 2004). Armenti suggests that most academics entering the field are well into their twenties, and thirties, which is in accordance with most females childbearing years (Committee on the Status of Women in Universities, 1988); thus, as females are beginning their careers, they are simultaneously making choices about their personal and family lives (Armenti, 2004).

The insensitivity to childbirth timing may be a result of the inflexible career path of academics that was previously established around the male life course (Armenti, 2004). Moreover, having a child during an academic semester may disrupt work for the female, her colleagues and department chair as they are likely to assume the faculty member’s responsibilities for the duration of the leave (Comer & Stites-Doe, 2006). Though child rearing is a major component in the career progression of faculty women, and women in any other profession, they experience difficulty combining work and family responsibilities for other reasons as well. The current study aimed to identify some of those factors.

**Non-Instructional Staff in Higher Education.** Universities function primarily as centers for higher learning, though these organizations operate as businesses as well. Aside from offering courses for students to take, and providing educational experiences, universities house several offices responsible for typical business functions. Within James Madison University specifically, four of the five university divisions are responsible for tasks outside of teaching and learning functions; the divisions include: Access and Enrollment Management, Administration and Finance, Student Affairs and University Planning, and University Advancement (JMU, 2014). The roles within these divisions entail: admissions, financial aid, university events, facilities management,
human resources, postal services, disability services, residence life, health and wellness center, marketing, and development. A comprehensive breakdown of the University organizational chart is located in Appendix E.

Although university employees are predominantly thought of as professors, a large portion of the personnel are responsible for organizational functions, such as those previously mentioned. Many of these non-instructional employees perform duties essential to running organizations efficiently. At a basic level, several positions within these offices perform clerical and administrative duties including, but not limited to, organizing and preparing documents, scheduling appointments, and supporting other staff (Bureau of Labor Statistics, 2016). Advanced responsibilities include: planning meetings and events, recommending and making purchases, handling traveling arrangements, and conducting software trainings (Bureau of Labor Statistics, 2003).

Employees’ position level, responsibilities, and autonomy, may vary depending upon their specific job role. Although faculty members are not bound to working the traditional business hours (9am-5pm), it is a common requirement for non-instructional staff because of the nature of their work. In addition to working standard business hours, these employees work in traditional office settings, such as those found in the corporate sector (Bureau of Labor Statistics, 2003).

Policy and Culture in Higher Education. To combat the issues of work-life balance, and to gain support, many organizations including those of higher education, have established work-life balance policies. Newman and Mathews (1999) defined work-family policies as “arrangements to support employees faced with balancing the competing demands of work and family in today’s fast-paced, complex environment” (p.
Such policies and practices have typically included organizational support for dependent care, flexible work options, and family or personal leave (Estes & Michael, 2005). The White House’s 2012 Workplace Flexibility Report proposed research suggesting flexible work arrangements reduce absenteeism, turnover and help recruitment (Workplace Flexibility Report, 2012, p. 17). Supporting such initiatives may save organizations between hundreds and thousands of dollars per year per employee (Corporate Voices for Working Families, 2004). With the increase in both dual career couples, and working women now approaching approximately 50% of the workforce, there has been a surge in the implementation of policies, practices, and professional development opportunities (Workplace Flexibility Report, 2012; Lester, 2015).

Despite the expressed desire for these policies to be put in place, they are rarely used (Lester, 2015). Blair-Loy and Wharton (2002) found that some organizations adopt these policies as a mere symbolic value to portray legitimate concern rather than sincere intentions. Though often necessary to protect employee rights, the determinants of policy usage are highly aligned with peer and supervisor support; backed by Kirby and Krone (2002) who suggest “the daily discursive practices of individuals can either reinforce or undermine formally stated work-family initiatives” (p. 50).

Jamie Lester (2015), of George Mason University points out that research supports the connection between policy usage and cultural norms; yet, fewer studies have examined the work-life balance cultural change in higher education, compelling him to conduct a case study of two universities to examine the fragmenting work-life balance culture. In the university setting, even with established policies, individuals rarely leave following the birth of a child or stop the tenure clock in fear of subsequent repercussions.
Culture has repeatedly been cited as one of the main reasons university surveys report small percentages of faculty and staff taking advantage of the family and medical leave policies (Thompson, Beauvais, & Lyness, 1999; Ward & Wolf-Wendel, 2012). Low participation in work-life balance policies is a result of the lack of cultural norms that aim to reduce the stigma of family and medical leave; in other words, policies are not being utilized because of “mostly discouraging cultures” (Lester, 2015, p. 141).

Research recommends cultural change be established to support policy usage and to alleviate the stigma of work-life balance (Thompson, Beauvais, & Lyness, 1999; Ward & Wolf-Wendel, 2012). The literature proposes that organizations can achieve supportive work-life cultures through shared meanings and values (Lester, 2015). As defined by Thompson, Beauvais, and Lyness (1999), a supportive work-life culture “[is] the shared assumptions, beliefs, and values regarding the extent to which organizations value and support the integration of work and family lives, for women and men” (p. 394).

However, achieving these supportive work-life cultures may prove difficult as researchers suggest rather than one unifying organizational culture, these cultures are ambiguous, disorderly, and always shifting (Alvesson, 2002; Calas & Smircich, 1987; Martin, 1992). Lester (2015) elaborates, each individual comes to organizational culture with varying perspectives and have unique experiences that are actively shaped by their unit or departmental position. Each individual’s reality is understood and interpreted differently dependent upon their circumstances (Martin, 1992). Due to the inconsistency, ambiguity, and lack of consensus Lester (2015) suggests organizational cultures are fragmented.
O-Meara and Campbell (2011) found that both male and female faculty were more likely to use work-life balance policies if they felt support within their departments. Further, institutional context in the form of flexible work expectations influences faculty members’ perceptions of power which create situations that allow for work-life balance. Thompson, Beauvais and Lyness (1999) validate the same finding in their study about work-family culture’s influence on benefit usage, organizational attachment and work-family conflict. A supportive work-life culture has been defined as, “the shared assumptions, beliefs, and values regarding the extent to which organizations value and support the integration of work and family lives, for women and men” (Thompson, Beauvais, & Lyness, 1999, p. 394).

From their research, Thompson, et al. (1999) found a significant relationship ($\beta = -.215, p < .01$) between the perception of a supportive work-family culture and work attitudes (p. 406). In addition, they identified three dimensions of work-family culture: perceived managerial support, negative career consequences for dedicating time to family concerns, and organizational time demands and expectations that interfere with family responsibilities. Further, when employees perceived fewer career repercussions for devoting time to family and fewer time demands that interfere with home life, individuals reported lower levels of work-family conflict. Adopting and openly endorsing policies and supportive work-life cultures increase affective commitment to work and decrease intension to leave.

Now that the literature has been reviewed, chapter three will discuss the methods used in the study. The research design, participants, instrument and data collection procedures will be reviewed in the chapter.
Chapter 3: Methods

In this section, I will review the research design I used for the current study. The participant sample, instrument, data collection methods and procedures, data analysis, limitations, reliability and validity will also be covered in detail.

Research Design

This mixed methods study examined female university employees’ perceptions of their work-life balance and technology’s role in the equation. The mixed methods approach involved collecting and integrating both quantitative and qualitative data, then drawing interpretations based on the results (Creswell, 2015). This approach was taken when designing the study because the combined strengths of the results from each type of data provide a more comprehensive understanding of the problem than quantitative or qualitative research alone could provide.

Quantitative data draw conclusions from a small number of people to larger populations, such as the overall perception of employees’ work-life balance and technology usage; while qualitative data explore personal experiences with work-life balance and offer deeper investigation of individual perspectives of how their current position is involved with issues of work-life balance (Creswell, 2015). The data for this study were integrated using an explanatory sequential design in which the data sets were first analyzed individually, then integrated for further analysis. The qualitative data collected was used in an attempt to explain the quantitative data in order to achieve a deeper understanding of the information.

As Edley (2001) notes, the boundaries between the work and life domains are permeable, demanding continuous efforts to keep a balance between them. For this
reason, I was interested in examining women’s perceptions of technology’s effect on work-life balance. The current study exists as a similar, but different approach to the study conducted by Edley (2001) in the understanding of technology and women workers’ work-life balance. In the current study, the same survey was administered to both instructional and non-instructional female staff and faculty members to compare the perceived balance, or imbalance, of their work and life domains. The survey also inquired about individual perceptions of technology’s effect on work-life balance. Comparisons were made between instructional and non-instructional female staff and faculty because I hypothesized there were differences between the balance of work and life among the two groups. More so, I hypothesized the degree to which female employees perceived their work-life balance would differ depending on the nature and form of their work.

The purpose of the study was to determine the perceived level of work-life balance of female employees at an institute of higher education, including the effect of information and communication technologies such as email and instant messaging. Research questions include:

- What percentage of participants perceive an imbalance between their work and life domains because of information and communication technologies?
- Is there a difference in the perceived work-life balance of female instructional and non-instructional employees?
- Is the distribution of perceptions of work-life balance approximately normal for both instructional and non-instructional employees?
Sample and Population

The target population includes female staff and faculty at all four-year institutions in Virginia; however, the accessible population for this study included all female staff and faculty at James Madison University, a mid-sized liberal arts college located in northwestern Virginia’s Shenandoah Valley. With approximately 20,000 students, the university is comprised of nearly 2,800 faculty and staff (About JMU, Just The Facts, 2014). Of the 2,800 employees, 993 are Full-Time Instructional Faculty, 393 are Part-Time Instructional Faculty, and 1,308 are Full-Time Classified Staff (About JMU, Just the Facts. 2014). A list of employee position definitions can be found in Appendix A, and a list of instructional faculty rank classifications can be found in Appendix B.

Approximately eighty percent of the student body is white, it may be possible that employee ethnicity statistics are similar. With a student gender ratio of 60:40 females to males, it is again likely the ratio is similar for faculty and staff. Jones and Taylor (2013) note increasing participation in higher education for females, highlighting the importance of understanding the research problem. Ages of participants ranged from age 22 to age 68.

Purposive sampling techniques (Fraenkel & Wallen, 2011) were utilized for the study, as all female faculty and staff members at the university were identified for participation in the study (p. 99). Further, purposive sampling was utilized because every member of the population, female staff and faculty members at James Madison University, had an equal chance to be involved in the study. By making participation in the study accessible to all female faculty and staff members, I hoped to receive a large sample size that would accurately represent the population.
Data Collection and Instrumentation

Participants in the study anonymously completed a survey administered through Qualtrics, an online survey software. The instrument was created for the purpose of the study and included approximately 33 survey items in which the respondents were asked to indicate their feelings and perceptions of work-life balance, information and communication technologies, and the relationship between the two. The survey included 30 close-ended survey items that were scored on a Likert scale system, multiple choice matrix, or drop down items. Typically, the response options ranged from strongly agree to strongly disagree, or always to never. There were three open-ended questions, which gave participants the opportunity to elaborate on their experiences involving work-life balance in the position they currently hold within the university. Both instructional and non-instructional staff completed the same survey to identify differences between the two groups. A copy of the survey can be found in Appendix C. Sample items from the survey include:

Perceptions of Work-Life Balance

- Overall, what is the balance between your work life and your home life?
  - Very well-balanced, somewhat well-balanced, somewhat out of balance, not balanced

- Which of the following best describes your feelings of stress in regard to work-life balance?
  - Very stressful, stressful, slightly stressful, not at all stressful

- To what extent do the demands of your work interfere with personal life?
  - Always, often, sometimes, never
Perceptions of Information and Communication Technologies (ICTs)

- How often do the demands of your work interfere with your personal life due to ICTs?
  - Always, often, sometimes, never

- How often do you perceive ICTs as useful for managing your work-life balance?
  - Always, often, sometimes, never

- How often does your mobile device create pressure on your work-life balance?
  - Always, often, sometimes, never

Open-Ended Questions

- In what ways do you think JMU works to support a balance between work life and home life for its employees?

- What would a good balance or successful integration of work life and home life look like for you?

The survey was made available and sent to the population at the beginning of the Spring semester, in February of 2016. An email was sent to all participants, inviting them to complete the survey at their earliest point of convenience. The study’s consent form was attached in the body of the interest email and can be found in Appendix D. The survey was open for approximately nine days to provide sufficient time for participant response. Participation from all subjects was highly anticipated but not required. The survey took participants no longer than approximately 10 minutes to complete.
Since some survey items asked participants to express their true feelings and perceptions about aspects of their current job, precautions were taken to maintain anonymity of survey responses. For example, although the participants received the survey through their employee email account their responses were not linked back to their email, instead the responses were anonymously recorded and the email address collectors within the online survey system were inactive. Before participants completed the survey, they answered a few questions pertaining to the nature of their job including how long they have been in their position and how their position is classified.

Validity and Reliability

There are numerous considerations around the validity and reliability of the study. In an initial attempt to create a valid measure, survey items were constructed based on key components of previous studies. Though this does not guarantee validity, basing items off those developed from previous research increases the probability. Reliability, or stability, of the quantitative portion of the survey may be measured using the test-retest method in which participants complete the questionnaire at two different times to compare results (Charles, 1995). If the measure is stable, and the results may be repeatable, there is potential the survey is reliable (Golafshani, 2015). Another method to test the reliability and validity of the instrument may involve a replication of the study, or to conduct a longitudinal study in which the results may be studied over a number of years. A longitudinal study would allow researchers to examine the change of results throughout a certain period of time (Fraenkel & Wallen, 2009).

Validity refers to the appropriateness and usefulness of inferences made based on the data (Fraenkel & Wallen, 2009, p. 148). In an attempt for reliability and validity, the
survey was piloted with individuals who are a part of the target population before it was administered. Five individuals completed the pilot survey and provided feedback about the ordering and wording of questions. The instrument was updated and revised based on the pilot feedback. Once changes were made to the instrument, the pilot survey data were destroyed.

Validity and reliability of qualitative methods involve credibility, transferability, and trustworthiness (Golafshani, 2015). The current qualitative methods can be determined as reliable because the study helps generate understanding of the issue of work-life balance for women in higher education (Stenbacka, 2001). Qualitative methods should be judged by its own paradigm, in which terms such as applicability and transferability are relevant criteria for quality (Lincoln & Guba, 1985). If the validity or trustworthiness can be increased or measured, the qualitative data may result in generalizability which is typically a sign of a strong research study (Stenbacka, 2001). The current study may prove valid or reliable if the qualitative responses are supported by the literature on work-life balance.

Triangulation is a method used to improve the validity and reliability of research findings by combining multiple methods of data using both quantitative and qualitative approaches (Patton, 2001). Triangulation aligns with both the realism paradigm, and constructivism, which each suggest there are multiple and diverse perceptions about knowledge and reality (Healy & Perry, 2000); and thus, necessitate a variety of data collection and analysis methods for validity and reliability (Johnson, 1997). Triangulation was used to identify convergence among the various information collected to then form
themes and subthemes in an attempt to best establish and portray truthful information (Creswell & Miller).

Data Analysis

Mixed methods research designs entail both quantitative and qualitative data analyses. As a first step, the data was cleaned to ensure the data are useful and functional for the intended analyses; this process includes ensuring accuracy and completeness, as well as eliminating errors and redundancy. Then, for the quantitative analysis, the descriptive statistics were used to analyze the data. Data such as mean and standard deviation were analyzed and recorded from the responses. Qualtrics, the software used to develop the survey was also used to compute and analyze the descriptive statistics.

A comparison was made between the instructional and non-instructional employees’ responses to identify potential differences. The Statistical Package for the Social Sciences (SPSS) was used to run and analyze the inferential statistics. An independent samples t-test was conducted to compare whether the means of the two groups, instructional and non-instructional faculty and staff, were statistically different from each other. The t-test indicated the groups have significantly different perceptions of technology and work-life balance. SPSS was also used to run correlations between various survey items.

The four open-ended questions were analyzed using thematic coding, a form of content analysis (Frankel & Wallen, 2009), to organize and synthesize the information into descriptive themes regarding how participants perceive JMU’s efforts to support work-life balance, how they could improve support, what a good balance would look like, and any other comments about work-life balance. Using an inductive (emergent) coding
technique allowed me to identify themes that emerged within the data while examining it, instead of postulating pre-set themes (Charmaz, 2014).

General segments and lines of data were identified during initial coding which allowed for common trends to surface (Charmaz, 2014). The data was examined multiple times before preliminary categories were set. Focused coding was used to move through all the data to get a closer look at how participants were responding to the questions. Axial coding and theoretical integration were the final tasks in the initial coding and analysis phase (Charmaz, 2014). The data was organized by theme and subtheme, which was then put together for comprehensive examination. In Microsoft Excel, later in the analysis, enumeration was used to quantify certain word’s appearances in the data (Charmaz, 2014).

Themes were developed to facilitate identifying commonalities and differences among employee’s perceptions as they relate to the key variables. To analyze the data, I imported it from Qualtrics into Microsoft Excel to organize and reformat the responses. During this process, any responses that were incomplete or unusable were removed from the data set.

Threats

Due to the nature of the study, there were a variety of potential threats to internal validity including subject characteristics, mortality, instrument, maturation, and history (Fraenkel & Wallen, 2011); it is possible other variables could have influencing factors on the results. Personal and environmental factors such as the attitudes, time of day, and time of year the survey was distributed may have impacted the results.
Mortality is always a threat to the validity of a study when subject participation is not required. The participants in the study had the option of not responding to the survey, or starting the survey and not fully completing it. The loss of participants in the study limits the generalizability and is one of the most difficult threats to control for (Fraenkel & Wallen, 2011). The location of the study may or may not have been a threat to the validity depending on where the participant decided to take the survey, as the survey was online and could be accessed anywhere with Internet connection. If respondents decided to answer the survey questions on campus during work hours, their responses may have reflected their current mood while at work. If respondents took the survey outside of regular work hours, they may have responded to the questions differently than they would have if they responded while at work. To minimize potential threats to internal validity, I aimed to standardize the conditions of the study, obtain a sufficient amount of information on participants, and use an appropriate measure.

Since the study was issued electronically through Qualtrics, as the researcher, I did not come in contact with any participants; because there was no contact with participants, the threat of subjectivity is of low concern. Though, respondent characteristics may have effected which individuals chose to participate in the study. The culture and climate at the University may play into this, as there has been a recent push for the University to move towards a more research focused institution. As a result, individuals’ choices to voluntarily participate may have increased. The data was analyzed using a statistical software program in which the data was directly imported into the program, then quantified and put into charts for analysis. The qualitative responses were
analyzed without any preconceived notions about what the data may show. Thus, there is minimal concern of researcher bias during the data analysis.

As the study was conducted on the university campus, I presume the quantitative results of the study are generalizable, at least, to similar populations of employees at other universities. Generalizations would be possible for universities of similar size, socioeconomic make-up, and profiles. Although the results of the current study should not be generalized to small or large businesses outside of academia, future studies could recruit participants in other fields to better understand female employees’ perceptions of work-life balance and technologies. Further, ecological generalizability could be possible if a similar study was conducted outside the university setting.

**Limitations**

A limitation of the current study involves the use of a novel instrument to conduct the study. If possible, the study should be replicated in a similar university setting to determine the usefulness of the instrument. From the results of a replication study, I would be able to make the necessary adjustments to the scale to produce the most accurate and relevant information. As the survey was administered for the first time, I conducted a couple of sessions with the target population to ensure usability. Instead of these sessions, I could have conducted a pilot test using more participants. The purpose of conducting a pilot study is to identify any potential issues so they can be resolved before the entire study is carried out (Fraenkel & Wallen, 2011).

A limitation that will always be of concern to research of this nature involves the response rate. With no consequences for not responding to the survey, it is difficult to ensure participation from the entire population sample. Finally, the nature of the results
provides some insight into associations between variables rather than causality; more research may need to be conducted to identify specific instances of causality between variable associations identified in the results.

If the current study has failed to determine the perceptions of academic faculty and staff regarding work-life balance, the study should be redesigned to address certain aspects that remediate the study’s deficiencies. If the instrument has proven to be substandard, certain measures should be taken to adjust the drawbacks. A potential solution would be to revert to an interview style survey to get more descriptive and comprehensive responses from participants.

**Protection of Human Subjects**

Prior to completing the survey, all participants received an informed consent document, which notes that the participant gave consent for me to use the information obtained within the study for research purposes, and any potential harm of participating in the study. There was low risk for participants of the study, and as the researcher, I did not foresee any harm coming to the participants as a result of participation. The confidentiality of the participants was kept and any data collected from the study was not used for purposes other than the current, stated one. Further, by giving informed consent, the participants recognized their right to withdraw from the study at any point in time. Following the completion of the study, all data was destroyed.
Chapter 4: Findings

This study examined female staff and faculty members’ perceptions and experiences with work-life balance, as well as the effects of technology on this issue. The mixed method design adopted for this study used triangulation, in which multiple forms of data were collected and analyzed. The two forms of data were first analyzed individually then combined to determine if the methods worked in support of each other to develop a singular, comprehensive understanding of the current issues. In this section I will present both quantitative and qualitative findings from the study. The response rate and demographic information will also be addressed. The data are represented with a variety of charts and graphs to highlight the frequency and characteristics of responses.

Survey Results

A total of 297 surveys were returned, with 253 surveys completed by women, and a 70% completion mean. Two-hundred fifty-three respondents equate to a 15% response rate. The total number of responses per question varied, with \( n = \) between 220 and 250 for most questions. The final four questions regarding work-life balance (Questions 24, 25, 26, and 27) were qualitative and yielded a varied number of responses, with \( n = 147, 148, 128, \) and 80 respectively.

Two-hundred and sixty responses were recorded on the first day the survey was open and eighteen responses were recorded on the second day. After the second day the numbers tapered off, with two respondents on the last day the survey was open. The survey was open for a nine-day period.
Figure 2: Survey start and completion dates

The Work-Life Balance and Technology survey was created using a mixed-methods research design in order to yield the greatest, and most comprehensive, data regarding the effects and perceptions of technology on work-life balance for women in higher education.

**Demographics.** Employees who participated in the survey were asked approximately 13 questions in relation to their work and life domains. The number of questions respondents were asked depended on their responses to certain questions. For example, only participants who indicated their position was categorized as instructional faculty were asked about their faculty rank and tenure-track. The following figures and tables illustrate the responses categorized by, number of children/relatives an individual is responsible for, age, race or ethnicity, marital status, department/division, and employee position classification.
Q1: Please indicate which gender you most identify with.

The first question asked participants to identify which gender they most identified with: female, male, or other, in which participants were given the choice to type in their response. Although the focus of the study was on females, the university bulk email request did not offer the option of specifying the gender of the population; thus, the initial question asked participants to disclose the gender they most identify with, and if participants responded male, the survey force closed. A total of 297 individuals responded to the survey, 253 of whom were female, and 44 of whom were male. The remainder of results reported in this chapter are from female participants’ responses.

Q2: How many years have you worked at JMU?

This question yielded 249 responses with the mean duration of employment by JMU being approximately 9 years. The shortest reported duration of employment by JMU was approximately 4 months, and the longest was approximately 34 years.

Q3: How old are you?

Of the 253 participants, ages ranged from 22-68, with the average age being approximately 43 years old.

Q4: Please select the race or ethnicity you identify with the most.

The fourth question of the survey (n = 249) asked participants to indicate the race or ethnicity they identified with the most. Ninety-two percent of respondents indicated they were white (228 participants), which relatively aligns with the estimated race and ethnicity percentages among the student population at the university.
Figure 3: Participant race and ethnicity

Q5: Which best describes your marital status?

Two-hundred and forty-nine participants responded to question five. One-hundred and seventy-three participants indicated they were married, 52 single, 21 divorced, 2 separated, and one widowed.

Figure 4: Marital status
Q6: Please indicate the number of children in each age group for whom you are responsible.

A total of 174 participants indicated they had children. A majority reported they had one or two toddlers, middle school, or post high school children.

![Figure 5: Number of children](image)

**Q7: Do you have the responsibility of caring for an elderly or disabled parent/grandparent/in-law or other relative?**

Question 7 asked participants to indicate if they had the responsibility of caring for an elderly or disabled parent/grandparent/in-law or other relative; there were 249 responses to this question, and only 39 stated they were responsible for caring for another person other than their children.
Figure 6: Responsibility of caring for elderly/disabled family

Q8: The individual you are responsible for is:

For individuals that indicated they had the responsibility of caring for someone else, they were asked about the perimeters of the care. Specifically, 39 participants were asked to identify whether the individual they are responsible for is living with them (7 respondents), local but not living with them (20 respondents), or not local (12 respondents).
Q9: Which best describes your current position at JMU?

A total of 246 participants responded to question nine; one hundred-thirteen respondents identified as having faculty positions, and 133 respondents identified as having staff positions at JMU.

Figure 7: Living arrangements of individual needing care

Figure 8: Current position
Q10: Which best describes your work schedule at JMU?

Two-hundred forty-six participants responded to the question; two-hundred and twelve identified as full-time employees, while only thirty-four responded as part-time.

![Current Schedule](image)

*Figure 9: Current schedule*

Q11: Which department/division is your current position at JMU?

A total of 240 participants responded to question ten. Thirty-six respondents indicated their department was classified in the “Other” category, meaning the survey item was missing multiple employee departments or divisions. Although, participants may have chosen to not disclose this information in efforts to protect their identity.

Q12: Your current position at JMU is:

Two-hundred and forty-five participants responded to the question. Eighty-seven responded as classified employees, fifty-eight responded as administrative and professional faculty and seventy-two responded as instructional faculty. Appendix A includes a list of the definitions of each position.
Q13: Please indicate your rank.

A total of sixty-nine participants who identified as instructional faculty, indicated their rank. A majority identified as professors (21 participants), assistant professors (19 participants), associate professors (11 participants) and lecturers (11 participants).

Appendix B lists each faculty rank with the corresponding position description.

Figure 11: Faculty rank
Q14: Do you currently have tenure, or are you currently tenure-tracked?

Seventy-two participants who indicated they were instructional faculty in Question 12 responded to question fourteen; forty-seven indicated they had tenure, or were tenure-tracked, and 25 indicated they were not.

Figure 12: Tenure or tenure-tracked

Q15: How helpful would the following be for your current and anticipated family care needs?

Question 15 asked participants to indicate which of the five accommodations would be helpful to their family needs: flexible work schedule, supervisor support, peer support, back-up elder care referral services, and back-up child care referral services.

Since the question has multiple components, the results are broken out into five charts, one for each accommodation. Descriptive statistics for Question 15 can be found in Table 3.
Q15-1: Flexible work schedule

Of the 221 responses to the question, a majority of respondents (78%) indicated a flexible work schedule would be very helpful.

Figure 13: Perceived helpfulness of flexible work schedule

Q15-2: Supervisor support

Seventy-three percent of participants reported supervisor support as being very helpful in regard to work-life balance. One percent indicated it would not be helpful at all.
Figure 14: Perceived helpfulness of supervisor support

**Q15-3: Peer support**

A little over half (55%) of participants indicated peer support would be very helpful regarding work-life balance. Forty-three percent said it would be helpful, and two percent said peer support would not be helpful.

Figure 15: Perceived helpfulness of peer support
Q15-4: Back-up elder/adult care service referrals

Thirty-one percent of participants reported back-up elder care service referrals would be very helpful, and forty-six percent said it would be helpful. Twenty-three percent reported this accommodation would not be helpful.

![Diagram showing distribution of helpfulness of back-up elder/adult care service referrals: 31% Very Helpful, 46% Helpful, 23% Not Helpful.]

*Figure 16: Perceived helpfulness of back-up elder/adult care service referrals*

Q15-5: Back-up children care service referrals

Thirty-six percent of participants reported back-up children care referrals would be a very helpful accommodation, forty-five percent said it would be helpful, and nineteen percent said it would not be helpful.
Figure 17: Perceived helpfulness of back-up children care service referrals

Table 2.

Percentages of perceived helpfulness of accommodations

<table>
<thead>
<tr>
<th></th>
<th>Very Helpful</th>
<th>Helpful</th>
<th>Not Helpful</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flexible work schedule</td>
<td>78%</td>
<td>22%</td>
<td>0%</td>
</tr>
<tr>
<td>Supervisor support</td>
<td>73%</td>
<td>26%</td>
<td>1%</td>
</tr>
<tr>
<td>Peer support</td>
<td>55%</td>
<td>43%</td>
<td>2%</td>
</tr>
<tr>
<td>Elder care referrals</td>
<td>31%</td>
<td>46%</td>
<td>23%</td>
</tr>
<tr>
<td>Child care referrals</td>
<td>36%</td>
<td>45%</td>
<td>19%</td>
</tr>
</tbody>
</table>

Table 3.

Descriptive statistics of perceived helpfulness of accommodations

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Variance</th>
<th>Standard Deviation</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flexible work schedule</td>
<td>1.23</td>
<td>.18</td>
<td>.43</td>
<td>221</td>
</tr>
<tr>
<td>Supervisor support</td>
<td>1.28</td>
<td>.22</td>
<td>.47</td>
<td>216</td>
</tr>
<tr>
<td>Peer support</td>
<td>1.46</td>
<td>.28</td>
<td>.53</td>
<td>212</td>
</tr>
<tr>
<td>Elder care referrals</td>
<td>1.91</td>
<td>.54</td>
<td>.73</td>
<td>93</td>
</tr>
<tr>
<td>Child care referrals</td>
<td>1.84</td>
<td>.52</td>
<td>.72</td>
<td>110</td>
</tr>
</tbody>
</table>
Quantitative Results

Following the initial demographic questions was a quantitative section. The questions in this section asked about work and life demands and experiences. Questions 16-22 looked at work-life balance, and conflict. Questions 28 (1-11) asked about technology in regard to work-life balance in different ways including its influence on time-management, whether it creates pressure or not, and whether participants feel ICTs help maintain work-life balance.

Q16: How many days away from work have you needed to take in order to address personal or family care needs?

Question 16 inquired about the number of days needed away from work in order to take care of personal or family needs. Of the 236 responses, a majority of participants (61%) indicated they spent five, or fewer days away from work for personal or family needs.

![Number of Days Away From Work For Personal/Family Needs](image)

*Figure 18:* Number of days away from work for personal/family needs
Q17: Overall, what is the balance between your work life and your home life?

Question 17 asked participants to indicate the overall balance between their work life and home life, and yielded \( n = 238 \). One-hundred eighteen individuals (50%) responded by saying they were somewhat well-balanced, while 59 participants indicated their work life and home life are somewhat out of balance.

![Overall Balance Between Work Life and Home Life](chart.png)

**Figure 19:** Overall balance between work life and home life

Table 4.

*Descriptive statistics of overall balance between work life and home life*

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>2.16</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>0.65</td>
</tr>
<tr>
<td>Total Responses</td>
<td>238</td>
</tr>
</tbody>
</table>

Q18: Which of the following best describes your feelings of stress in regards to work-life balance?

A total of 239 participants responded to Question 18, in which 115 indicated they felt slightly stressed in regard to work-life balance.
Figure 20: Feelings of stress regarding work-life balance

Table 5.

*Descriptive statistics of feelings of stress regarding work-life balance*

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>2.64</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>0.83</td>
</tr>
<tr>
<td>Total Responses</td>
<td>239</td>
</tr>
</tbody>
</table>

Q19: To what extent do the demands of your work interfere with personal life?

Of the 239 responses to Question 19, one-hundred and thirty-eight participants indicated that only sometimes do the demands of work interfere with personal life.
Figure 21: Extent to which demands of work interfere with personal life

Table 6.

Descriptive statistics of extent to which demands of work interfere with personal life

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>2.72</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>0.51</td>
</tr>
<tr>
<td>Total Responses</td>
<td>239</td>
</tr>
</tbody>
</table>

Q20: Please indicate how often you feel as if the following statements are true.

Question 20 asked participants to indicate how often they felt their home life intruded upon their work life, and visa versa. Of the 238 responses obtained, 70 participants noted their work intrudes upon their home life weekly; while 86 respondents indicated their home life only intrudes upon their work life a few times a year. The responses to Question 20 are broken out into two charts in Figures 22-23.
20-1. My work life intrudes upon my home life

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>7</td>
</tr>
<tr>
<td>Rarely</td>
<td>45</td>
</tr>
<tr>
<td>A few times a year</td>
<td>49</td>
</tr>
<tr>
<td>Monthly</td>
<td>29</td>
</tr>
<tr>
<td>Weekly</td>
<td>70</td>
</tr>
<tr>
<td>Daily</td>
<td>38</td>
</tr>
</tbody>
</table>

Figure 22: Work life intrudes upon home life

Table 7.

Descriptive statistics of work life intrudes upon home life

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>3.06</td>
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<tr>
<td>Standard Deviation</td>
<td>1.47</td>
</tr>
<tr>
<td>Total Responses</td>
<td>238</td>
</tr>
</tbody>
</table>

20-2. My home life intrudes upon my work life

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>8</td>
</tr>
<tr>
<td>Rarely</td>
<td>48</td>
</tr>
<tr>
<td>A few times a year</td>
<td>86</td>
</tr>
<tr>
<td>Monthly</td>
<td>42</td>
</tr>
<tr>
<td>Weekly</td>
<td>42</td>
</tr>
<tr>
<td>Daily</td>
<td>12</td>
</tr>
</tbody>
</table>

Figure 23: Home life intrudes upon work life
Table 8.

Descriptive statistics of Home life intrudes upon work life

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>3.59</td>
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<tr>
<td>Standard Deviation</td>
<td>1.23</td>
</tr>
<tr>
<td>Total Responses</td>
<td>238</td>
</tr>
</tbody>
</table>

Q21: Thinking back over the past year, how many times have you had to miss something at work/home?

Question 21 asked participants how many times they have had to miss something at work or home, due to work or life concerns/responsibilities. Two-hundred thirty-eight individuals responded to how frequently they miss something at work due to home life concerns and responsibilities. A majority (85 participants) indicated they rarely miss work; while, 236 responded to missing something at home because of work responsibilities, in which 43 indicated they did monthly, and 68 noted they rarely missed something at home due to work life.

Q21-1: Miss something at work due to home life concerns/responsibilities

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>25</td>
</tr>
<tr>
<td>Rarely</td>
<td>85</td>
</tr>
<tr>
<td>A few times a year</td>
<td>80</td>
</tr>
<tr>
<td>Monthly</td>
<td>38</td>
</tr>
<tr>
<td>Weekly</td>
<td>10</td>
</tr>
<tr>
<td>Daily</td>
<td>0</td>
</tr>
</tbody>
</table>

![Bar chart showing frequency of missing something at work due to home life concerns/responsibilities]
Figure 24: Miss something at work due to home life concerns/responsibilities

Table 9.

Descriptive statistics of miss something at work due to home life concerns/responsibilities

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>4.32</td>
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<tr>
<td>Standard Deviation</td>
<td>1</td>
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<tr>
<td>Total Responses</td>
<td>238</td>
</tr>
</tbody>
</table>

Q21-2: Miss something at home due to work life concerns/responsibilities

Figure 25: Miss something at home due to work life concerns/responsibilities

Table 10.

Descriptive statistics of miss something at home due to work life concerns/responsibilities

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Number</th>
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</thead>
<tbody>
<tr>
<td>Mean</td>
<td>3.89</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>1.26</td>
</tr>
<tr>
<td>Total Responses</td>
<td>236</td>
</tr>
</tbody>
</table>
Q22: Please indicate your level of agreement with the following statements:

Question 22 asked participants to indicate their level of agreement with two statements, and is therefore broken out into two tables to better portray the information.

Responses to Question 22 are broken out into Figures 26-27.

Q22-1: The demands of work interfere with my home life.

Two-hundred and thirty-eight participants responded; 98 disagreed that the demands of their work interference with their home life, while 83 agreed with the statement.

![Bar chart](image)

**Figure 26:** Demands of work interfere with home life

Table 11.

*Descriptive statistics of demands of work interfere with home life*

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>2.53</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>0.86</td>
</tr>
<tr>
<td>Total Responses</td>
<td>238</td>
</tr>
</tbody>
</table>
Q22-2: The amount of time my job takes up makes it difficult to fulfill personal/family responsibilities.

Question 22-2 received 238 responses. Eighty-eight participants agreed that the amount of time their job takes up makes it difficult to fulfill personal/family responsibilities. However, 96 participants disagreed with the statement.

![Bar chart](Figure 27: Demands of work interfere with home life)

Table 12.

Descriptive statistics of demands of work interfere with home life

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>2.57</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>0.84</td>
</tr>
<tr>
<td>Total Responses</td>
<td>238</td>
</tr>
</tbody>
</table>

Q23: Please read the following statements and indicate your level of agreement:

In Question 23, participants were asked to indicate their level of agreement regarding aspects specific to their employment at JMU including: if the environment is supportive of balance (n = 230), supervisors/department chairs understand the importance
of maintain balance \((n = 232)\), colleagues understand the importance \((n = 232)\), the opportunities for balance are equally available for all employees \((n = 232)\), individuals regularly have to make hard decisions between work and home obligations \((n = 231)\), and if supporting a work/home life balance should be a priority for JMU \((n = 231)\). Since Question 23 is multifaceted and ask multiple within, it is broken out into six charts below to better represent the data; see Figures 28-33. Table 13 provides the descriptive statistics for Question 23.

**Q23-1: The environment at JMU supports balance between work and home life.**

A majority of respondents (136) agreed the environment at JMU supports work-life balance, 44 strongly agreed, 39 disagreed, and 11 participants strongly disagreed.

![Figure 28: Environment at JMU supports balance between work and home life](image-url)
Q23-2: My supervisor/department chair understands the importance of maintaining a balance between work and home life.

One-hundred and two participants strongly agreed their supervisor/department chair understands the importance of work-life balance, 106 agreed, 17 disagreed, and 7 strongly disagreed.

![Chart showing responses to Q23-2](image)

Figure 29: Supervisor/department chair understands importance of maintaining a balance

Q23-3: My colleagues understand the importance of maintaining a balance between work and home life.

Seventy-eight participants strongly agreed their colleagues understand the importance of work-life balance, 133 agreed, 18 disagreed, and 3 strongly disagreed with the statement.
Figure 30: Colleagues understand importance of maintaining a balance

**Q23-4: Opportunities for work/home balance are equally available to all employees.**

Only 22 participants thought there were equal opportunities available to all employees, while 63 agreed, 102 disagreed, and 45 strongly disagreed with the statement. This finding is supported in the qualitative findings.

Figure 31: Opportunities for work/life balance are equally available to all employees
Q23-5: I regularly have to make hard decisions between work and home obligations.

A majority of participants (113) reported they did not regularly have to make hard decisions between work and home while 80 reported they did. Twenty-three participants strongly disagreed with the statement, while 15 strongly agreed.

![Bar chart showing responses to Q23-5](chart.png)

*Figure 32: Regularly have to make hard decisions between work and home obligations*

Q23-6: Supporting a work/home life balance should be priority for JMU.

Most participants (135) strongly agreed that work-life balance should be a priority for JMU, 92 agreed, 3 disagreed, and only one strongly disagreed with the statement. The number of respondents who agreed with this statement highlight the importance and need for research on this topic.
Figure 33: Supporting a work/home life balance should be a priority for JMU

Table 13.

Descriptive statistics of employee perceptions of WLB and JMU environment

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environment at JMU supports balance between work and home life</td>
<td>2.07</td>
<td>.74</td>
<td>230</td>
</tr>
<tr>
<td>Supervisor/department chair understand importance of balance</td>
<td>1.69</td>
<td>.74</td>
<td>232</td>
</tr>
<tr>
<td>Colleagues understand importance of balance</td>
<td>1.77</td>
<td>.64</td>
<td>232</td>
</tr>
<tr>
<td>Opportunities for WLB are equally available to all employees</td>
<td>2.73</td>
<td>.88</td>
<td>232</td>
</tr>
<tr>
<td>Regularly have to make hard decisions between work and home</td>
<td>2.62</td>
<td>.75</td>
<td>231</td>
</tr>
<tr>
<td>Supporting a work/home life balance should be a priority for JMU</td>
<td>1.44</td>
<td>.55</td>
<td>231</td>
</tr>
</tbody>
</table>

Q28: Please read the following statements and indicate your level of agreement with the following statements:
Similar to Question 23, Question 28 was complex, in that eleven questions are asked within Question 28; all of which pertain to information and communication technologies (ICTs). Participants response rates varied. The descriptive statistics for Question 28 can be found in Table 14.

**Q28-1: How often do the demands of your work interfere with your personal life due to ICTs?**

Two-hundred twenty-four participants responded to Question 28-1; a majority indicated the demands of their work only interfere with their personal life due to ICTs sometimes (99 individuals).

![Bar chart showing the frequency of demands of work interfering with personal life due to ICTs.]

**Figure 34:** Demands of work interfere with personal life due to ICTs

**Q28-2: How often do you feel ICTs promote a blur between your work life and personal life?**

Participants were asked how often they feel ICTs promote a blur between their work and personal life, in which 223 responded, and seventy-one stated they felt ICTs promote a blur between work and personal life often.
Q28-3: How often do you spend time on work related activities outside of regular work hours using ICTs?

Question 28-3 yielded 224 responses about how often participants spent on work related activities outside of regular work hours using ICTs. Ninety-nine individuals indicated they sometimes use ICTs for work related activities outside of regular work hours, and 78 participants indicated they often use ICTs for work related purposes outside of regular work hours.
28-3. How often do you spend time on work related activities outside of regular work hours using ICTs?

Figure 36: Time spent using ICTs on work-related activities outside of regular work hours.

Q28-4: How often do you perceive ICTs (for work purposes) as a hindrance on your personal life?

Of the 224 responses, 95 individuals indicated that ICTs (for work purposes) are a sometimes a hindrance on their personal life; while 44 participants often perceive ICTs as a hindrance of their personal life.
Q28-5: How often do you perceive ICTs (for work purposes) assist you in managing your work-life balance?

A total of two-hundred and twenty-one responses were collected for Question 28-5, in which 98 participants indicated ICTs sometimes assist them in managing their work-life balance.

![Chart showing responses to Q28-5](chart.png)

Q28-6: How often do you perceive ICTs as useful for managing your work-life balance?

Question 28-6 asked participants how often they perceive ICTs as useful for managing their work-life balance; two-hundred and twenty-four individuals responded. One-hundred and three indicated they are sometimes useful for managing their work-life balance, and 78 indicated they are often useful for managing work-life balance.
28-6. How often do you perceive ICTs as useful for managing your work-life balance?

- Never: 25
- Sometimes: 103
- Often: 78
- Always: 18

Figure 39: Perceive ICTs as useful for managing work-life balance

Q28-7: How often does your mobile device create pressure on your work-life balance?

Of the 223 respondents, ninety-six indicated their mobile device sometimes creates pressure on their work-life balance, while fifty-one said it often does, and fifty-three said it never does.

28-7. How often does your mobile device create pressure on your work-life balance?

- Never: 53
- Sometimes: 96
- Often: 51
- Always: 23

Figure 40: Mobile device creates pressure on work-life balance
Q28-8: How often do you feel busy due to the use of your mobile device?

Two-hundred and twenty-three participants responded to Question 28-8, and eighty-seven indicated they sometimes felt busy due to their mobile device.

![Bar chart showing responses to Q28-8](chart.png)

*Figure 41: Feel busy due to the use of mobile device*

Q28-9: How often do you feel ICTs create more work requests in your job than you would have otherwise?

Question 28-9 asked participants how often they felt ICTs create more work requests in their job than they would have otherwise; two-hundred and twenty-four responses were collected, and a majority of participants felt ICTs sometimes create more work requests than they would have otherwise (81 individuals).
Figure 42: ICTs create more work than job would have otherwise

Q28-10: Using technology helps me maintain my work and life balance by facilitating time management.

Two-hundred and twenty-three participants responded to Question 28-10, and one-hundred and six individuals stated technology helps them maintain their work-life balance by facilitating time management only sometimes. Sixty-five individuals said it often helps, 25 said it always helps, and 27 said technology never helps them maintain work-life balance by facilitating time management.
28-10. Using technology helps me maintain my work and life balance by facilitating time management.

---

Figure 43: Technology facilitates time management

Q28-11: ICTs are useful in helping me manage my work-life balance.

A total of 224 participants responded to Question 28-11; almost half of respondents indicated ICTs are sometimes useful in helping them manage their work-life balance (111 participants), and 65 indicating ICTs are often useful in helping manage work-life balance.

---

28-11. ICTs are useful in helping me manage my work-life balance.

---

Figure 44: ICTs are useful in managing work-life balance
**Table 14.**

*Descriptive statistics of ICTs and work-life balance*

<table>
<thead>
<tr>
<th>Description of ICTs and work-life balance</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demands of work interfere with personal life due to ICTs</td>
<td>2.7</td>
<td>.91</td>
<td>224</td>
</tr>
<tr>
<td>ICTs promote a blur between work life and personal life</td>
<td>2.37</td>
<td>1</td>
<td>223</td>
</tr>
<tr>
<td>Time spent on work outside of regular work hours using ICTs</td>
<td>2.45</td>
<td>.82</td>
<td>224</td>
</tr>
<tr>
<td>ICTs as a hindrance on personal life</td>
<td>2.96</td>
<td>.9</td>
<td>224</td>
</tr>
<tr>
<td>ICTs (for work purposes) assist in managing WLB</td>
<td>2.6</td>
<td>.82</td>
<td>221</td>
</tr>
<tr>
<td>ICTs as useful for managing WLB</td>
<td>2.6</td>
<td>.79</td>
<td>224</td>
</tr>
<tr>
<td>Mobile device create pressure on WLB</td>
<td>2.8</td>
<td>.92</td>
<td>223</td>
</tr>
<tr>
<td>Feel busy due to the use of mobile device</td>
<td>2.57</td>
<td>.96</td>
<td>223</td>
</tr>
<tr>
<td>ICTs create more work requests than would have otherwise</td>
<td>2.67</td>
<td>.99</td>
<td>224</td>
</tr>
<tr>
<td>Technology helps maintain WLB by facilitating time management</td>
<td>2.61</td>
<td>.84</td>
<td>223</td>
</tr>
<tr>
<td>ICTs are useful in helping manage WLB</td>
<td>2.59</td>
<td>.82</td>
<td>224</td>
</tr>
</tbody>
</table>

**Independent T-Tests**

An independent t-test was conducted to compare instructional faculty to non-instructional faculty on work-life balance and ICTs. Instructional faculty scored significantly higher on work-life balance *(M=3.8, SD=.621)*, when compared to non-instructional faculty *(M=3.28, SD=.777)*, *(t(152)=5.460, p<.001)*. These data indicate that instructional faculty rated their work-life balance more positively, when compared to non-instructional faculty. Instructional faculty scored significantly higher on the ICT scale *(M=2.71, SD=.595)*, when compared to non-instructional staff *(M=2.32, SD=.527)*, *(t(221)=4.850, p<.001)*. These data indicate that instructional faculty reported technology
having more of an impact on their work-life balance, when compared to non-instructional staff.

*Figure 45:* Instructional faculty perceptions of work-life balance frequency distribution

Instructional faculty perceptions of work-life balance were approximately normally distributed, with a slightly negative skew (-.120). This means, more instructional faculty indicated higher levels of work-life balance, but a few scored on the lower end.
Non-instructional staff perceptions of work-life balance also had approximately normal distributions, though non-instructional employees’ responses were slightly positively skewed (.106). Most participants indicated lower levels of work-life balance, but a few indicated high work-life balance.

Table 15.

Descriptive statistics of instructional and non-instructional faculty on WLB

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Variance</th>
<th>Standard Deviation</th>
<th>Skewness</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructional faculty</td>
<td>3.80</td>
<td>.375</td>
<td>.612</td>
<td>-.120</td>
<td>67</td>
</tr>
<tr>
<td>Non-instructional faculty</td>
<td>3.28</td>
<td>.605</td>
<td>.777</td>
<td>.106</td>
<td>171</td>
</tr>
</tbody>
</table>
Table 15 lists the descriptive statistics for both instructional and non-instructional employees’ perceptions of work-life balance, based on the work-life balance composite score.

Table 16.

**Descriptive statistics of perceptions of WLB and ICTs composite scores.**

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Variance</th>
<th>Standard Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceptions of work-life balance</td>
<td>3.28</td>
<td>.605</td>
<td>.777</td>
<td>171</td>
</tr>
<tr>
<td>Perceptions of ICTs</td>
<td>2.32</td>
<td>.278</td>
<td>.527</td>
<td>157</td>
</tr>
</tbody>
</table>

Table 16 lists the composite scores for employees’ perceptions of work-life balance, and employees’ perceptions of ICTs on work-life balance. These composite scores allowed for a comparison between the two groups on work-life balance, and information and communication technologies.

**Correlations**

Multiple correlations were run to investigate potential relationships between variables. A summary of the correlations can be found in Table 17. Work-life balance (WLB) was significantly correlated to seven variables including: years employed by JMU (YE), tenure/tenure-tracked (TN), employee position (instructional/non-instructional) (EP), number of children (CHD), JMU environmental support of work-life balance (ES), supervisors understanding of the importance of WLB (SU), colleagues understanding of the importance of WLB (CU).

Participants’ perceptions of information and communication technology’s (ICTs) influence on WLB was correlated with tenure/tenure-tracked (TN), employee position (instructional/non-instructional) (EP), JMU environmental support of work-life balance
(ES), supervisor understanding of importance of WLB (SU), colleagues understanding of importance of WLB (CU).

Table 17.

Summary of correlations

<table>
<thead>
<tr>
<th></th>
<th>WLB</th>
<th>ICTS</th>
<th>YE</th>
<th>TN</th>
<th>EP</th>
<th>CHD</th>
<th>ES</th>
<th>SU</th>
<th>CU</th>
</tr>
</thead>
<tbody>
<tr>
<td>WLB</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>TN</td>
<td>-.276*</td>
<td>-.307*</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>EP</td>
<td>-.305**</td>
<td>-.310*</td>
<td></td>
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<tr>
<td>CHD</td>
<td>.146*</td>
<td>.273*</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>ES</td>
<td>.494**</td>
<td>.514**</td>
<td>.169*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.505**</td>
<td></td>
</tr>
<tr>
<td>SU</td>
<td>.251**</td>
<td>.430**</td>
<td>.169*</td>
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*Correlation is significant at the 0.05 level (2-tailed)
**Correlation is significant at the 0.01 level (2-tailed)

Qualitative Results

After completing the questions regarding work-life balance, and before the transition into questions regarding information and communication technologies, participants were asked four open-ended questions (Questions 24, 25, 26, and 27). The purpose for the questions was to inquire about participants’ experiences and perceptions of work-life balance at James Madison University, and to offer participants a chance to express any additional concerns, ideas or remarks about the survey. In total, 147 individuals responded to the first question, 148 responded to the second question, 148 to the third question, and 80 responded for the final question. Listed below are the four open-ended questions and direct quotes from participants’ responses for each question.
Q24. In what ways do you think JMU works to support a balance between work life and home life for its employees?

Participant responses were focused around a number of topics including: support, policies and benefits, work schedule, resources, and parental/familial considerations. The responses indicated most participants were generally satisfied with JMU’s efforts to facilitate work-life balance. The topics mentioned in the responses were examples participants gave of ways JMU provides support to employees.

“I think JMU is a model of how to balance work life/home life. They provide a challenging and rewarding work environment while allowing time for family and personal obligations.”

“This is really dependent upon supervisor... Fortunately, my current supervisor is GREAT. This is not the case for all of my colleagues.”

“In my particular department, there is a lot of autonomy and support for work life balance, which makes it much easier for me to be flexible in regards to working from home or bringing my daughter to work, etc. This sort of flexibility, in which I’m able to get my job done in a variety of ways, allows for less disruption of my work when something arises at home and allows me to prioritize based on the needs of that day.”

“Telecommuting and flexible work schedules for classified staff promotes an appropriate balance between work life and home life but those are not available to every position. Computing security issues can limit the opportunity for telecommuting for some employees.”
Q25. How do you think JMU could improve its support for balance between work life and home life for its employees?

A number of responses to Question 25 were centered around expectations, support, childcare, flexible schedules, and various discrepancies between each type of employee benefits.

“Not set such high expectations of research on new faculty when the teaching and service load is so heavy.”

“Find a way to make all supervisors treat their employees equally as well as equally across supervision. It shouldn’t make a difference what department or supervisor you work for as to how situations are handled as far as what is allowed and what isn’t.”

“Hiring more full-time employees instead of wage employees. Wage employees don’t have any paid time off, so sometimes a snow day or a sick day can mean a pay cut that employees might not be able to afford.”

“Recognize both childcare and elder care needs; recognize life needs not related to childcare.”

“Allow for flexible work days/hours and the opportunity to work from home if the job allows.”

Q26. What would a good balance or successful integration of work life and home life look like for you?

Each individual holds a unique notion of how work-life balance should look, and what it would look like to successfully maintain balance between the two domains. However, the responses indicated general reoccurring concepts that are associated with,
and influential on, work-life balance, these include: flexibility, schedule, time, life circumstances and obligations,

“More defined hours, and other members of my department understanding that I need a personal life as well.”

“I think I have pretty good balance now. When my kids needed childcare, life was more stressful but that's true for most people.”

“More opportunities for staff to telecommute.”

“Being able to only think about work when at work, and only think about home when at home; however, we are dynamic individuals, and I am not sure it works out that way. In that respect, being able to not feel "guilty" or "bad" about using time, such as personal or vacation, for a personal obligation, or rearranging your work schedule to make both work and outside obligations happen.”

“Regular hours, strong leadership, and clear expectations are key to a happy work environment.”

Q27. Is there anything else you would like to share about work-life balance?

Participants’ responses varied, though several topics mentioned recurred throughout this, and the other open-ended questions. Among the topics mentioned were: support, policy, leadership, personal/familial obligations, technology, and differences within employee positions.

“Everyone has different needs. Supervisors are not properly trained to oversee employees. There is too much drama created when inconsistencies arise between employees.”
“I think that technology has created a lot of these issues. I don’t like being constantly connected, but I don’t know what to do about it.”

“It changes depending on your context, your decisions, and your resources. It means something different to each person. I own it, not my employer. I make my decisions within a set of parameters, but they are my decisions.”

“Equity needs to be a priority. Classified and wage employees should have the kind of flexibility that faculty members have. While we may have different jobs, we still have a need for work-life balance and flexibility.”

“It seems that work-life balance at JMU is strongly related to your individual department and who your immediate supervisor is. I don’t see any uniformity across the university in how the things in this survey are tended to. It would be nice for JMU/Human Resources to have uniform policies, or pay closer attention to the perks that some department employees are receiving, but not others.”

Emergent Themes

Through the individual analysis of responses to each question, it became apparent which aspects of participants’ work and personal lives were most influential on their work-life balance. Once the responses from each question were individually analyzed, concepts and themes from each response were compiled to generate overarching themes of participant responses. Since the response trends were quite repetitive, it seemed appropriate to compile each question’s responses by themes for further analysis. Compiling responses in this way allowed the opportunity to examine similarities and differences between participants’ perceptions of work-life balance at James Madison University.
The following section reports and describes the themes and subthemes that emerged from the raw data. To provide context, within each theme description are direct quotes from the data. The results were organized into ten key themes; Table 18 lists each theme as well as the associated subthemes that emerged during the analysis. The themes and subthemes were developed for the purpose of this research and are not meant to serve as exclusive rules but instead fluid guidelines for interpreting the data.

Table 18.

Overview of emerging themes and subthemes found in open-ended survey responses

<table>
<thead>
<tr>
<th>Theme</th>
<th>Subtheme</th>
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<tr>
<td>Schedule</td>
<td>● Flexibility</td>
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<td>● Control of schedule</td>
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<td>● Structure of academia</td>
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<td>Policy and Benefits</td>
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<td>● Equal access</td>
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<td>● Personal and family healthy benefits and leave</td>
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<td>● Uniform campus-wide policy</td>
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<td>● Department v. university</td>
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<td>● Inconsistencies</td>
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<td>● Understanding and compassion</td>
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<td>Environment</td>
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<td>● Expectations</td>
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<td>● Family emergencies</td>
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<td>● Child/family illness</td>
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<td>● Stigma of child birth</td>
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<td>Technology</td>
<td>● Utilization of more technology</td>
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<td>● Telework and work from home opportunities</td>
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<td>● Boundary management</td>
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<td>● Unplugging after hours</td>
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<td>Resources</td>
<td>● Professional development</td>
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Schedule. Employee schedule emerged as a theme from the subthemes: (a) flexibility, (b) control of schedule, and (c) structure of academia. As stated in the literature, schedule is a major component of academic work (Jacobs, 2004). Among the four qualitative questions, schedule was mentioned around 50 times and flexibility was mentioned approximately 70 times.

Survey respondents frequently mentioned aspects of their work schedule when discussing how JMU supports, and could improve support, for employees. Participants report being able to better manage their work and life domains when they have control and autonomy over their work, so long as their job responsibilities are met. Another subtheme that coincided with the literature was the structure of academia and the variety, and number, of hours required (Jacobs, 2004). Participants noted they would like to see a shift from the traditional 8-5 model, to something that is more accommodating of the nature of work.
“Having a flexible schedule, being able to work from home when necessary, being able to work on weekends to make up for work missed on weekdays instead of using vacation time. Being able to use sick leave when off caring for someone living in your household.”

“Simply the definition of academia - not a 9-5 job.”

Policy and benefits. Policy and benefits emerged as a theme with subthemes including: (a) support of policy usage, (b) equal access, (c) personal and family health benefits and leave, and (d) uniform campus-wise policies.

Obtaining a variety of perspectives facilitated the emergence of these subthemes. The responses of employees from each position type highlighted the different opportunities granted to each group. Peer coverage is a benefit that recurred through the responses, though this is an opportunity not all employees receive. Participants spoke of peer coverage in positive and negative lights, noting that is it beneficial to some employees while it may add to the workload of the colleagues who are supporting the employees’ time of absence.

“Peer coverage for sick days is helpful.”

A formal maternity and paternity leave policy was one of the most frequented responses of how JMU could improve support of work-life balance for it’s employees. Though some employees are able to take time following the birth of a child, there are not static parameters which may make it difficult to obtain the leave. Further, employees expressed the desire for guaranteed paid maternity and paternity leave.

“[An] official maternity/paternity leave policy for faculty.”

“Offering more flexible options for new moms- i.e. longer maternity leave.”
Further, standardized policy usage and support from all departments was highlighted as a way for JMU to better support its employees. As with maternity/paternity leave, there are not uniform benefits and policies for all employees, instead the benefits and policies are allocated based on employee status and left up to the discrepancy of supervisors, which results in less opportunities for part-time employees as compared to full-time employees. Supported in the literature, respondents indicated an association between organizational culture and low policy usage (Lester, 2015).

"JMU has a very generous leave policy that offers many different types of leave for use by classified employees."

"My office supports [work-life balance] but does not outwardly state that. Other offices are not supportive. [It] should be a blanket policy."

**Support.** Support was one of the most, if not the most, mentioned factor of employees’ work-life balance; the subthemes that emerged include: (a) leadership, (b) colleagues, (c) department vs. university, (d) inconsistencies, and (e) understanding and compassion.

Participants identified support as a pivotal influencer on perceptions of work-life balance. Supervisor and department chair support are noted as influencers on employees’ satisfaction. Further, studies have found that policy usage is heavily dependent upon leadership support (Comer and Stites, 2006).

"My supervisors and direct peers are supportive."

Participants mentioned variability in support for policy usage and overall work-life balance between the university, departments and supervisors as an influencer on perceptions of work-life balance. Further, O’Meara and Campbell (2011) suggest
employees are more likely to use policies if they feel they are supported. Employees may perceive a better work-life balance if there is consistent support among all university departments and divisions.

“I do not see JMU as working to support the balance, but my division supports flexible schedules and my supervisor is very good at helping me balance work and home.”

“I think it is specific to the department.”

“I have had the pleasure/luck of having a supervisor that understood the importance of family and has always supported any absence due to family matters. I was always trusted to make my own decision as to which was more important when job and family ran together. I also have seen others that have not had that same support from their supervisors and can see their discontent with JMU.”

A participant also mentioned autonomy from supervisors to complete work as positively impacting their work-life balance.

“Feeling no obligation to be in the office during certain hours, being trusted that I am getting my work done.”

**Environment.** Three subthemes emerged from within the theme of environment: (a) university culture, (b) transparency, and (c) expectations.

The climate and culture of the university surfaced as underlying factors influencing employee’s perceived balance. Transparency and expectations were also identified as fundamental components of one’s work-life balance. Some participants mentioned JMU having a supportive culture for work-life balance, while others suggested there is not much support across the university.
“JMU talks about work life balance which is a good start.”

“The culture across the university doesn’t seem to match the talk across the university when it comes to work-life balance.”

Expectations of employees were cited in a variety of ways including those of supervisors, peers and students (for faculty). Since policy usage and support are dependent upon supervisors, employee expectations may also be dependent upon supervisors, resulting in unique experiences for each individual. The responses within this theme may be a result of couched language associated with personal frustrations, or participants’ expressions of the desire for consistent implementation of expectations.

“Encourage different supervisors to treat employees similarly (with the same expectations put on all employees). Currently different supervisors have different expectations of those they supervise. This breeds job dissatisfaction and resentment.”

“Email and the expectation of today’s students that faculty will respond to everything and do everything for them is wrecking any semblance of work-life balance. Gendered expectations.”

**Caregivers.** Caregivers emerged as a theme because of the mixed responses regarding employee’s roles as caregivers to both children, elders and family members. Subthemes that emerged in this category include: (a) childcare, (b) family emergencies, (c) child/family illness, (d) snow days, and (e) the stigma of childbirth for female employees.

For employees who are also parents, feasible childcare options emerged as a primary determinant of work-life balance. Numerous respondents expressed the desire for affordable childcare through the university, while others mentioned assistance in finding
childcare would be beneficial to balance. Snow days were a recurring subtheme, perhaps because of the lack of childcare on campus. Unexpected snow days require effort from employees to ensure children will have someone to watch over them; many faculty resort to bringing their children to work. As cited in Comer and Stites-Doe (2006), childcare options may work to alleviate some of the stress put on employees.

“Daycare for employees’ children - ideally on site, ideally free, low cost, or pre-tax, but having a daycare option at all would be a great start.”

“I don't have kids yet, so balance is pretty easy, but once I have kids, I think a good balance would depend heavily on finding reliable and affordable childcare.”

“My department is not really supportive of working from home, so I've had to bring children in to my office with me (& have them spend way too much time on their electronic devices to keep them quiet) to decrease the dirty looks I get from co-workers.”

In accordance with research (Armenti, 2004; Lester, 2015), participants mentioned the stigma and potential repercussions having children may have on their careers.

“I've been delaying having children because of lack of support at the university. A good or successful balance would look like being able to pursue having children without having to worry about what will happen to my job or financial resources.”

**Technology.** Participants mentioned technology as an influencer on work-life balance. Subthemes that emerged include: (a) utilization of more technology, (b) work from home and telework opportunities, (c) boundary management, and the idea of (d) unplugging after work hours.
Utilizing technology to its full advantage was mentioned by employees as something that JMU could do to improve support for work-life balance (i.e. meeting through a conference call instead of on campus). Telework and working from home emerged in various ways, because of the different types of employees who completed the survey. Faculty typically have the option and autonomy to telework, while classified employees may not receive the same opportunities. For many wage and classified employees, working from home may require access to the university network. Such permissions are typically not granted to employees due to the amount of sensitive information within the network.

“Being allowed to work from home a few days a year as needed for whatever reason (mental health day, difficulty getting to work, etc.) would be great because most of the times I need to miss work it is not because I am unable to work, but because I am unable to make it into the office. Those are lost days of productivity and also a drain on my vacation/leave time. It's a lose/lose for the university.”

“More opportunities to telecommute (I also live over 30 miles away to support a two-career family).”

With telework comes choices of boundary management which may, or may not, be successfully maintained. Participants also noted technology’s role in blurring boundaries because of the demands that come with it. Though technology is useful when accomplishing work in different settings, it is also strenuous when managing a balance. The accessibility of technology is a pro and con of work-life balance.

“To me it's being able to disconnect from work when I go home.”
“JMU runs almost 24 hours a day/7 days a week/365 days a year. It is impossible for most people to be "on" all the time. Technology creates a lot of time pressure and emotion. It is difficult to be home even at night or on weekends.”

**Resources.** Resources emerged as a theme when participants were asked about how JMU currently supports, and could improve support, for employees. Four subthemes emerged: (a) professional development, (b) health and fitness opportunities, (c) family events, and (d) discounted services.

Professional development surfaced in the form of employees’ awareness of opportunities such as workshops and training sessions about successfully managing work-life balance. Health and fitness opportunities such as extended lunch to ensure enough time for employees to exercise between classes. Family events such as movies in the campus theatre, and discounted services such as reduced rate for summer camp were, among others, recurrent themes.

“Offering trainings through Training and Development on how to create a life-work balance.”

“Making available activities where families are welcome- Grafton movies, UREC family hours, faculty picnic, etc.”

“Discounts on summer programs (such as camp at UREC).”

**Attitudes and perceptions.** The theme attitudes and perceptions, was organized by positive and negative feelings, then broken into five subthemes based on the most prevalent responses. These include: (a) guilt, (b) pressure, (c) stress, (d) satisfaction, and (e) pleasure.
Negative attitudes and perceptions flourished through the use of terms such as pressure, stress, and guilt. Some employees also reported feeling overworked compared to the number of staff in their unit. Pressure was externally experienced, while guilt was internalized by employees if they felt they were focusing a disproportionate amount of time or energy to one domain. Positive attitudes recurred throughout the four qualitative questions, as many participants indicated current feelings of good, and successful, work-life balance.

“I have accrued a large amount of overtime while here at JMU and feel badly when I take time off during the week because of the demands on my office. There is a general unawareness of how responsibilities are distributed. A lot of people seem pretty unhappy here, despite JMU's reputation of being a very happy place overall.”

“Societal guilt for women who work is still high in Rockingham county. I think that plays a part in how women feel about work life balance.”

“I know I could take off more time than I currently do, but I also feel that it wouldn't be the right thing to do because of the strain it would put on others at work.”

“We take cues from our leaders. If they are workaholics it tends to put pressure on the people around them to be the same, at the expense of stress levels, balance, etc. There must be a fine line with work/life balance as well. We can't sacrifice the work that needs to be done, either. Jobs must be done - it's important we don't neglect the job we're paid to do, but it shouldn't consume us.”

Though participants mentioned negative feelings in regard to work-life balance, a number of participants reported positive feelings of balance in their current positions.
Positive responses were associated with JMU, individual departments and supervisors, and employee position.

“JMU is a GREAT place to work. It provides its employees opportunities to prioritize their families while also providing rewarding career experiences.”

“Of all the places I have worked JMU honestly does an excellent job at making work-life balance a priority. I think becoming a mom has changed some of my ideas of what work-life balance means and am glad to be at a workplace that values this.”

“I have a pretty good balance right now, mostly because I have a supervisor and department have allowed for it.”

**Employee position.** The employee position emerged from an array of perceptions as to how position effects work-life balance. The main subtheme is (a) instructional v. non-instructional faculty and staff, followed by (b) equal opportunities, (c) workload, (d) job security and opportunities.

The instructional v non-instructional employee subtheme was originally broken out into their own themes, until similar recurring patterns surfaced. Though an employee’s position may have influenced their perceptions, most employees discussed the same ideas and issues. Many participants mentioned equal opportunities for all employees, even outside their own position. Part-time employees receive fewer benefits and opportunities for benefits, which may hinder an individual’s work-life balance. Further, employees in positions that are not full-time, desire a sense of job security for work-life balance.
“The ability to keep work at work and not need to bring it home because I can't go over my official hours. 1500 hours may be too low for some employees to complete all their responsibilities.”

“I feel like classified staff have good work-life balance, partly because the conditions of their employment mostly require it. AP faculty, on the other hand, have this expectation that they need to be available at all hours.”

“Academics limits the ability of individuals to have a good work-life balance if one is to get tenure and advance.”

“Hiring more full-time employees instead of wage employees. Wage employees don’t have any paid time off, so sometimes a snow day or a sick day can mean a pay cut that employees might not be able to afford.”

A number of employees, both instructional and non-instructional, repeatedly referred back to recognition of work/teaching load, and workload distribution. Employees mentioned strain in work-life balance because of the work-load and distribution of job responsibilities. Related to this, was the notion of employees being overworked and understaffed.

“Faculty, in particular, need manageable workloads in order to maintain a good work life and home life balance.”

“Not set such high expectations of research on new faculty when the teaching and service load is so heavy.”

“Departments need to look at workloads of employees and determine if staff is being asked to do an unreasonable amount of work on an average week.”
Integration v. segmentation. The final theme, integration v. segmentation, is an overarching theme in which most responses could be split into; this finding is in accordance with the literature (Olson-Buchanan & Boswell, 2006). A number of participants spoke directly about attempts to integrate their work and life domains, or about intentional actions to keep the spheres separate.

“Not having to login to work from home in the evenings or weekends.”

“To be able to leave my work at my work and focus on myself and family when I leave the office.”

“I like the idea of "integration" better than balance. It's not a tug of war.”

“To me, work-life balance is about recognizing that employees lead complex, dynamic lives. While I love my job and take great pride in what I do, it's not necessarily my defining role. Working for a department that recognizes the complexity of people's lives, and encourages them to seek an identity outside of their job title would represent successful work-life integration.”

Within this chapter the research findings were presented. The survey, Technology’s Effect on Work-life Balance was designed using mixed-methods to quantify participant’s perceptions of work-life balance and technology, while obtaining qualitative data about JMU and work-life balance specifically. In the final chapter I will discuss the conclusions, limitations, and recommendations for practice.
Chapter 5: Discussion and Conclusions

The current study added to the research of technology’s influence on work-life balance. Specifically, I was interested in women workers’ perceptions of the issue because I think men and women experience and maintain work-life balance differently. Although family roles are becoming more modernized, there is still heavy underlying pressure for women to manage and maintain family life (West & Zimmerman, 1987). More so, I think technology has an impact on how, and to what degree, individuals have control of their work-life balance. With the increased accessibility and ease of use technological advances have created, the pressure for individuals to stay connected to work when away, has subsequently increased as well.

Overview of Key Findings

Quantitative

It is important to revisit the initial research questions for the study when analyzing and making conclusions about the work-life balance:

1. What percent of participants perceive an imbalance between their work and life domains because of information and communication technologies?
2. Is there a difference in the perceived work-life balance of female instructional and non-instructional employees?
3. Is the distribution of perceptions of work-life balance approximately normal for both instructional and non-instructional employees?

Fifty-seven percent of participants perceived an imbalance between work and life because of ICTs, while 61% reported ICTs facilitate work-life balance. These percentages were derived from the descriptive statistics of the composite score that was
created from the survey items asking about work-life balance. However, there is a difference in the perceived work-life balance of female instructional and non-instructional employees. Instructional faculty reported greater work-life balance than did non-instructional staff. In general, the distribution of work-life balance perceptions is approximately normal for both instructional and non-instructional employees.

Instructional faculty perceptions of work-life balance were distributed approximately normal, with a slight negative skew. The slightly negative skew of instructional faculty perceptions of work-life balance may be for a few reasons. Professors who are currently on the tenure-track may be experiencing worse work-life balance than professors who have already achieved tenure, or are not currently pursuing tenure. Individuals who have already achieved full professor typically have fewer requirements, and lighter workloads than others; full-professors are not required to complete as much service, or conduct as much research, as they were previously. In addition, the courses taught by seasoned professors have well been established and do not require them to spend as much time planning, as their lower faculty rank colleagues.

Non-instructional staff perceptions of work-life balance were distributed approximately normal, with a slight positive skew. This slightly positive skew may be because some non-instructional staff and faculty have limited flexibility in their job roles. The lack of flexibility may take the form of start and stop times of work, the requirement to be physically present in the office, and the restricted access to the university network.

Workload distribution and supervisor support may be reasons non-instructional faculty feel more of an imbalance than instructional faculty. Due to the nature of their work, instructional faculty typically have more flexible work arrangements than do non-
instructional faculty. A great deal of faculty work is autonomous, this type of work includes: teaching, advising, office hours, scholarship, service, grading and attending meetings. Having this flexible arrangement in which the faculty member is given autonomy to complete her job tasks where and when she would like, may facilitate work-life balance by giving the employee a sense of control over her work.

It was anticipated that the perceptions of work-life balance of instructional faculty differ from non-instructional staff in that instructional faculty members feel more pressure on their work-life balance because of information and communication technologies. However, the results suggest there is a significant relationship ($p<.001$) between ICTs and imbalance for non-instructional staff ($M=2.32, SD=.527$) rather than instructional faculty ($M=2.71, SD=.595$).

Colleagues understanding the importance of work-life balance was positively correlated with supervisor’s understanding of the importance of work-life balance ($r = .626$). Both supervisor and colleague understanding were positively correlated to perceptions of environmental support of work-life balance at JMU ($r = .505; r = .457$). Participants who felt both their colleagues and supervisors understood the importance of work-life balance, may subsequently perceive the JMU environment as supportive of work-life balance because of their personal experiences.

Perceptions of ICTs influence of work-life balance was positively correlated with supervisor ($r=.430$) and colleagues ($r=.415$) understanding of importance of work-life balance; it may be because the supervisors and colleagues who are supportive of work-life balance also utilize technologies to maintain their own work-life balance, and promote their employees, and departments/offices, to do so as well. Employees who do
not have understanding supervisors and colleagues may not be able to utilize ICTs for balance because they are not given the opportunity.

There was a positive correlation between work-life balance and years employed by JMU ($r = .15$). This may be because people who have worked at JMU for a longer amount of time may have had a longer period of time, and a greater chance, to create and identify ways to manage work-life balance compared to those employed for a shorter period of time. Those employed for a short amount of time may still be assimilating to their position, peers, supervisors, and department or office.

A surprising correlation from the data involved work-life balance and the number of children participants had. Those who reported having more children also reported having greater work-life balance ($r = .146$). This correlation may be because those with more children have already experienced the dilemma of choosing between work or personal life, and have established their commitment to their personal lives. Thus, participants may consistently choose to uphold their personal and familial commitments with priority over their work.

There was negative correlation between work-life balance and employee position ($r = -.305$), which is consistent with the t-test run to compare instructional and non-instructional employees. The effect size for this correlation ($d = .09$) suggests nine percent of the variance in work-life balance is accounted for by position type.

Qualitative

Overall, the four open-ended questions regarding work-life balance yielded general recurring themes that resulted into a wide range of subthemes. From the responses, it is apparent that employees at James Madison University have differing and
unique perspectives of work-life balance. Respondents expressed their interpretation of how JMU works to support balance, how they could improve, what an ideal balance or integration of work-life would look like, and any additional remarks about work-life balance or the survey.

Throughout the responses of the four questions, there were numerous recurring themes among both instructional and non-instructional faculty and staff. However, the manner in which participants spoke about certain themes was dependent upon their employee position (i.e. wage, classified, etc.). Included among the themes are: schedule, support, policy and benefits, technology, environment, caregivers’ resources, attitudes and perceptions, and employee position. The most frequent responses were categorized in the schedule, support, caregiver and employee position themes. There was immense diversity in participant responses, and though each individual internalizes and organizes their work-life balance according to their own unique experiences, a majority were dependent upon participants’ position of employment. For example, part-time employees do not receive the same benefits their full-time colleagues do, which may result in feelings of imbalance.

An overarching theme in participants’ responses was the idea of integration or segmentation between their work and life domains. Responses varied as to whether participants viewed the paradigm with desire to integrate or separate the spheres; those categorized as suggesting separation mentioned “leaving work at work” and truly having time off during evenings and weekends. From the data, there is evidence that instructional faculty are passionate and dedicated to their work which may result in faculty pursuing their work during personal leisure time. In general, positive feelings of
work-life balance were observed quantitatively, complemented by findings throughout the qualitative data.

While the quantitative results shed light on employees’ basic perceptions of work-life balance, and the effect of ICTs, the qualitative data provided context as to why individuals may feel this way. A persistent finding among the literature involves the organizational culture and support of individuals in leadership positions within universities (Comer & Stites-Doe, 2006). Even with policies set for work-life and family-friendly work spaces, there is much ambiguity left for interpretation by the individual in authority. Moreover, the findings relate to the literature in that employees construct their perceptions of work-life balance based on peer and supervisor support (Ertmer & Newby, 2015). Corresponding with Blair-Loy and Wharton (2002), the findings suggest in order for employees to feel empowered to take advantage of such policies they must feel a certain level of support. Further, Jacobs (2004) discusses the benefit of uniform policies and the idea of reducing, or refining the tenure track for instructional faculty.

Finally, in accordance with the literature, the specific ways individuals organize and use information and communication technologies to segment or integrate their work and personal lives differ (Golden & Geisler, 2007). The subtle differences in participant responses indicate the complexity around individuals’ relationships to ICTs. The variance in responses may also indicate the ambiguity, and participants’ uncertainty, of how to conceptualize the phenomenon. The results of this study skim the surface to understanding how information and communication technologies effect the work-life balance of female employees in higher education. Though, considerable research must be
done to suggest a comprehensive understanding of the relationship between work-life balance and ICTs.

**Conclusions**

The current study investigated the phenomenon of work-life balance in both the administrative and academic realm of an institute of higher education. The study examined instructional and non-instructional female staff because I suspected with different positions, and different job roles and tasks, individuals would perceive and handle their work-life balance differently. The participants in the study received a survey sent to their university employee email address. The participants’ responses were anonymous in hopes to increase the likelihood of sincere and truthful answers to the questions asked in the survey. Once participants responded, the data was analyzed using Qualtrics, the survey software for descriptive statistics and SPSS, a statistical analysis program, for inferential statistics.

As stated previously, a major limitation to conducting the study involved using a novel instrument. Because of the specificity of the information I was looking for, it was necessary to create an instrument that asked questions tailored towards the themes of work-life balance, women in higher education, and information and communication technologies (ICTs). Future research could involve a replication of the study to test the reliability and validity of the instrument created. With the results of a replication, I would be able to identify, and alter, aspects of the measures that do and do not work.

Another limitation of the study involved the homogeneity of demographic characteristics of the sample due to the context of the institution. The homogeneity of the sample is a major limitation because the lack of diversity may lead to a large gap in
acknowledgement and comprehension of work-life balance needs among diverse populations. With the nature of the participants, university employees, respondents may have potentially answered in a way they believe to be socially desirable or with a positivity bias. There are other confounding variables that could have had an effect on the results of the study such as participant characteristics, dispositions at the time of the study, organizational deadlines, and more.

**Recommendations for Future Research and Practices**

Previous studies (McCoy, et al., 2013) have found, “The academic careers of women are more likely to be affected by changes in life or familial status, and more likely to be subject to associated job dissatisfaction with a negative impact of work on family life” (p. 320). For women, work-life conflict has the potential to influence job satisfaction and well being, making it important to understand variables that may impact these factors. Future research should explore the complex dynamics of female workers, to better understand and identify solutions to these issues. For future research, I recommend taking the study to an organization outside of the academic realm to identify differences between women’s perceptions in a different setting. If the study is replicated in a setting other than academia, the study may yield different results.

Corporate organizations may have different organizational policies, cultures, and subsequent pressures that support the use of information and communication technologies in a way different than the current academic setting. Further, if women’s perceptions of technology’s effect on work-life balance were studied in both a large corporation and a small business, I think the results would vary. If the two were compared, I believe there would be a greater view of ICTs as an intrusive component to the lives of women in large
corporations than women in small businesses. I make these predictions because of the difference in the pace of work and cultures of large and small organizations. It seems larger organizations support fast paced work ethics that demand more from their employees than smaller companies.

Maharshi and Chaturvedi (2015) suggest, it is becoming increasingly difficult to balance work and life domains because of such rapid changes in technology, work environment, and the demographical structure of work. Specifically, the researchers note that an important part of the current work force is composed of female employees. Thus, documentation of work-family balance levels is necessary for both researchers and practitioners (Grzywacz & Carlson, 2007); however, a comprehensive work-life balance instrument has not been published here because although development and validation of a measure are pivotal for evolving the research, it is not of important in this research.

Having said that, organizations should aim to improve employees’ work-life balance, which may thereby improve productivity (Maharshi & Chaturvedi (2015). Maharshi and Chaturvedi propose a cluster of initiatives to increase work-life balance such as paid maternity leave, job sharing and career breaks, and acceptable opportunities for career advancement, personal and professional growth, and proper training and development programs that organizations and institutions should take into consideration.
References


Clark, C. D., & Hill, J. M. (2010). Reconciling the tension between the tenure and biological clocks to increase the recruitment and retention of women in academia. *In Forum on Public Policy Online* (Vol. 2010, No. 2). Oxford Round Table. 406

West Florida Avenue, Urbana, IL 61801.


Healy, M., & Perry, C. (2000). Comprehensive criteria to judge validity and reliability of
qualitative research within the realism paradigm. *Qualitative Market Research, 3*(3), 118-126.


https://joblink.jmu.edu/userfiles/static/customers/41/Position_Type_Desciptions.pdf


Monroe, K., Ozyurt, S., Wrigley, T., & Alexander, A. (2008). Gender equality in academia: Bad news from the trenches, and some possible solutions. Perspectives


Organization of Economic Co-operation and Development. (2014). How’s life in the


http://www.bls.gov/news.release/empsit.nr0.htm


### Appendix A
JMU Employee Position Definition

<table>
<thead>
<tr>
<th>Position</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classified</td>
<td>- A full-time, salaried position that may include a wide variety of work ranging from administrative, professional, office, clerical and skilled crafts to service and maintenance. Employees in this category are covered by the Virginia Personnel Act.</td>
</tr>
<tr>
<td>Wage</td>
<td>- A part-time position working no more than 1,500 hours in a consecutive 365-day period. Job duties vary depending on need. Employees in this category are NOT covered by the Virginia Personnel Act.</td>
</tr>
<tr>
<td>Temporary</td>
<td>- A short-term position used to supplement the work force during seasonal or temporary workloads, to provide interim replacements, or to perform short-term projects.</td>
</tr>
<tr>
<td>Administrative and Professional Faculty</td>
<td>- A faculty position (part-time or full-time) with primary responsibilities that include management or administration but does not include teaching.</td>
</tr>
<tr>
<td>Instructional Faculty</td>
<td>- A faculty position (part-time or full-time) with primary responsibilities that include management or administration but does not include teaching.</td>
</tr>
<tr>
<td>Part-Time Non-Teaching</td>
<td>- A short-term or long-term, non-salaried position that is ineligible for Commonwealth of Virginia benefits.</td>
</tr>
</tbody>
</table>
### Appendix B

**JMU Instructor Faculty Rank**

<table>
<thead>
<tr>
<th>Instructional Faculty Rank</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecturer</td>
<td>• Appointment at the rank of lecturer can be made in the case of an RTA. Individuals in the rank of lecturer are not eligible for promotion.</td>
</tr>
<tr>
<td>Professor</td>
<td>• In addition to the requirements for associate professor, appointment at the rank of professor is contingent upon recognition of outstanding professional accomplishment.</td>
</tr>
<tr>
<td>Assistant Professor</td>
<td>• Appointment at the rank of assistant professor normally carries with it teaching, scholarship and service responsibilities, and normally requires a terminal degree in a relevant discipline.</td>
</tr>
<tr>
<td>Associate Professor</td>
<td>• In addition to the requirements for assistant professor, appointment at the rank of associate professor is contingent upon substantial professional achievements, evidenced by an appropriate combination of teaching, scholarship and service.</td>
</tr>
<tr>
<td>Adjunct Faculty</td>
<td>• Individuals who teach at the university on a limited, special or provisional basis, but perform no other duties.</td>
</tr>
<tr>
<td>Visiting Professor</td>
<td>• Appointments as visiting faculty members are for a fixed term to carry out instructional or research responsibilities within an academic unit. Professional credentials are required for appointment as a visiting faculty member. Tenure cannot be awarded to a visiting faculty member. Visiting faculty members may be primarily associated with another university or agency, or may be engaged as a research associate, post-doctoral faculty member, teaching associate or teaching fellow.</td>
</tr>
</tbody>
</table>
Appendix C  
Work-Life Balance and Technology Survey

Demographic Information
Q1. Please indicate which gender you most identify with.
   - Female
   - Male
   - Other (Text entry box)

Q2. How many years have you worked at JMU? (Text entry)

Q3. How old are you? (Text entry)

Q4. Please select the race or ethnicity you identify with the most.
   - White
   - African American
   - Hispanic
   - American Indian and Alaskan Native
   - Asian
   - Native Hawaiian and other Pacific Islander
   - Other (Text box entry)

Q5. Which best describes your marital status?
   - Single
   - Married
   - Widowed
   - Separated
   - Divorced

Q6. Please indicate the number of children in each age group for whom you are responsible. (Matrix table)
   - Infant (>1 year)
   - Toddler (1-3)
   - Preschooler (4-5)
   - Kindergartener – Elementary (6-10)
   - Middle Schooler (11-14)
   - High Schooler (15-18)
   - Post High School
   - [None, one two, three, four or more]

Q7. Do you have the responsibility for caring for an elderly or disabled parent/grandparent/in-law or other relative?
   - Yes
   - No
Q8. Is the individual:
   - Living with you
   - Locally but not living with you
   - Not local

Q9. Which best describes your current position at JMU?
   - Faculty
   - Staff

Q10. Which of these describes your faculty or staff status?
   - Full time
   - Part time

Q11. Which department/division is your current position at JMU? (Drop-down)

Q12. Your current position at JMU is:
   - Classified
   - Wage
   - Temporary
   - Administrative and Professional faculty
   - Part-time Non-Teaching
   - Instructional Faculty

Q13. If instructional faculty, please indicate your rank.
   - Visiting professor (any rank)
   - Professor
   - Associate professor
   - Assistant professor
   - Senior Lecturer
   - Lecturer

Q14. Do you currently have tenure, or are you currently tenure-tracked?
   - Yes
   - No

Work-Life Balance
Q15. How helpful would the following be for your current and anticipated family care needs? (Matrix table)
   - Flexible work schedule
   - Supervisor support
   - Peer support
   - Back-up elder/adult care service referrals
   - Back-up children care service referrals
   - [1 = very helpful, helpful, not helpful, 4 = not applicable]
Q16. How many days away from work have you needed to take in order to address family care needs in the past 12 months? (Drop down)
   ○ 0-5 days
   ○ 6-10 days
   ○ 11-15 days
   ○ 16-20 days
   ○ 21 or more

Q17. Overall, what is the balance between your work life and your home life?
   ○ [1 = very well-balanced, somewhat well-balanced, somewhat out of balance, 4 = Not balanced]

Q18. Which of the following best describes your feelings of stress in regards to work-life balance?
   ○ [1 = very stressful, stressful, slightly stressful, 4 = not at all stressful]

Q19. To what extent do the demands of your work interfere with personal life?
   ○ [1 = always, often, sometimes, 4 = Never]

Q20. Please indicate how often you feel as if the following statements are true:
   ○ Your work life intrudes upon my home life
   ○ Your home life intrudes upon my work life
   ○ [1 = daily, weekly, monthly, a few times a year, rarely, 6 = never]

Q21. Thinking back over the past year, how many times have you had to:
   ○ Miss something at work due to home life concerns/responsibilities
   ○ Miss something at home due to work life concerns/responsibilities
   ○ [1 = daily, weekly, monthly, a few times a year, rarely, 6 = never]

Q22. Please indicate your level of agreement with the following statements:
   ○ The demands of my work interfere with my home life
   ○ The amount of time my job takes up makes it difficult to fulfill family responsibilities
   ○ [1 = strongly agree, agree, disagree, 4 = strongly disagree]

Q23. Please read the following statements and indicate your level of agreement with the following statements: (Matrix table)
   ○ The environment at JMU supports balance between work and home life
   ○ My supervisor/department chair understands the importance of maintaining a balance between work and home life
   ○ My colleagues understand the importance of maintaining a balance between work and home life
   ○ Opportunities for work/home balance are equally available to all employees
   ○ I regularly have to make hard decisions between work and home obligations
   ○ Supporting a work/home life balance should be a priority for JMU
   ○ [1 = strongly agree, agree, disagree, 5 = strongly disagree]
Open-Ended Work-Life Balance
Q24. In what ways do you think JMU works to support a balance between work life and home life for its employees? 
Q25. How do you think JMU could improve its support for balance between work life and home life for its employees? 
Q26. What would a good balance or successful integrating of work life and home life look like for you? 
Q27. Is there anything else you would like to share about work-life balance?

Work-Life Balance and Information & Communication Technologies (ICTs)
Q28. Information and Communication Technologies (ICTs) are defined as devices used to digitally contact individuals via email, or instant message, such as phones, tablets, or computers. 
• Please indicate the level of frequency for the following statements: (Matrix table) 
  o To what extent do the demands of your work interfere with your personal life due to ICTs? 
  o To what extent do you believe ICTs promote a blur between your work life and personal life? 
  o To what extent do you spend on work related activities outside of regular work hours using ICTs? 
  o To what extent do you perceive ICTs (for work purposes) as a hindrance on your personal life? 
  o To what extent do you perceive ICTs (for work purposes) assist you in managing your work life when away from work? Outside of regular work hours? 
  o To what extent do you perceive ICTs as useful for managing your WLB? 
  o ICTs are useful in helping me manage my WLB. 
  o Using technology helps me balance my work and life by facilitating time management. 
  o To what extent does your mobile device create pressure on your work-life balance? 
  o To what extent do you feel busy due to the use of your mobile device? 
  o To what extent do you feel ICTs create work requests in your job than you would otherwise? 
  o [1 = Often, not often, sometimes, 4 = always]
Appendix D
Consent Form

Dear JMU Faculty,
You are being asked to participate in a research study conducted by Alexandra Hubbard, a master’s student in the Adult Education/Human Resource Development program at James Madison University.

Identification of Investigators & Purpose of Study
The purpose of this study is to better understand the effect of technology on work-life balance for female instructional and non-instructional faculty and staff in higher education. This study will contribute to the completion of her master’s research.

Research Procedures
This study consists of an online survey that will be administered to individual participants using Qualtrics (an online survey tool). The survey consists of questions related to technology and work-life balance.

Time Required
This survey will take between 10 and 15 minutes of your time.

Risks
The investigator perceives minimal or no risk from your involvement in this study (that is, no risks beyond the risks associated with everyday life).

Benefits
Your participation will contribute to the understanding of instructional and non-instructional faculty and staff experiences with technology and work-life balance at JMU. Additionally, your participation will help the investigator complete her master’s thesis.

Confidentiality
The results of this research will be presented to a faculty committee during the researcher’s Master’s thesis defense. While individual responses are anonymously obtained and recorded online through the Qualtrics software, data are kept in the strictest confidence. No identifiable information will be collected from the participant and no identifiable responses will be presented in the final form of this study. All data will be stored in a secure location only accessible to the researcher. At the end of the study, all records will be destroyed. Final aggregate results will be made available to participants upon request.

Participation & Withdrawal
Your participation is entirely voluntary. You are free to choose not to participate. Should you choose to participate, you can withdraw at any time without consequences of any kind. However, once your responses have been submitted and anonymously recorded you will not be able to withdraw from the study.

Questions about the Study
If you have questions or concerns during the time of your participation in this study, or after its completion or you would like to receive a copy of the final aggregate results of this study, please contact:

**Alexandra Hubbard**  
Adult Education/Human Resource Development  
Leadership  
James Madison University  
hubbarag@dukes.jmu.edu

**Dr. Noorjehan Brantmeier**  
Learning, Technology, and Leadership  
James Madison University  
brantmnk@jmu.edu

**Questions about Your Rights as a Research Subject**  
Dr. David Cockley  
Chair, Institutional Review Board  
James Madison University  
(540) 568-2834  
cocklede@jmu.edu

**Giving of Consent**  
I have been given the opportunity to ask questions about this study. I have read this consent and I understand what is being requested of me as a participant in this study. I certify that I am at least 18 years of age, and currently enrolled as a student at James Madison University. By clicking on the link below, and completing and submitting this anonymous survey, I am consenting to participate in this research.

**Survey Link:**  
http://jmu.co1.qualtrics.com/SE/?SID=SV_2rCmtha97iM8Hch
Appendix E
University Organizational Chart