

2018

# Work-Life Balance, Work-Study Interface, Gender, Stress, and Satisfaction of Online Students

Viya Kumari Ayadurai  
*Walden University*

Follow this and additional works at: <https://scholarworks.waldenu.edu/dissertations>

 Part of the [Quantitative Psychology Commons](#)

---

This Dissertation is brought to you for free and open access by the Walden Dissertations and Doctoral Studies Collection at ScholarWorks. It has been accepted for inclusion in Walden Dissertations and Doctoral Studies by an authorized administrator of ScholarWorks. For more information, please contact [ScholarWorks@waldenu.edu](mailto:ScholarWorks@waldenu.edu).

# Walden University

College of Social and Behavioral Sciences

This is to certify that the doctoral dissertation by

Viya Kumari Sivaguru Ayadurai

has been found to be complete and satisfactory in all respects,  
and that any and all revisions required by  
the review committee have been made.

## Review Committee

Dr. Leslie Barnes-Young, Committee Chairperson, Psychology Faculty

Dr. David Yells, Committee Member, Psychology Faculty

Dr. Anne Morris, University Reviewer, Psychology Faculty

Chief Academic Officer  
Eric Riedel, Ph.D.

Walden University  
2018

Abstract

Work-Life Balance, Work-Study Interface, Gender, Stress, and Satisfaction of Online

Students

by

Viya Kumari Sivaguru Ayadurai

MSOC, University of South Australia, 2008

BSc (Hons), Open University, United Kingdom, 2006

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Psychology

Walden University

August 2018

## Abstract

There is a likelihood of stress in working students' struggles to manage work, family, studies, and personal life, yet little is known about differences in stress levels between male and female online students. Previous studies suggested that more men than women balanced work and family owing to women's asymmetrical family responsibilities. The purpose of this study was to examine the moderating effects of gender on the relationships of work-life balance and work-study interface of working online students and their perceived stress and satisfaction with life. In this quantitative study, the theoretical framework included social role theory and spillover theory. A convenience sample of 80 working online students (aged 20–60+ years) participated in an online survey. Participants completed a demographic survey, work-life balance scale, work-study interface scale, perceived stress scale, and satisfaction with life scale. Collected data were analyzed using regression analysis. The results indicated that in both work-life balance and work-study interface, working female online students had higher levels of perceived stress than males, and women had a lower level of satisfaction with life than men in work-study interface. Understanding spillover experiences and gender social roles of working online students in their work-life balance and work-study interface may lead to positive social change by providing useful information for policy makers to support online students. The study may also provide an understanding of the dynamic of the work-life-study balance for the students themselves.

Work-Life Balance, Work-Study Interface, Gender, Stress, and Satisfaction of Online

Students

by

Viya Kumari Sivaguru Ayadurai

MSOC, University of South Australia, 2008

BSc (Hons), Open University, United Kingdom, 2006

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Psychology

Walden University

August 2018

## Dedication

Dedicated to my parents, father, Mr. S. A. Durai and mother, Mrs. Jeyalaxmi S. A. Durai, and sisters, the Durai Twins for all the memorable experiences and invaluable knowledge I gotten from them. I would also like to dedicate to my supervisors, Chairperson, Dr. Leslie E. Barnes-Young and Committee Member, Dr. David Yells for their expertise and motivation in supporting my pursuit in completing my dissertation.

## Acknowledgments

I would like to thank my Chair, Dr. Leslie E. Barnes-Young and Committee Member, Dr. David Yells for their expertise, guidance and encouragement that had been a great support in the completion of my dissertation. I would also like to thank my mother, Mrs. Jeyalaxmi S. A. Durai, who had been a constant inspiration and motivator for my study. As great pillars of strength beside me, my twin sisters, Shanti Durai and Vasanti Durai, served as my left and right support and care throughout this study. My daughter Shanu Rekha Loganathan has been my guide and mentor with her expertise in research writing. My son Vicknesh, Loganathan constantly encouraged me to move on. Finally, my other siblings and their children did chip in to ensure I was able to concentrate with minimal distraction during our weekly family gatherings. I would also like to thank all my family members for their invaluable support and encouragement throughout my dissertation.

## Table of Contents

List of Tables .....	iv
Chapter 1: Introduction .....	1
Introduction.....	1
Background.....	3
Problem Statement.....	5
Purpose of the Study.....	7
Research Questions and Hypotheses .....	7
Theoretical Framework for the Study.....	9
Nature of the Study.....	11
Definition of Terms.....	11
Assumptions.....	13
Scope and Delimitations .....	14
Limitations .....	14
Significance.....	15
Summary .....	16
Chapter 2: Literature Review.....	18
Introduction.....	18
Literature Search Strategy.....	18
Theoretical Foundation .....	19
Spillover Theory .....	19
Social Role Theory .....	21



Literature Review Related to Key Variables .....	23
Work-Life Balance.....	23
Work-Study Interface.....	27
Gender in Work-Life Balance.....	28
Stress and Satisfaction with Life in Work-Life Balance .....	29
Perceived Stress .....	30
Satisfaction With Life.....	32
Summary .....	34
Chapter 3: Research Methods .....	36
Introduction.....	36
Research Design and Rationale .....	36
Methodology.....	37
Population .....	37
Sampling and Sampling Procedures .....	38
Procedures for Recruitment, Participation, and Data Collection.....	38
Instrumentation and Materials .....	39
Data Analysis Plan.....	42
Research Questions and Hypotheses .....	43
Threats to Validity .....	45
Ethical Considerations .....	46
Summary .....	47
Chapter 4: Results.....	49

Introduction.....	49
Data Collection .....	51
Results	51
Demographic Factors .....	51
Work-Life Balance.....	54
Work-Study Interface.....	55
Summary .....	57
Chapter 5: Discussion, Conclusions, and Recommendations.....	59
Introduction.....	59
Interpretation of the Findings.....	60
Work-Life Balance.....	61
Work-Study Interface.....	63
Limitations .....	65
Recommendations.....	65
Implications.....	66
Conclusion .....	68
References.....	70

## List of Tables

Table 1. Descriptive Statistics.....	53
Table 2. Regression Work-Life Balance of Online Students.....	55
Table 3. Regression Work-Study Interface of Online Students.....	57

## Chapter 1: Introduction

### **Introduction**

Work-life balance plays a pivotal role in the holistic wellbeing of individuals (Lyubomirsky, 2008; Moore, 2007; Pocock, 2005). Pursuit of well-being and life satisfaction has been on the rise globally for the past decades (Diener & Chan, 2011; Singh, 2013). Lockwood (2003) referred to work-life balance as a state of equilibrium between an employee's job and personal life demands, while Greenhaus and Beutell (1985) referred work-family conflict as, "a form of inter-role conflict in which role pressures from the work and family domain are mutually incompatible in some respect" (p. 77).

Interrole conflicts between work and nonwork domains may result in unfavorable outcomes such as stress, burnout, lower levels of job satisfaction, and negative family satisfaction (Okeke, 2011). In particular, Martinez, Ordu, Della Sala, and McFarlane (2013) highlighted that stress remained unexamined among working online students. For example, experience of conflict in a particular domain (e.g., work domain) may increase stressful situations for working online students that may lead to decreased satisfaction in the receiving domain (e.g., nonwork domain).

Next, some women may be particularly impacted by the challenges that come from managing work and family (Beutell & Schneer, 2014; Bird, 2006; Stimpson & Filer, 2011). Bird (2006) found that many women traditionally take on multiple roles that may contribute to higher levels of stress compared to men. Likewise, in their study, Stimpson and Filer (2011) concluded that it was challenging for some women to manage their

many roles as employees, wives, mothers, caregivers, and with an additional role as students to balance their work, family, studies, and personal life.

Working nontraditional students enrolled in school may face the pressures of multiple roles that may sometimes leave them with a feeling of being overwhelmed, overloaded, or stressed (Duxbury & Higgins, 2012; Hale, 2013; Lei & Gupta, 2010; Olson, 2014). As a result, working online students may already experience work-family conflicts, and an additional role as student may lead to neglect of certain roles and/or role overload (Lei & Gupta, 2010). Hale (2013) reported that students from brick-and-mortar universities experienced statistically significantly higher satisfaction with life than did working online students.

While much research has been conducted on work-life conflict in traditional work and educational settings, one aspect of work-life conflict that has remained unexamined is the role of online student. Online universities market their educational settings as convenient, flexible, and suited to the demands of working nontraditional college students (Lei & Gupta, 2010; Martinez et al., 2013). But these virtues remain largely unexamined as they relate to work-life balance and whether there is, as might be assumed, any benefit for women in these settings.

The remainder of Chapter 1 is organized into the following sections: background, problem statement, research questions and hypotheses, theoretical framework for the study, nature of the study, definition of terms, assumptions, scope and delimitation, limitations, significance, and summary. In the next section, I discuss the background of the current study.

## **Background**

Atici and Bati (2010) stated that the use of the Internet created opportunities for individuals for continuing education. Allen and Seaman (2007) highlighted that the key reason for the emergence and growth of online education was that it provided adult learners greater autonomy and flexibility to enroll in courses that fit their schedules. In the 2014 Survey of Online Learning conducted by the Babson Survey Research Group, the number of students taking at least one online course had surpassed 7.1 million (Allen & Seaman, 2014). Further, according to the U.S. Department of Education (2007), 46% of full-time students and 81% of part-time students were engaged in a paid position while studying; 25% of these students were also engaged in family responsibilities such as having to take care of dependents (National Center for Education Statistics, 2008). Given this considerable number of students engaged in online education, there was a need to examine their work-life balance because combining responsibilities of work, family, and study may cause additional forms of stress. That is, working online students engage in work and family responsibilities in addition to their study responsibilities and thus may experience stress that affects their overall life satisfaction.

Students may be overwhelmed due to their academic workload, paid job demands, personal commitments, and family responsibilities (Pookaiyaudom, 2015).

Pookaiyaudom (2015) highlighted that there was a high awareness of the importance of work-life balance in order to maintain well-being among students who experienced limited work-life balance associated with an overload of academic work. Demands from academic work and paid work disrupted the balance causing stressful environments for

students as they faced spillover experiences in their work-study interface. Staines (1980) defined spillover as a process where individuals' experiences in one role affect their experiences in another role and the resulting role experiences in the other role may manifest as positive spillover or negative spillover. Further, Schmidt (2011) found significant spillover of work-to-family for men and spillover of family-to-work for women. Adema (2013) found that family-to-work spillover was stronger for women and the work-to-family spillover was stronger for men.

Both male and female students strive to obtain a balance in their work-life-study balance, evidence of how and to what extent they achieved their work-life balance was revealed in previous studies. For example, Pookaiyudom (2015) highlighted that study overload interfered with work/family responsibilities. Baral and Bhargava (2011) found work-family enrichment was stronger for women than men. Kossek, Valcour, & Lirio (2014) found stress and satisfaction experienced by men and women in their interrole conflict depended on the work-family responsibilities.

In summary, the use of the Internet created opportunities for adult learners for continuing education. Previous studies (Duxbury & Higgins, 2012; Lei & Gupta, 2010; Martinez et al., 2013) revealed how and to what extent working online students strive to obtain a balance in their work, life, and studies. The current study examined the moderating effects of gender on the relationship between work-life balance and work-study interface of working online students and their perceived stress and satisfaction with life. In the next section, I explore the gap in the literature in the problem statement.

### **Problem Statement**

Many online students are engaged in work and family responsibilities. Brus (2006) highlighted that students in their studies struggled to balance their academic pursuits with their personal lives and responsibilities. Olson (2014) found that 1,143 college students' job demands were significantly related to work-to-school conflict, their family demands were significantly related to family-to-school conflict, and their school demands were significantly related to school-to-family and school-to-work conflict. The author also found that work-school conflict significantly decreased job and school satisfaction, and family-school conflict significantly decreased family and school satisfaction. Given that work-family-study demands are related to work-family-study conflict that decreases work, family, and study satisfaction, this study examined the moderating effects of gender on the relationships between work-life balance and work-study interface of working online students and their perceived stress and satisfaction with life.

Next, women may experience increased responsibility of balancing their additional roles when they continue to take on the majority of domestic responsibilities and struggle with work-life balance compared to men in dual-career families (Evans, Carney, & Wilkinson, 2013). However, with the trend in the integration of gender roles, responsibilities for work, domestic work, and childcare are not necessarily restricted to traditional gender roles (Wang, 2013). This study supplemented the current literature by examining the gender differences in work-family-study conflict.



There is research (Hecht & McCarthy, 2010) on work-life concerns, where work-family conflict has been given considerable attention compared to the broader concept of work-life balance. There is also research (Martinez et al., 2013; Pookaiyaudom, 2015) on students and work-family conflict, but most of these studies examined only students in doctoral programs. Owing to the limited literature on e-learning in the context of work-life balance, little is known about work-life balance, work-study interface, perceived stress, and satisfaction with life of working online students. More studies may provide an increased level of awareness of employees' needs in this area to e-learning providers and policymakers so as to maximize productivity gains (Overton & Hill, 2009). In this study I attempted to provide a better understanding of the spillover experiences faced by online students when they manage work-family-study conflict.

Male and female working online students alike may find it challenging to meet the demands of family-related activities and work-related activities in addition to their study-related activities and face stress. In turn, these stressors may reduce the level of satisfaction with their work-family situations. The roles taken up by the students as employees, family members, and students play a crucial role in working students' lives. Study responsibilities with family and/or work responsibilities may cause stress. There have been many studies (Greenhaus & Allen, 2012; Hale, 2013; Pookaiyaudom, 2015; Singh, 2013; Wang, 2013) that have examined work-family conflict and work-life balance among employees, but few focused on working online students. The current work-family-study research is relevant to working online students, and may expand the already existing literature of work-life balance/conflict. Given there may be an increase

in stress and low satisfaction in work-family-study conflict of male and female employees, this study examined the moderating effects of gender on work-life balance and work-study interface of working online students and their perceived stress and satisfaction with life. In the next section, I discuss the purpose of the study.

### **Purpose of the Study**

The purpose of the current study was to quantitatively examine the moderating effects of gender on the relationships between work-life balance and work-study interface of working online students and their perceived stress and satisfaction with life. The independent variables for the current study were work-life balance and work-study interface of working online students. The dependent variables were perceived stress and satisfaction with life of the working online students. The moderator variable was gender of the working online students. In the next section, I discuss the research questions and hypotheses of the current study.

### **Research Questions and Hypotheses**

Gender plays an important role in moderating the relationships between work-life balance and work-study interface of working online students and their perceived stress and satisfaction with life in this study. With substantial background of research on spillover in work-family conflict among adult employees, I focused the current study on identifying predictors of spillover between men and women employees. The research questions and hypotheses were:

RQ1: What is the moderating effect of gender on the relationship between work-life balance of working online students and their perceived stress?

*H<sub>01</sub>*: Gender will not moderate the relationship between work-life balance and perceived stress of working online students.

*H<sub>11</sub>*: Among working online students, gender will moderate the relationship between work-life balance and perceived stress, such that women are more likely to report higher levels of perceived stress than men.

RQ2: What is the moderating effect of gender on the relationship between work-study interface of working online students and their perceived stress?

*H<sub>02</sub>*: Gender will not moderate the relationship between work-study interface and perceived stress of working online students.

*H<sub>12</sub>*: Among working online students, gender will moderate the relationship between work-study interface and perceived stress of working online students, such that women are more likely to report higher levels of perceived stress than men.

RQ3: What is the moderating effect of gender on the relationship between work-life balance of working online students and their satisfaction with life?

*H<sub>03</sub>*: Gender will not moderate the relationship between work-life balance and satisfaction with life of working online students.

*H<sub>13</sub>*: Among working online students, gender will moderate the relationship between work-life balance and satisfaction with life of working online students, such that women are more likely to report lower levels of satisfaction with life than men.

RQ4: What is the moderating effect of gender on the relationship between work-study interface of working online students and their satisfaction with life?

*H<sub>04</sub>*: Gender will not moderate the relationship between work-study interface and satisfaction with life of working online students.

*H<sub>14</sub>*: Among working online students, gender will moderate the relationship between work-study interface and satisfaction with life of working online students, such that women are more likely to report lower levels of satisfaction with life than men.

In the next section, I discuss theoretical framework for the study.

### **Theoretical Framework for the Study**

Building the groundwork for the current study regarding working male and female online students required an understanding of the variables (e.g., gender, work-life balance, work-study interface, perceived stress, and satisfaction with life) that influence the changing social role in gender and spillover experiences of working online students in their work-life balance and work-study interface. Spillover theory was developed from Sieber's (1974) idea of personality enrichment. Kanter (1977) highlighted work affecting family life and family life affecting work. Zedeck (1992) drew a positive association between life satisfaction and work satisfaction. Pleck (1977) worked on work-family role system and raised the associations among male work roles, male family roles, female work roles, and female family roles. Women experienced spillover from family roles into work roles and men experienced spillover from work roles into family roles (Pleck, 1977).

Spillover theory is a process by which individuals' experiences in one role affect the individuals' experiences in another role and the resulting role experiences in the other role may manifest as positive spillover or negative spillover (Staines, 1980). There could be positive spillovers and negative spillovers from work domain to family domain (Hansen, Hammer, & Colton, 2006) and individuals may experience stress and fatigue during these spillovers (Googins, 1991). However, Padma and Sudhir (2013) found the following demographics of marital or partner status, long working hours, child-care responsibilities and support from head of the department influenced the work-life balance of schoolteachers. A statistically significant support from spouse and elder parent buffer any spillover into childcare responsibilities.

Social role theory emerged in the 1980s as an attempt to understand the origin of sex differences and similarities in social behavior (Eagly, Wood, & Diekman, 2000). The traditional division in labor between women and men is in accordance with domestic responsibilities and occupational responsibilities respectively (Eagly, 1987) where men and women behave differently in social situations owing to society's expectations and gender stereotyping. Further, as psychological well-being is the resultant outcome of how salient a role is to the corresponding role (Thoits, 1992), negative experiences in a highly prominent role may result in more negative emotions and related well-being outcomes compared to a role of less prominence. Depending on the importance individuals have placed in the role, individuals may experience stronger negative emotions when one role interferes with the other role.

Wolfram and Gratton (2014) showed that female managers from 67 work-groups reported that a lack of gender-typical attributes in their gender role self-concept might be disadvantageous in that they found individuals with higher family role experienced negative spillover from home to work and lower life satisfaction. The current study examined gender differences among working online students in work-family-study conflict. In the next section, I discuss the nature of this study.

### **Nature of the Study**

In the current study I examined the moderating effects of gender on the relationships between work-life balance and work-study interface of working online students and their perceived stress and satisfaction with life via online survey. I chose a quantitative research method for this study because quantitative research focuses on statistical data collection to determine the relationship between variables (Creswell, 2014). Self-report data were collected from working online students of Walden University and were analyzed using regression analysis. In the next section, I discuss terms pertinent to this research.

### **Definition of Terms**

In context of the study, the following terms are defined to ensure clarification.

*Adult learners:* Students aged 24 years or older who are enrolled in higher educational programs (Whisnant, Sullivan, & Slayton, 1992).

*Asynchronous learning:* Learning that takes place in an online format (Chickering & Ehrmann, 1996). In context of this study, the term refers to enrolled online learners who are able to log into the course-room, complete assignments and assigned postings by

a specific deadline, and even respond to others at the learners' discretion. Learners are able to log in anytime, anywhere as long as there is internet connection to log into the course room.

*Interrole conflict:* Perceived challenges and difficulties that an individual may experience as a result of involvement in more than one role (Greenhaus & Beutell, 1985).

*Online graduate program:* An internet-based learning platform where the student is separated from the instructor and peers by time and space (Albright, Simonson, Smaldino, & Zvacek, 2006).

*Perceived stress:* An individual's perception of stress related to daily life (Cohen, Kamarck, & Mermelstein, 1983).

*Satisfaction with life:* Cognitive self-judgments of satisfaction with a person's life (Pavot & Diener, 1993).

*Work-life balance:* An individual's assessment of balancing multiple life roles (Greenhaus & Allen, 2011; Haar, 2013; Kossek et al., 2014).

*Work-study interface:* An interrole conflict that occurs when one role makes it difficult to fulfill the obligations of the other roles (Greenhaus & Beutell, 1985). In the context of this study, role of working online student as a nonwork domain in the work-life conflict construct.

*Study interface with work:* An interrole conflict whereby the extent to which study-related responsibilities interfere with the ability to meet the demands of work (Cheng & McCarthy, 2013).

*Work interface with study:* An interrole conflict whereby the extent to which work-related responsibilities interfere with the ability to meet the demands of study (Cheng & McCarthy, 2013).

*Wellness:* A positive approach to living that emphasizes the whole person in relation to state of health, which is closely related to health and lifestyle (Lyubomirsky, 2008). In the context of this study, a state of well-being is the integration of the body, mind, and spirit. Also included is the appreciation that everything a person does, thinks, feels, and believes has an impact on that person's state of health.

In the next section, I discuss the assumptions of the current study.

### **Assumptions**

The constructs of work-life balance, work-study interface, perceived stress, and satisfaction were based on the following assumptions that reflected behavioral science perspectives. The assumptions comprised individuals' regulation of their own behavior, interacting and progressively transforming with the environment through self-initiation of person-environment interactive patterns essential to behavior change. The following assumptions were based on the nature of the study. I assumed that the working online students at SurveyMonkey® gave honest answers in the survey. I assumed the data collection to be unbiased. I assumed the online survey platform to be accessible and efficient for all undergraduate and graduate online students of the university to participate. In the next section, I discuss the scope and delimitations of the current study.



### **Scope and Delimitations**

The study participants consisted of working undergraduate and graduate online students enrolled at Walden University. The scope of this study was limited by the use of just one chosen university. The online survey was opened to working undergraduate and graduate online students pursuing an online education at the university. The current study provided information for future research that may enable appropriate future interventions for working online students. In the next section, the limitations of the current study are discussed.

### **Limitations**

The findings of this study may not generalize to other working student populations, such as working traditional students from brick-and-mortar universities, as data was only collected from working online students. The online survey was opened to all working undergraduate and graduate online students of the chosen university. The online survey included demographic characteristics for future reference and was not included in the findings of the current study. The use of a Likert scale in the survey may have limited some participants' ability to provide an accurate assessment of their feelings, behavior, or beliefs (Creswell, 2003).

The next possible limitation of this study was participants' understanding and interpretation of the survey questions; there was a possibility for participants to fake good social desirability and provide demand effects responses (Breakwell, Hammond, Fife-Schaw, & Smith, 2008). Demand effects take place when participants may respond in a socially acceptable manner. Participants may also respond according to what the

researchers would want. Also, there may be a difference in some crucial way between participants who volunteered to do the survey compared to those other individuals who declined the offer to participate; for instance, participants may have higher stress levels than individuals who chose not to participate in the study. Thus, limitations and delimitations in this study allowed provision of earlier interventions to increase accuracy of the test. In the next section, I discuss the significance of the current study.

### **Significance**

This study provided useful information of changing social roles in gender and spillover experiences of working online students in their work-life balance and work-study interface. The findings would be useful for human resource personnel and higher education personnel of online education in designing and structuring appropriate settings for working online students such as work-study schedule. Social implications of the present study exploring working online students' work-life balance and work-study interface served as an impetus for future research on interconflict of more than the two role domains. Conducting a quantitative study using survey research led to an understanding of the personal dimensions in life other than work domain of online students, such as the demographic information of age, work-hours, study-hours, number of children, and so forth. Tapping into the experience of the working online student role in work-life balance and work-study interaction in this study provided relevant information and understanding of the dynamic of work/family/study balance for the students themselves such as stress and satisfaction experienced by students in their work-life-study balance. An insight into the changing social role in gender and spillover

experiences of working online students provided information with regards to their perceived stress and satisfaction with life that may enable appropriate future interventions.

Another social implication of the current study was establishing awareness and understanding of the role conflicts faced by working online students in their work-life balance. For policy makers, the findings of this study may provide useful information about the work-life balance/interface, stress, and satisfaction of working online students, specifically a flexible work schedule in relation to work hours, family hours, and study hours. Information such as perceived stress and satisfaction of life of working online students provided an insight into the plight of working online students for any future interventions. Concerned policy makers can also assist working online students in upkeep of their studies in work-life balance, for instance, university study leave. The positive social change may result from an awareness of changing social roles in gender and spillover experiences of working online students in their work-life balance and work-study interface. The findings of this study contribute to positive social change by providing useful information for policy makers to support online students and an understanding of the dynamic of the work/life/study balance for the students themselves. In the next section, I discuss the summary of the current study.

### **Summary**

In this study, I examined the relationship between work-life balance and work-study interface of working online students with gender as a moderator in relation to quality of life. There is a constant struggle in managing work and personal lives of

working individuals. They face the interference of work or nonwork domain that may lead to a positive or negative spillover and increase work-life problems and stressors (Mauno, Kinnunen, & Ruokolainen, 2006). Balancing work and nonwork domain plays a critical role in working students' lives. In this study, I examined the moderating effects of gender on the relationships between work-life balance and work-study interface and their perceived stress and satisfaction with life of working online students. The findings of this study shed more light into the role of working online students, and in the process, the findings of this study may aid online students to increase their health outcomes positively with optimal well-being and enhanced functional ability with personal fulfilment and productivity so as to achieve an overall betterment in health.

Chapter 1 consisted of the introduction, background, scope of the study, literature gap, problem statement, purpose of study, research questions and hypotheses, theoretical framework for the study, nature of the study, definitions of terms, assumptions, scope and delimitations, limitations, significance and summary. In the next chapter, I discuss research related to key variables.

## Chapter 2: Literature Review

### **Introduction**

Work-life balance is a key issue in dual-career families where high work demands and long working hours may become a challenge for both men and women (Wang, 2013). Women in the past were mostly confined to their domestic responsibilities and very few women received an education (Carey-Fletcher, 2007). With an increase in the number of women in the workforce, both men and women may face challenges in balancing work roles and family roles. As adults return to school, they may also face work-family-school conflicts.

Work-family-study conflict is bidirectional where work/family responsibilities interfere with study responsibilities and study responsibilities interfere with work/family responsibilities; for instance, study overload interferes with work/family responsibilities (Pookaiyaudom, 2015). The remainder of Chapter 2 is organized into the following sections: literature search strategy, theoretical foundation, literature review related to key variables, and summary. In the next section, I discuss the literature search strategy for the current study.

### **Literature Search Strategy**

The search covered literature databases such as ProQuestCentral, ERIC, MEDLINE, PsycINFO, PsycARTICLES, single search terms and concepts, and advanced search in the Boolean search. The Walden library's subject-specific databases were used to find current peer-reviewed journal articles, books, reports, theses, and dissertations. Peer-reviewed publications, reports, and conference proceedings were searched to

contribute to the limited current literature review. I used Google Scholar and citation tools such as Academic Search Premier (EbscoHost) to perform a search using title or author of peer-reviewed journal articles, books, and dissertations and for APA citation style. In the next section, I discuss the theoretical foundation of the current study.

### **Theoretical Foundation**

In this section, I discuss the theoretical foundation of social role theory and spillover theory. I used the theoretical foundation of this dissertation to extend an understanding of the spillover effects in the work-study interface of male and female online students.

#### **Spillover Theory**

Spillover theory evolved from Sieber's (1974) idea of personality enrichment. Sieber observed that the skills and behavior that existed in one role could also be effectively applied to another role. A general model of spillover is bidirectional where positive and negative values, behaviors, and skills are transferred from one role to another (Crouter, 1984; Staines, 1980; Zedeck, 1992). There could be positive spillovers and negative spillovers from work domain to family domain (Hansen et al., 2006; Hill, Ferris, & Mårtinson, 2003; Zedeck, 1992). As such, individuals may also experience stress and fatigue during these spillovers (Googins, 1991).

Past studies highlighted the association of variables in work domain and nonwork domain in work-life spillover, such as (a) negative spillover from home to work with stress (Schmidt, 2011); (b) positive spillover of work domain with general well-being in the family domain (Kinnunen, Feldt, Gerust, & Pulkkinen, 2006); (c) bank employees'

positive spillover to greater family satisfaction, increased mental health, and overall well-being (Hansen et al., 2006); (d) positive work-spillover and positive health outcomes of Canadian government workers (Brotheridge & Lee, 2005); (e) positive job-to-home with organizational family support, job autonomy, perceived control and well-being (Thompson & Prottas, 2006); (f) family disagreements and negative spillover between work and family (Grzywacz & Marks 2000); and (g) work spillover with the quality of marital relationship, parent-child relationship, involvement in household responsibilities, and leisure activities (Small & Riley, 1990).

Theorists and researchers (Allen, Hancock, Vardaman, & McKee, 2014; Klein, Cooper, Molloy, & Swanson, 2014) have explored new ways in which affect, skills, behaviors, and values could be transferred from work domain to nonwork domain. When the spillover was integrated and overlapped with work and nonwork domain responsibilities in time and space, then the spillover was positive in the direction of achieving healthy work and nonwork balance (Hill et al., 2003). Thus, according to spillover theory, when positive spillovers transferred positive role qualities and their beneficial effects on the receiving domains, there were positive effects of work on other areas of life (Crouter, 1984).

Thompson and Prottas (2006) examined the relationship among organizational family support, job autonomy, perceived control, and well-being. In their qualitative study, the authors hypothesized the relationships among availability of formal organizational family support (family benefits and alternative schedules), job autonomy, informal organizational support (work-family culture, supervisor support, and coworker

support), perceived control, and employee attitudes and well-being. The authors found that the informal organizational support for work-family balance from supportive supervisors, coworkers, and work-family culture was a significant predictor of positive job-to-home spillover.

Schmidt (2011) examined work-life conflict by exploring factors associated with negative spillover from home to work. The author hypothesized that female workers, workers with children under the age of six in the home, working mothers, and workers employed as managers/professionals were more likely to report negative home-to-work spillover than male workers. In that quantitative study using secondary data, the author found that both males and females experienced negative spillover from home to work. Males were stressed from their home chore of cleaning responsibilities and their job. The significant predictor of spillover for females was having children younger than six years of age at home.

The current study examined the moderating effects of gender on the relationships between work-life balance and work-study interface of working online students and their perceived stress and satisfaction with life. In this study, the views of spillover theory were applied to extend an understanding of the spillover effects in the work-study interface of male and female online students.

### **Social Role Theory**

In the 1980s, social role theory emerged as an attempt to understand the origin of sex differences and similarities in social behavior (Eagly et al., 2000). The differences in the behavior of men and women distributed them into social roles acquiring role-related



skills. As such, women and girls became homemakers and assumed responsibilities at home and men were the breadwinners and assumed responsibilities outside the home. Future generations were directed by gender stereotypes of their social roles acquired early in childhood (Eagly, 1987, 1997; Eagly et al., 2000; Williams & Best, 1982).

Franke, Crown, and Spake (1997) found that more women perceived specific hypothetical business practices as unethical compared to men. Here, using the social role theory, they observed that there was a decline in gender differences when students were at precareer samples and an increase in gender differences when work experience of samples increased. Greater gender differences were found in nonmonetary issues than in monetary issues. In view of the current study, the social role theory was able to explain the gender differences in the relationships between work-life balance and work-study interface of the male and female online students and their perceived stress and satisfaction with life.

Social role theory identifies the traditional division in labor between women and men in accordance with domestic responsibilities and occupational responsibilities respectively (Eagly, 1987). Although there are other theories of stereotype content (Alexander, Brewer, & Herrmann, 1999; Fiske, Cuddy, Glick & Xu, 2002), social role theory focuses on the openly observable behaviors in occupational roles and domestic roles. For instance, there are observable characteristics such as men's size and strength and women's pregnancy and lactation accounts for division of labor. Social role theory also provides plausible account of the psychological processes of stereotyping. For instance, sex-typical behaviors are dependent on stereotypic sex differences based on

society's approval of an individual's behavior and action according to categorization as male and female gender roles.

In summary, I used spillover theory (Zedeck, 1992) and social role theory (Eagly, 1987) in the current study. The two theories are associated with the behavior of the employees. In this study, I used the two theories to explain the gender differences and the behavior of both male and female employees in occupational roles and domestic roles that could be transferred from work domain to nonwork domain. In the next section, I discuss the literature review related to key variables of the current study.

### **Literature Review Related to Key Variables**

In this section, the key variables related to literature review are work-life balance, work-study interface, student role and gender in work-life balance, work-study interface, student role in work-life balance, gender in work-life balance, stress and satisfaction with life in work-life balance, perceived stress, and satisfaction with life. This section provides a review of the key variables.

#### **Work-Life Balance**

Work-life balance is crucial to organizations and employees to obtain an optimal management of multiple tasks at work, home, and personal life, as employees with high work-life balance contributed more towards organizational growth and success (Naithani, 2010). According to Singh (2013), there has been an interest in work-life interface in psychology, mainly in the sources and outcomes of conflict between work-to-life and life-to-work domains in the recent years. In the literature, not only is work-life balance

frequently used interchangeably with work-family balance and work-life interface with work-family conflict, the concepts remained the same (Hecht & McCarthy, 2010).

Work-life balance refers to the equilibrium of resources and constraints between work and nonwork domain as in family or other personal roles (Frone, 2003; Quick, Henley, & Quick, 2004). Work-life balance also refers to the degree to which employees could concurrently balance their emotional, behavioral, and time demands of both paid work and family and personal duties (Hill, Hawkins, Ferris, & Weitzman, 2001). Lacking a universal definition, work-life balance remains a broad and complex phenomenon where work-life balance most typically is conceptualized as the “extent to which an individual is equally engaged in—and equally satisfied with his or her work role and family role” (Greenhaus, Collins, & Shaw, 2003, p. 513) and work-family balance has been defined as “satisfaction and good functioning at work and at home, with a minimum of role conflict” (Clark, 2000, p. 751).

Verhagen and Vossen (2011) investigated the influence of control over work schedules in employees’ work-life balance (production and office workers) on three job outcomes: job satisfaction, turnover intention, and organizational commitment. The authors hypothesized that work schedule would moderate the relationship between control over work schedules and work-life balance. They distributed a questionnaire about personal situations, work-life balance, and perceived control among various organizations. Contrary to the hypotheses, results revealed that controlling schedule type did not influence work-life balance ( $\beta = -.19, p = \text{n.s.}$ ). The researchers interpreted that the effect of control of work schedules on work-life balance was not significant for

employees. Control of work schedules also may not influence work-life balance of working online students.

Ramos, Francis, and Philipp (2015) examined the work-life balance and quality of life among 139 employees in the banking industry in Malaysia. They hypothesized that there is a relationship between time and involvement balance and quality of life. While time indicated the amount of time devoted to work and family roles, involvement balance indicated the amount of psychological involvement at work and in family roles. Surveys were e-mailed to bank employees. The results revealed that employees who maintained time ( $F = 4.25; p < .001$ ) and involvement balance ( $F = 4.02; p < .001$ ) experienced better quality of life. The researchers interpreted that balance in time and involvement in work-life balance reduced imbalance and increased quality of life. Hence, increasing balance between work roles and family roles may have positive impacts on the quality of life for employees. It is important for working online students to strike a balance between their work roles and nonwork roles.

An imbalance in work-life balance may occur to working online students when there is a struggle for individuals to maintain and satisfy the demands by both the work and non-work domains. As such, stress may result owing to the conflicting pressure from work and non-work domains. Pookaiyaudom (2015) highlighted the importance of work-life balance among 65 students. The author hypothesized students from Thai and International program have similar perceptions towards the importance of work-life balance. His findings revealed that the students had a high awareness of work-life balance that ensured an optimal and valued life ( $t(65) = .017, p=0.05$ ). The study also highlighted

that students experienced limited work-life balance owing to an overload of university assignments and projects and their desire to seek recreational activities outside their study time. With an additional role as students, working online students may experience stress in their work-family-study conflict. In the current study, working online students' spillover experience of study overload from study to work domain may affect their work, resulting in an increase in their stress level and a decrease in their satisfaction level.

Haar, Russo, Suñe, and Ollier-Malaterre (2014) investigated the effects of work-life balance on job satisfaction, life satisfaction, anxiety, and depression of 1,416 employees across seven distinct cultures of Malaysian, Chinese, New Zealand Maori, New Zealand European, Spanish, French, and Italian. In their quantitative study, the authors hypothesized that gender egalitarianism will moderate the relationship between work-life balance and individual outcomes, such that the positive relationship between work-life balance and (a) job satisfaction and (b) life satisfaction will be stronger in countries higher in gender egalitarianism, and the negative relationship between work-life balance and (c) anxiety and (d) depression will be stronger in countries higher in gender egalitarianism. Their study revealed that work-life balance was more positively associated with job satisfaction (path coefficient = .05,  $p < .05$ ) and life satisfaction (path coefficient = .10,  $p < .001$ ) for employees in countries higher in gender egalitarian cultures, and more negatively associated with anxiety (path coefficient = -.09,  $p < .01$ ) for employees in countries higher in gender egalitarian cultures. The researchers interpreted that employees may feel more satisfied in work-life balance. With an additional role as students, working online male and female students may experience satisfaction in

balancing their work and study. In the current study, working online male and female students may experience satisfaction in their work-life balance.

In summary, employees with high work-life balance may contribute more towards organizational growth and success (Naithani, 2010), and by increasing a balance between work roles and family roles, may also have positive impacts on the quality of life on employees (Ramos et al., 2015). With an additional role as students, working online male and female students may experience stress in their work-family-study conflict, and they may also experience satisfaction in balancing their work and study. In the next section, work-study interface will be discussed.

### **Work-Study Interface**

In this section, work-study interface is addressed. With limited research on the role of a student and its influence on work and non-work domain (Hecht & McCarthy, 2010), the role of working online students was taken into account as a non-work domain in the work-study interface. The work-study interface was measured by two subscales of work interface with study and study interface with work focusing on to what extent work interfered with student role and student role interfered with work (Frone et al., 1992; Markel & Frone, 1998; Netemeyer, Boles & McMurrian, 1996). In this study, the term *work-study* was used instead of *work-family*.

As work-study interface is bidirectional where work interferes with study and study interferes with work, work-study interface may be either adverse (work-study conflict) or beneficial (work-study enrichment) (Pookaiyaudom, 2015). Students' roles in the work-life balance added to the existing constant struggle in managing work and their

personal lives as working students faced work-life problems and work-related stress (Behere, Yadav, & Behere, 2011; Mauno et al., 2006; Skakon, Nielsen, Borg, & Guzman, 2010).

Hale (2013) examined the influence school choice, online versus traditional, has on perceived overall satisfaction with life of graduate students. The author hypothesized that perceived levels of overall life satisfaction will be significantly lower for graduate students attending an online university than similar students attending traditional brick-and-mortar universities. Hale concluded that there was a significant difference in the perceived overall satisfaction with life of graduate students from traditional brick-and-mortar schools ( $Md = 27, n = 82$ ) and online schools ( $Md = 25, n = 65$ ),  $U = 2099.500, z = -2.210, p = .027, r = -.18$ . In the current study, working online students may either spillover their study to work domain that may affect their work or spillover their work to study domain that may affect their study, resulting in an increase in their stress level and a decrease in their satisfaction level.

In summary, the role of the online student was taken into account as a non-work domain in the work-study interface. Work-study interface is bidirectional, and it addresses to what extent work interfered with student role and student role interfered with work, resulting in an increase in their stress level and a decrease in their satisfaction level. In the next section, gender in work-life balance will be discussed.

### **Gender in Work-Life Balance**

In this section, gender in work-life balance is addressed. Researchers revealed both men and women managed and balanced work-life demands (Parker & Wang, 2013).

However, there was a difference between the dual roles played by men and women. In work-family conflict, women were more likely to adjust to their work compared to men. Traditionally held beliefs of men as breadwinners and women as homemakers and social construction of gender make it challenging for motherhood to be compromised with fatherhood (Grönlund, 2007). Spillover of positive experiences of family to work was significant for women, whereas the spillover of positive experiences at work to family was significant for men, and not women (Adema, 2013). For example, working mothers found spillovers from family, like support from spouse/partner, supervisor support, and flexi-work schedule. In this study, gender as a moderator gave an insight to the changing social role in gender and spillover experiences of working online students in their work-study interface. In the next section, stress and satisfaction with life in work-life balance will be discussed.

### **Stress and Satisfaction with Life in Work-Life Balance**

An increase in stress-related studies and life-satisfaction studies of working online students across genders would be beneficial as the number of students taking at least one online course had surpassed 7.1 million, which was nearly one-half of all students in higher education taking at least one online course in the United States of America (Allen & Seaman, 2014). With a shift in the delivery of education, working online students may enjoy a more balanced work-life balance, however, in another study, students found that their study took away time from work and family (Kirby, Biever, Martinez, & Gomez, 2004). Work comprised 25% of an individual's waking life and 25% of the overall life satisfaction was job satisfaction (Grawitch, Gottschalk, & Munz, 2006). In the event of



spillovers from one domain to another, graduate students managed their work- and non-work activities by making many sacrifices that influenced their life satisfaction (Martinez et al., 2013). In this study, the moderating effects of gender on the relationship between work-life balance and work-study interface of working online students and their perceived stress and satisfaction with life gave an insight into the changing social role in gender and spillover experiences of working online students in their work-life balance and work-study interface. In the next section, perceived stress is discussed.

### **Perceived Stress**

Stress can be perceived as any type of change that causes physical, emotional, or psychological strain (Holmes & Rahe, 1967). Lazarus and Folkman (1984) found stress occurs when the relationship between individuals and the environment is assessed as demanding and their well-being is at risk. Kiecolt-Glaser, and Glaser (2001) found that high levels of perceived stress may influence the functioning of the immune system. As such, the rationale of perceived stress was constructed on an individual's perception of stressful life events which had a more intense effect on one's health than the actual event itself.

In their quantitative study, Lim, Tam, and Lee (2013) hypothesized a positive relationship between perceived stress and general health state. The authors revealed in their findings that students who perceived high level of stress had lower level of general health ( $r = .289, p < .01$ ). Using Pearson correlation coefficient, the results showed that perceived stress of the students correlated negatively with their coping strategy. Stress

perceived among students was relevant to current study because it provided supporting evidence of a similar population (*student*) to that of the current study.

According to Stranks (2005), high levels of stress lowered working morale, job satisfaction, and productivity in employees. In a conceptual study on stress and its influence on employee's work-life balance, the predictors of work-life conflict were stressful job conditions and long working hours (Atheya & Arora, 2014). Soo, Zippay, and Park (2012) explored the mediating effects of negative work-family spillover and the moderating effects of gender, family workload, and single parenting of 2,769 working adults on the relationships between schedule flexibility and employee stress. The authors found schedule flexibility reduced negative work-family spillover and stress among women, single parents, and employees with heavier family workloads.

Gabre and Kumar (2012) found that among 95 undergraduate accounting students at two universities, female accounting students reported higher perceived stress compared to male accounting students in their qualitative study. No significant relationship between perceived stress and academic performance was established. The difference between men's and women's perceived stress was relevant to this study. It provided supporting evidence of a similar population (*student*) as in the current study. Increased working hours caused serious consequences on lifestyle affecting social and psychological well-being. Having to manage work and study in their work-study interface, students may experience long hours of work and study. Time management becomes crucial in the students' life in managing their different roles. As such, the current study examined

students' perceived stress in their spillover experiences in their work-study interface. In the next section, the satisfaction with life will be discussed.

### **Satisfaction With Life**

Life satisfaction includes global judgments of an individual's life and satisfaction with specific life domains (e.g., work, family), and is considered a cognitive component of subjective well-being (Pavot & Diener, 2008). Subjective well-being included the emotional or affective component and the judgmental or cognitive component (Diener, 1984; Veenhoven, 1984). The judgmental component was conceptualized as life satisfaction that led to the development of Satisfaction with Life Scale (Diener, 1984) and as a measure of the judgmental component of subjective well-being (Diener, Emmons, Larsen, & Griffin, 1985).

The levels of life-satisfaction are predictive of the level of the outcomes (Lyubormirsky, King, & Diener, 2005). For instance, high levels of life-satisfaction are predictive of positive outcomes in work, health, educational, family, and personal life domain. Glaesmer, Grande, Brachler, and Roth (2011) found perception of support from family, friends, and neighbors of 2,519 adults correlated with life-satisfaction. In another study by Galindez, and Casas (2010), there was a strong correlation between self-esteem of 339 students and their life-satisfaction. Berges and .Landa (2014) found emotional intelligence was predictive of life-satisfaction. Escoda and Alegre (2016) found 2,233 university students with higher emotional intelligence experienced higher satisfaction with life from positive experiences. As such, levels of life-satisfaction are predictive of outcomes in work, health, educational, family, and personal life domain.

The concept of life satisfaction was related to satisfaction with one's life where life satisfaction could be assessed specific to a particular domain in life, such as family, study, or work (Andrews & Withey, 1976). Dorin (2007) found that not much work is carried out in the area of how life satisfaction was affected by learning environments. However the author found that the older adult learners were positively impacted by online education and experienced increased life-satisfaction in online education participation. The current study served as an extent of literature in the area of how life satisfaction is affected by learning environments. The evidence of life-satisfaction of adult learners is relevant and supports the current study of working online students. In the current study, Satisfaction with Life Scale was used to examine male and female online students' level of cognitive judgments of satisfaction with their life to their level of work-life balance and work-study interface.

On the contrary, in a quantitative study, Hale (2013) hypothesized that the perceived levels of overall life satisfaction for graduate students attending an online university will be lower than similar students attending traditional brick-and-mortar universities. Hale found that the 82 graduate students attending traditional university reported significantly higher satisfaction with life than the 65 graduate online students ( $z = -2.210, p = .027, r = -.18$ ). In their struggle to balance work and study, working online students may either spillover their study to work domain that may affect their work or spillover their work to study domain that may affect their study, resulting in an increase in their stress level and a decrease in their satisfaction level.

In summary, high levels of life-satisfaction are predictive of positive outcomes in work, health, educational, family, and personal life domain. In the next section, Chapter 2 will be summarized.

### **Summary**

The current study examined the moderating effects of gender on the relationships between independent variables (work-life balance and work-study interface) and dependent variables (perceived stress and satisfaction with life) of working online students (part-and full-time employees). As online working students may already experience work-family conflicts, and now, with an additional role as students may lead to neglect of certain roles and/or role overload. It has been speculated that the pressures of multiple roles in an individual's life in relation to work-life balance and work-study interface, and managing multiple roles, may sometimes leave the student feeling overwhelmed, overloaded or stressed (Duxbury & Higgins, 2012).

There are limited studies on the role of working online male and female students in relation to stress and life satisfaction. Stress is predictive of work-family spillover from family responsibilities to work responsibilities for both men and women employees and lower satisfaction with work-family balance (Soo, Zippay, & Park, 2012). Besides, the traditional division in labor between women and men in accordance with domestic responsibilities and occupational responsibilities respectively, women experience spillover from family role into work role, and men experienced spillover from work role into family role. In this quantitative study, the moderating effects of gender on the relationships between the independent variables (work-life balance and work-study

interface) and the dependent variables (perceived stress and satisfaction with life) are analyzed in Chapter 4. In the following chapter (Chapter 3) I describe the methodology employed in this research.

## Chapter 3: Research Methods

### **Introduction**

In pursuit of education as adult learners, working online students struggle to manage work, family, studies and personal life. Previous studies have shown that more men than women balanced their work and family owing to women's asymmetrical family responsibilities (Evans et al., 2013). The purpose of the current study was to quantitatively examine the moderating effects of gender on the relationships between work-life balance and work-study interface of working online students and their perceived stress and satisfaction with life. The remainder of Chapter 3 is organized into the following sections: research design and rationale, methodology, instrumentation, data analysis plan, threats to validity, and ethical considerations of participant's rights. In the next section, I discuss the research design and rationale of the current study.

### **Research Design and Rationale**

The current study employed a nonexperimental quantitative design. A quantitative research method was chosen for this study because quantitative research focuses on the collection of numerical data to determine the relationship between variables (Creswell, 2014). In this study, a cross-sectional online survey was administered to determine the moderating effects of gender on the relationships between the work-life balance and work-study interface (independent variables) and perceived stress and satisfaction with life (dependent variables) of the working online students, and to obtain information from participants within a short time. Participants were able to do the online survey at their convenience. The electronic survey was cost effective. I statistically analyzed collected

data using regression analysis to determine the moderating effect of gender on the relationships between variables in this study. I proposed research questions and hypotheses from review of existing literature in the areas of work-life balance and work-study interface of the working online students. The research design was congruent with a design needed to advance knowledge in the discipline by contributing to the literature in the area of working online student roles in work-life balance. The current study may contribute in designing policies and programs up to university level to meet the needs of online-students. In the next section, I discuss the methodology.

### **Methodology**

In this section, I describe the methodology, population, sampling and sampling procedure, procedure for recruitments, participation and data collection, instruments and materials, and data analysis plan.

### **Population**

The total student population of undergraduate and graduate students at Walden University was 50,036 in 2015 (Walden University, 2015) and women comprised more than 76.7% of the student body. Walden students were 39.4% white, 37.3% black, 7.2% Hispanic or Latino, 3.2% Asian/Pacific Islander, 2% multiracial, 0.4% American Indian/Alaskan native, and 10.5% unknown. Students pursuing their online education at Walden University were from 150 countries. The age demographic for Walden students was 24–29 years (16.1%), 30–39 years (34.0%), 40–49 years (28.6%), and others, 23 years and younger, 60+ years (6.4%).



### **Sampling and Sampling Procedures**

Participants for this study consisted of working undergraduate and graduate students, aged 20 years to 60+ years, pursuing online education at Walden University. Using G\* power 3.1.3, a statistical power analysis calculator (Faul, Erdfelder, Lang, & Buchner, 2007), a sample size of 80 for regression was determined using a priori power analysis at a power of .80, effect size of 0.20 at an alpha level of .05 (Cohen, 1992). I used convenience sampling in this study because it was fast, inexpensive, easy, and allowed me to select participants' accessibility and proximity.

### **Procedures for Recruitment, Participation, and Data Collection**

Permission was obtained from the Institutional Review Board before data collection. The electronic survey was uploaded at SurveyMonkey®. Data were collected from working online students of Walden University and were analyzed using regression analysis. Ethical procedures were adhered to.

An implied consent form was uploaded with the electronic survey at SurveyMonkey®. Using the link in the invitation letter, participants logged on to participate in this electronic survey on a voluntary basis. Electronic survey was cost effective and provided more participant flexibility (Al-Omiri, 2007). After reading the purpose of the study, risk and benefits of participating in the study, and statement of implied consent and confidentiality, completion of the online survey was considered as consent to participate in this study. Participants were allowed to discontinue and terminate their participation at any point during the online survey without any obligation. Participants were also thanked at the end of the online survey for their participation in

this study. I collected and analyzed data using SPSS (Statistical Package for the Social Sciences) version 21.0.

### **Instrumentation and Materials**

The online survey covered the following domains: demographics, work-life balance, work-study interface, perceived stress, and satisfaction with life. The survey was designed to be completed in 10-15 minutes at most.

**Work-Life Balance Scale.** The work-life balance scale of the work-life balance construct was developed by Brett and Stroh (2003) to understand work-life balance from the subjective experience of the employee. The 5-item work-life balance scale uses a 5-point Likert scale anchored by 1 = *never*, 2 = *rarely*, 3 = *from time to time*, 4 = *often*, and to 5 = *very often*. The items in the work-life balance scale are (a) “feeling that your job negatively affects your psychological well-being,” (b) “feeling that your job negatively affects your physical health,” (c) “feeling tension about balancing all your responsibilities,” (d) “feeling that you should change something about your work in order to balance all your responsibilities,” and (e) “feeling that personal commitments interfere with your job.” The work-life balance scale has a reliability of coefficient alpha .79 (Brett & Stroh, 2003).

**Work-Study Interface Scale.** For the work-study interface scale, work-study interface was measured using a modified version of the bidirectional work-family conflict scale developed by Netemeyer et al. in 1996. With a validation of Cronbach alphas that range from .82 to .90 (Greenhaus & Beutell, 1985), extensive reviews of the psychometric validity of the work-family conflict scale has predictive validity and good

reliability (Bohen & Viveros-Long 1981; Matthews, Kath, & Barnes-Farrell, 2010; Pleck, 1978). In this study, the word “family” was replaced with “study” and the scale was read as work-study interface scale. In this study, the interrole conflict was between role of employee in work domain and other than family role; online student role was used in the nonwork domain where the role of student replaced the family role. The 5-item work-study interface scale and the 5-item study-work interface scale used a 7-point Likert scale that was anchored by 7 = *strongly agree*, 6 = *agree*, 5 = *slightly agree*, 4 = *neither agree nor disagree*, 3 = *slightly disagree*, 2 = *disagree*, 1 = *strongly disagree*. The items in the work-study interface scale were (a) “the demands of my work interfere with my study and student life”; (b) “the amount of time my job takes up makes it difficult to fulfill student responsibilities”; (c) “things I want to do at my study do not get done because of the demands my job puts on me”; (d) “my job produces strain that makes it difficult to fulfill student duties”; and (e) “due to work-related duties, I have to make changes to my plans for student activities.” The items in the study-work interface scale were (a) “the demands of my study interfere with work-related activities”; (b) “I have to put off doing things at work because of demands on my time for my study”; (c) “things I want to do at work don't get done because of the demands of my study”; (d) “my student life interferes with my responsibilities at work such as getting to work on time, accomplishing daily tasks, and working overtime”; and (e) “study-related strain interferes with my ability to perform job-related duties.”

**Perceived Stress Scale.** The perceived stress scale was developed by Cohen et al. (1983) to measure individual's perception of stress (e.g., “How often have you felt

nervous or ‘stressed’?”). In this study, perceived stress scale was used to compare working online students’ level of perceived stress in work-life balance and work-study interface. The 10-item Perceived Stress Scale used a 5-point Likert Scale that was anchored by 0 = *almost never*, 1 = *sometimes*, 2 = *fairly Often*, 3 = *often*, and 4 = *very often* for items 1, 2, 3, 6, 9, and 10. Perceived Stress Scale scores were obtained by reversing responses (0 = *very often*, 1 = *often*, 2 = *fairly often*, and 4 = *almost never*) to the four positively stated items (items 4, 5, 7, and 8), and summing across the scale items. With a validation of Cronbach alphas that range from .84 to .85 (Cohen et al., 1983), extensive reviews of the psychometric validity of the perceived stress scale has convergent, factorial, and criterion validity and good reliability (Maroufizadeh et al., 2018; Pett, Lackey, Sullivan, 2003; Ware, Snow, Kosinski, Grandek, 1993).

**Satisfaction with Life Scale.** The satisfaction with life scale was developed by Diener et al. (1985) to measure global cognitive judgments of satisfaction with an individual’s life. The 5-item satisfaction with life scale used a 7-point Likert scale that was anchored by 7 = *strongly agree*, 6 = *agree*, 5 = *slightly agree*, 4 = *neither agree nor disagree*, 3 = *slightly disagree*, 2 = *disagree*, 1 = *strongly disagree*. The items in the satisfaction with life scale were (a) “in most ways my life is close to my ideal”; (b) “the conditions of my life are excellent”; (c) “I am satisfied with my life”; (d) “so far I have gotten the important things I want in life”; and (e) “if I could live my life over, I would change almost nothing.” With a validation of Cronbach alphas that range from .82 to .87 (Pavot & Diener, 1993), extensive reviews of the psychometric validity of the satisfaction with life scale show that it has criterion validity, good convergent and discriminant

validity, and good reliability (Allison, Alfonso, & Dunn, 1991; Corrigan, 2000; Diener et al., 1985; Vassar, 2007; Vazquez, Duque, & Hervas, 2013; Vera-Villaruel, Urzua, Pavez, Celis-Atenas, & Silva, 2012).

**Control variables.** Demographic variables were used as control variables in the regression as they may affect variation in the outcome variable. They included the respondent's age, type of study (bachelor, master, or PhD), marital or partner status, employment status of spouse/partner, hours per week working for spouse/partner, number and ages of children living with participant all or part of the time, work hours per week, study hours per week, flexibility of work schedule, other dependent care responsibilities, such as care for elderly or disabled family members, and hours per week spent on caregiving. In the next section, I discuss the data analysis plan of the current study.

### **Data Analysis Plan**

I entered data from the collection instruments on Microsoft Excel 2010 and the SPSS version 21.0 for data analysis. I conducted regression analyses using SPSS to determine the association between the dependent variables of perceived stress and satisfaction with life. I also computed descriptive statistics for all variables in this study.

The first step of the analysis included entering the control variables: age, type of study (bachelor, master, or PhD), marital or partner status, employment status of spouse/partner, hours per week working for spouse/partner, number and ages of children living with participant all or part of the time, work hours per week, study hours per week, flexibility of work schedule, other dependent care responsibilities, such as care for elderly

or disabled family members, and hours per week spent on caregiving. Control variables that were not significant predictors of the outcome were removed.

At the second stage, the independent variables (work-life balance and work-study interface) and moderator (gender) were regressed on the dependent variables (perceived stress and satisfaction with life). At the third stage, the independent variables (work-life balance and work-study interface), the moderator (gender), and the independent variables moderator product were regressed on the dependent variables (perceived stress and satisfaction with life). A significant interaction effect indicated the occurrence of moderation (Baron & Kenny, 1986). In the next section, I reiterate the research questions and hypotheses.

### **Research Questions and Hypotheses**

Gender plays an important role in moderating the relationships between work-life balance and work-study interface of working online students and their perceived stress and satisfaction with life in this study. With substantial background of research on spillover in work-family conflict among adult employees, the current study focused on identifying predictors of spillover between men and women employees. The research questions and hypotheses were:

RQ1: What is the moderating effect of gender on the relationship between work-life balance of working online students and their perceived stress?

$H_{01}$ : Gender will not moderate the relationship between work-life balance and perceived stress of working online students.

*H<sub>11</sub>*: Among working online students, gender will moderate the relationship between work-life balance and perceived stress, such that women are more likely to report higher levels of perceived stress than men.

RQ2: What is the moderating effect of gender on the relationship between work-study interface of working online students and their perceived stress?

*H<sub>02</sub>*: Gender will not moderate the relationship between work-study interface and perceived stress of working online students.

*H<sub>12</sub>*: Among working online students, gender will moderate the relationship between work-study interface and perceived stress of working online students, such that women are more likely to report higher levels of perceived stress than men.

RQ3: What is the moderating effect of gender on the relationship between work-life balance of working online students and their satisfaction with life?

*H<sub>03</sub>*: Gender will not moderate the relationship between work-life balance and satisfaction with life of working online students.

*H<sub>13</sub>*: Among working online students, gender will moderate the relationship between work-life balance and satisfaction with life of working online students, such that women are more likely to report lower levels of satisfaction with life than men.

RQ4: What is the moderating effect of gender on the relationship between work-study interface of working online students and their satisfaction with life?

*H<sub>04</sub>*: Gender will not moderate the relationship between work-study interface and satisfaction with life of working online students.

*H<sub>14</sub>*: Among working online students, gender will moderate the relationship between work-study interface and satisfaction with life of working online students, such that women are more likely to report lower levels of satisfaction with life than men.

In the next section, I discuss threats to validity for the current study.

### **Threats to Validity**

There were some potential threats to the research validity. First, using an online survey in the current study posed some technical problems. For example, accessing the online survey on low speed computers was time consuming, and it could increase dropout rate that may bias the final sample (Haugtvedt, Machleit, & Yalch, 2009). Second, another threat to validity was sampling error in demographics owing to either underrepresentation or null representation of some populations (Gray, 2014). In this study, using online students as participants, threats to external validity occurred in generalizing the findings to other demographic populations and across a variety of settings other than online survey using internet. In the next section, the ethical considerations are discussed.

There were some potential threats to the research validity. The threat to validity was sampling error in demographics owing to either underrepresentation or null representation of some populations (Gray, 2014). In this study, using online students as participants, threats to external validity occurred in generalizing the findings to other



demographic populations and across a variety of settings other than online survey using internet. In the next section, the ethical considerations are discussed.

### **Ethical Considerations**

In this study, confidentiality, risk of harm, implied consent, and voluntary participation were some of the ethical issues addressed (American Psychological Association, 2010). First, the participation was on a voluntary basis. Ethical considerations and confidentiality were strictly adhered to. Second, participants would be able to cease their participation in the study if they decide to withdraw from the study at any time. Next, permission for the usage of Work-Life Balance, Work-Study Interface, Perceived Stress Scale and Satisfaction with Life Scale were obtained, and were appropriately referenced in this study. A written approval from Institutional Review Board was obtained before commencement of data collection. The Institutional Review Board's approval number for this study is 01-13-17-0086480.

**Protection of human participants.** Ensuring the protection of human participants was of paramount importance in this study. Measures taken in order to ensure ethical considerations were strictly adhered to. Following were the ethical steps carried out to protect human participants in this study.

**Implied consent and voluntary participation.** Working online students pursuing online studies at the university volunteered their participation as respondents to the online survey posted at SurveyMonkey®. After reading the purpose of the study, risk and benefits of participating in the study, confidentiality of the online survey, and statement of implied consent, participants' moving forward meant consent to participate in this

study. Participants were allowed to discontinue their responses and terminate their participation at any point during the online survey without any obligations.

**Confidentiality.** In this study, working online students pursuing online studies at the university volunteered their participation as respondents to the online survey posted at SurveyMonkey®. Confidentiality and privacy were strictly adhered. Hardcopies of data were kept in locked drawers at researcher's home office.

**Risk of harm.** In this study, there were no physical risks or benefits for participation in the study. Participants chose to leave the study at any point of time without any obligation. Confidentiality was strictly adhered to. The next section is the summary of this chapter.

### Summary

The current study quantitatively examined the moderating effects of gender on the relationships between the independent variables (work-life balance and work-study interface) of working online students and the dependent variables (perceived stress and satisfaction with life) of working online students. Demographic information, work-life balance using a work-life balance scale (Brett & Stroh, 2003), work-study interface using a work-life conflict scale (Netemeyer et al., 1996), perceived stress scale (Cohen et al., 1983), and satisfaction with life scale (Diener, 1985) were utilized to examine the relationships between work-life balance/work-study interface of working online students and their perceived stress and life satisfaction. Using SPSS version 21.0, an analysis of demographics, and regression analyses were conducted to determine the association between variables. Ethical considerations, like confidentiality, risk of harm, implied

consent, protection of human participants, and voluntary participation were addressed in this study. In the next chapter, results of the study were analyzed.

## Chapter 4: Results

### Introduction

The purpose of the current study was to examine the moderating effects of gender on the relationships between work-life balance and work-study interface of working online students and their perceived stress and satisfaction with life. Chapter 4 presents a review of the current study's results and is organized into the following sections: data collection, results and summary. The research was designed to address the following questions and associated hypotheses:

RQ1: What is the moderating effect of gender on the relationship between work-life balance of working online students and their perceived stress?

*H<sub>01</sub>*: Gender will not moderate the relationship between work-life balance and perceived stress of working online students.

*H<sub>11</sub>*: Among working online students, gender will moderate the relationship between work-life balance and perceived stress, such that women are more likely to report higher levels of perceived stress than men.

RQ2: What is the moderating effect of gender on the relationship between work-study interface of working online students and their perceived stress?

*H<sub>02</sub>*: Gender will not moderate the relationship between work-study interface and perceived stress of working online students.

*H<sub>12</sub>*: Among working online students, gender will moderate the relationship between work-study interface and perceived stress of working online students,

such that women are more likely to report higher levels of perceived stress than men.

RQ3: What is the moderating effect of gender on the relationship between work-life balance of working online students and their satisfaction with life?

*H<sub>03</sub>*: Gender will not moderate the relationship between work-life balance and satisfaction with life of working online students.

*H<sub>13</sub>*: Among working online students, gender will moderate the relationship between work-life balance and satisfaction with life of working online students, such that women are more likely to report lower levels of satisfaction with life than men.

RQ4: What is the moderating effect of gender on the relationship between work-study interface of working online students and their satisfaction with life?

*H<sub>04</sub>*: Gender will not moderate the relationship between work-study interface and satisfaction with life of working online students.

*H<sub>14</sub>*: Among working online students, gender will moderate the relationship between work-study interface and satisfaction with life of working online students, such that women are more likely to report lower levels of satisfaction with life than men.

Chapter 4 began with data collection, results of the study, and concluded with a summary of findings. In the next section, I discuss data collection.

## **Data Collection**

The current study was carried out over 2 months. The actual recruitment for this study was 80. The response rate was 100%. Inclusion criteria were working undergraduate and graduate online students enrolled at Walden University. After obtaining approval from the Walden University Institutional Review Board, invitation letters to participate in this survey were e-mailed to participants. Data was collected via SurveyMonkey®. Ethical procedures were adhered to. In the next section, I discuss the results of this study.

## **Results**

This section is divided according to demographic factors, work-life balance, and work-study interface.

### **Demographic Factors**

Demographic data are summarized in Table 1. Demographic data revealed 7.5% of the participants were 20 to 29 years old, 30% were 30 to 39 years old, 30% were 40 to 49 years old, 30% were 50 to 59 years old, and 2.5% were 60+ years old. In this study, 50.0% of the sample was male ( $n = 40$ ) and 50.0 % of the sample was female ( $n = 40$ ). Twenty-five percent of the participants were single, 62.5% married, 11.3% divorced, and 1.2% widowed. More than half (66.3%) of the participants were parents with 1 to 2 children, 10% with 3 to 4 children, and 1.3% with more than 5 children. Twenty-five percent of the participants' children were 18 years old and above, 21.3% were 11 to 14 years old, 16.3% were 2 to 10 years old, and 5% were 1 year old and younger. The majority (67.5%) of participants were enrolled in a PhD program, 22.5% in a bachelor's

program, and 10% in a master's program. The majority (72.6%) of participants spent 10 to 29 study hours per week, 13.8% spent 30 to 39 study hours per week, 7.5% spent 40 to 59 study hours per week, and 6.3% below 10 study hours per week. Nearly three-quarters (73.8%) of the participants spent more than 40 hours per week at work, 17.5% spent 30 to 39 work hours per week, and 8.8% spent 10 to 29 work hours per week. More than half (56.3%) of the participants had flexibility at work.

Table 1

*Demographic Characteristics of Study Sample*

	Demographic variables	Frequency	Percent
Age	20 to 29	6	7.5
	30 to 39	24	30.0
	40 to 49	24	30.0
	50 to 59	24	30.0
	60 and above	2	2.5
Gender	Male	40	50.0
	Female	40	50.0
Type of study	Bachelor	18	22.5
	Master	8	10.0
	PhD	54	67.5
Marital status	Single	20	25.0
	Married/Partner	50	62.5
	Divorced	9	11.3
	Widowed	1	1.3
Spouse/partner job status	Full-time/Part-time	55	68.8
	Not employed	4	5.0
No. of children	1 - 2	44	55.0
	3 - 4	8	10.0
	Above 5	2	1.3
Age of children	1 and younger	4	5.0
	2 to 10	13	16.3
	11 to 17	17	21.3
	18 and above	20	25.0
Study hours	Below 10 hours per week	5	6.3
	10 – 19 hours per week	27	33.8
	20 – 29 hours per week	31	38.8
	30 – 39 hours per week	11	13.8
	40 – 49 hours per week	4	5.0
	50 – 59 hours per week	2	2.5
Work hours	10 – 19 hours per week	2	2.5
	20 – 29 hours per week	5	6.3
	30 – 39 hours per week	14	17.5
	40 – 49 hours per week	40	50.0
	50 – 59 hours per week	12	15.0
	60 – 69 hours per week	4	5.0
	70 – 79 hours per week	2	2.5
Flexibility	Yes	45	56.3
	No	35	43.8
Dependent care hours	Below 10 hours per week	50	62.5
	10 – 19 hours per week	10	12.5
	30 – 39 hours per week	2	2.5
	40 – 49 hours per week	1	1.3
	70 – 79 hours per week	1	1.3



### Work-Life Balance

Table 2 shows the significant moderation analyses. In testing the first hypothesis that among working online students, gender will moderate the relationship between work-life balance and perceived stress, such that women are more likely to report higher levels of perceived stress than men beta coefficients for work-life balance and perceived stress were  $\beta = .492, t = 2.255, p < .05$  (sig); gender and perceived stress were  $\beta = 1.121, t = 9.947, p < .01$  (sig); and moderation was  $\beta = -.625, t = -2.106, p < .05$  (sig). Gender moderated the relationship between work-life balance and perceived stress of working online students significantly, showing that women were more likely to report higher levels of perceived stress than men. Furthermore, because ( $\beta = -.625, p < .01$ ) was negative, women have higher significant effect on the relationship between work-life balance and perceived stress. Therefore, the null hypothesis was rejected, as gender had significantly moderated the relationship between work-life balance and perceived stress.

In testing the third hypothesis that among working online students, gender will moderate the relationship between work-life balance and satisfaction with life of working online students, such that women are more likely to report lower levels of satisfaction with life than men beta coefficients for work-life balance and satisfaction with life were  $\beta = -.040, t = -.457, p > .05$  (not sig); gender and satisfaction with life were  $\beta = -.986, t = -22.025, p < .01$  (sig); and moderation was  $\beta = .028, t = .234, p > .05$  (not sig). Gender did not moderate the relationship between work-life balance and satisfaction with life of working online students showing that women are not more likely to report lower levels of satisfaction with life than men ( $\beta = .028, p > .05$ ). Therefore, I failed to reject the null

hypothesis, as gender did not significantly moderate the relationship between work-life balance and satisfaction with life of working online students.

In sum, the null hypothesis in hypothesis 1 was rejected. I failed to reject the null hypothesis in hypothesis 3.

Table 2

*Regression Work-Life Balance of Online Students*

Variable	WLB /Perceived stress					WLB/Satisfaction				
	$\beta$	R2	R2 $\Delta$	F	Sig	$\beta$	R2	R2 $\Delta$	F	Sig
Step 1:		.957	.957	866.66	.000		.994	.993	6027.14	.000
WBL	.054			.801( <i>t</i> )	.426	-.020			.784( <i>t</i> )	.435
GENDER	.928			13.85( <i>t</i> )	.000	-.978			37.78( <i>t</i> )	.000
Step 2:		.960	.958	605.03	.000		.994	.993	3968.78	.816
WBL	.492			2.255( <i>t</i> )	.027	-.040			-.457( <i>t</i> )	.649
GENDER	1.121			9.947( <i>t</i> )	.000	-.986			-22.03( <i>t</i> )	.000
M3 / DV	-.625	.960	.958	-2.106( <i>t</i> )	.039	.028	.994	.993	.234( <i>t</i> )	.816

### Work-Study Interface

Table 3 shows the significant moderation analyses. In testing the second hypothesis that among working online students, gender will moderate the relationship between work-study interface and perceived stress of working online students, such that women are more likely to report higher levels of perceived stress than men beta coefficients for work-study interface and perceived stress were  $\beta = -3.613$ ,  $t = -1.690$ ,  $p > .05$  (not sig); gender and perceived stress were  $\beta = .340$ ,  $t = .394$ ,  $p > .05$  (not sig); and

moderation was  $\beta = 4.252, t = 2.171, p < .05$  (sig). Gender moderated the relationship between work-study interface and perceived stress of working online students significantly, showing that women were more likely to report higher levels of perceived stress than men. Furthermore, because ( $\beta = 4.252, p < .01$ ) was positive, women have higher significant effect on the relationship between work-study interface and perceived stress. Hence, the null hypothesis was rejected, as gender had significantly moderated the relationship between work-study interface and perceived stress.

To test the fourth hypothesis that among working online students, gender will moderate the relationship between work-study interface and satisfaction with life of working online students, such that women are more likely to report lower levels of satisfaction with life than men beta coefficients for work-study interface and satisfaction with life were  $\beta = -5.512, t = -9.862, p < .01$  (sig); gender and satisfaction with life were  $\beta = .317, t = 1.401, p > .05$  (not sig); and moderation was  $\beta = 4.198, t = 8.200, p < .05$  (sig). Gender moderated the relationship between work-study interface and satisfaction with life of working online students significantly, showing that women were more likely to report lower levels of satisfaction with life than men. Furthermore, because ( $\beta = 4.198, p < .01$ ) was positive, women have higher significant effect on the relationship between work-study interface and satisfaction with life. Hence, the null hypothesis was rejected, as gender had moderated the relationship between work-study interface and satisfaction with life of working online students.

In sum, the null hypotheses for three out of four hypotheses were rejected in this study. The three hypotheses are hypothesis 1, 2, and 4. However, hypothesis 3 failed to reject the null hypothesis. In the next section, I summarize this chapter.

Table 3

*Regression Work-Study Interface of Online Students*

Variable	WSI /Perceived stress					WSI/Satisfaction				
	$\beta$	R2	R2 $\Delta$	F	Sig	$\beta$	R2	R2 $\Delta$	F	Sig
Step 1:		.957	.956	865.10	.000		.995	.995	7412.69	.000
WSI	.631			.712( <i>t</i> )	.478	-1.321			-4.28( <i>t</i> )	.000
GENDER	.348			.392( <i>t</i> )	.696	.324			1.05( <i>t</i> )	.297
Step 2:		.960	.958	606.11	.000		.997	.997	9215.01	.000
WSI	-3.61			-1.69( <i>t</i> )	.095	-5.512			-9.86( <i>t</i> )	.000
GENDER	.340			.394( <i>t</i> )	.695	.317			1.40( <i>t</i> )	.165
M5/DV	4.25	.960	.958	2.171( <i>t</i> )	.033	4.20	.997	.997	8.200( <i>t</i> )	.000

### Summary

The purpose of the current study was to examine the moderating effects of gender on the relationships between work-life balance and work-study interface of working online students and their perceived stress and satisfaction with life. Chapter 4 provided a recapitulation of the research questions and hypotheses.

In the first hypothesis, gender moderated the relationship between work-life balance and perceived stress of working online students significantly, showing that

women were more likely to report higher levels of perceived stress than men ( $\beta = -.625, p < .01$ ). Therefore, the null hypothesis was rejected.

In the second hypothesis, gender moderated the relationship between work-study interface and perceived stress of working online students significantly, showing that women were more likely to report higher levels of perceived stress than men ( $\beta = 4.252, p < .01$ ). Therefore, the null hypothesis was rejected.

In the third hypothesis, gender did not significantly moderate the relationship between work-life balance and satisfaction with life of working online students showing that women were not more likely to report lower levels of satisfaction with life than men ( $\beta = .028, p > .05$ ). Therefore, I failed to reject the null hypothesis.

In the fourth hypothesis, gender moderated the relationship between work-study interface and satisfaction with life of working online students significantly, showing that women were more likely to report lower levels of satisfaction with life than men ( $\beta = 4.198, p < .01$ ). Therefore, the null hypothesis was rejected. In Chapter 5, I discuss the current study's findings, conclusions, implications, and recommendations.

## Chapter 5: Discussion, Conclusions, and Recommendations

### Introduction

Most researchers looking into the subject of this study examined the relationship between stress and satisfaction among students from traditional learning environments (Haar et al., 2014; Pookaiyaudom, 2014). In past studies, more men than women balanced their work and family owing to women's asymmetrical family responsibilities (Baral & Bhargava, 2011; Kossek et al, 2014). The current study was designed to aid in bridging the gap in the literature with a quantitative examination of the moderating effects of gender on the relationships between work-life balance and work-study interface of working online students and their perceived stress and satisfaction with life. The independent variables for this study were work-life balance and work-study interface of working online students. The dependent variables were perceived stress and satisfaction with life of the working online students. The moderator variable was gender of the working online students. I collected data from working online students of an online university and analyzed it using regression analysis.

In this study, demographic data revealed that a majority (67.5%) of participants were enrolled in a PhD program (Table 1). Fifty percent of the participants were men ( $n = 40$ ) and 50 % of the participants were women ( $n = 40$ ). A majority (62.5%) of the participants were married. More than half (66.3%) of the participants were parents. Twenty-five percent of the participants' children were 18 years old and above, 21.3% were 11 to 14 years old, 16.3% were 2 to 10 years old, and 5% were 1 year old and younger. The majority (72.6%) of participants spent 10 to 40 study hours per week and

91.3% of the participants spent more than 30 hours per week at work. More than half of the participants (62.5%) spent at least 10 hours per week carrying out other dependent care responsibilities, such as care for elderly or disabled family members. More than half (56.3%) of the participants had flexibility at work.

This study was based on four research questions that addressed the impact of three predictors, gender as a moderator, work-life balance, and work-study interface, on dependent variables of perceived stress and satisfaction with life. The moderating effects of gender were statistically significant on the relationships. I found a significant relationship between work-life balance of working online students and their perceived stress and between work-study interface of working online students and their perceived stress and satisfaction with life. Gender did not moderate the relationship between work-life balance and satisfaction with life of working online students.

The remainder of Chapter 5 is organized into the following sections: interpretation of the findings, limitations, recommendations, implications, and conclusion. In the next section, I discuss the interpretation of the findings of the current study.

### **Interpretation of the Findings**

In the current study I examined the moderating effects of gender on the relationships between work-life balance and work-study interface of working online students and their perceived stress and satisfaction with life. Based on the results of the current study, gender moderated the relationship between the two predictors, work-life balance and work-study interface, and the dependent variable, perceived stress of

working online students, such that women are more likely to report higher levels of perceived stress than men. Again, based on the results, gender also moderated the relationship between the predictor, work-study interface, and dependent variable, satisfaction with life of working online students, such that women are more likely to report lower levels of satisfaction with life than men. However, based on the results, gender did not moderate the relationship between work-life balance and satisfaction with life of working online students.

The four research questions addressed stress levels and satisfaction with life levels by working online students in their work-life balance and work-study interface, and how the interactions of gender as a moderator may impact perceived stress levels and satisfaction with life levels. The results of this study aid in the understanding of the effects of work-life balance and work-study interface among male and female working online students.

### **Work-Life Balance**

In this study, I examined how the use of gender in response to work-life balance affected perceived stress and satisfaction with life of working online students. Specifically, I examined the moderating effects of men and women using work-life balance and showed a higher level of perceived stress for women than men. However, the moderating effects of men and women using work-life balance did not affect satisfaction with life of working online students. The results of this study furthered understanding about the effects of work-life balance on perceived stress and satisfaction with life among male and female working online students.



According to spillover theory, there could be positive or negative spillovers from work domain to nonwork domain (Hansen et al., 2006; Hill et al., 2003; Zedeck, 1992) such that individuals may experience stress and fatigue during these spillovers (Googins, 1991). As evident in Adema's (2013) study, spillover of positive experiences of family to work was significant for women, whereas the spillover of positive experiences at work to family was significant for men but not women (Adema, 2013). For example, in the current study, working mothers may have found spillovers from family, such as support from spouse/partner and flexi-work schedule. According to O'Meara and Campbell (2011), with no change in the cultural norms related to femininity and motherhood and the structure of family, work-life balance will remain a woman's concern. Based on the results of this study, the moderating effects of gender increased levels of perceived stress for women more than men in work-life balance of working online students. This is congruent with the findings of Evans et al. (2013), which indicated that compared to men, women continue to take on the majority of the domestic responsibilities and struggle with work-life balance.

Next, both men and women managed and balanced work-life demands, but there was still a difference between the dual roles played by men and women in balancing their work roles. As evident in Parker and Wang's (2013) study, women were more likely to adjust to their work compared to men in work-family conflict. Traditionally held beliefs of men as breadwinners and women as homemakers and social construction of gender make it challenging for motherhood to be compromised with fatherhood (Grönlund, 2007). Utilizing gender as a moderator, my study provided an insight into the changing

social role in gender and spillover experiences that may influence working online students in their work-life balance.

The nonsignificant moderating effect of gender on the relationship between work-life balance and satisfaction with life was unexpected. My findings indicated that gender did not moderate the relationship between work-life balance and satisfaction with life. This is in contrast to the findings of Evans et al. (2013), which showed gender moderated the relationship between work-life balance on perceived stress and satisfaction with life such that women have higher stress level than men and that women had the increased responsibility of balancing their additional roles when they continued to take on the majority of domestic responsibilities and struggle with work-life balance compared to men in dual-career families. In my study, a possible cause for nonsignificant moderating effect of gender on the relationship between work-life balance and satisfaction with life for working online students could be that the 32.5% (50 years and above) students were positively impacted by online education and experienced increased satisfaction with life in online education. The results of this study seemed to confirm gender differences in perceived stress experienced between men and women in work-life balance of working online students.

### **Work-Study Interface**

This study examined how the use of gender in response to work-study interface affected perceived stress and satisfaction with life of working online students. Results of this study showed the use of the work-study interface increased perceived stress and lowered levels of satisfaction with life among women more than men.

Past research (Greenhaus & Beutell, 1985) on work-family conflicts had indicated that conflicts were expected to be bidirectional in nature. The findings of my study showed working online female students in the sample experienced higher levels of perceived stress and lower levels of satisfaction with life than did men in both study interface with work conflict and work interface with study conflict. Both men and women may have experienced negative spillover from home to work in my study, similar to the participants in Schmidt's (2011) study, where men experienced stress from their home chore of cleaning responsibilities and their job, and the presence of children under the age of six at home was predictive of spillover for women from family responsibilities to work responsibilities. Though men and women managed and balanced work-life demands, there was a difference between the dual roles played by men and women (Schmidt, 2011). In Parker and Wang's (2013) study, women were more likely to adjust to their work compared to men in work-family conflict, and it may explain why women are more likely to have lower level of satisfaction with life than men. My study showed that using work-study interface increased perceived stress and lowered levels of satisfaction with life for women more than men. The results of this study seemed to confirm gender differences in perceived stress and satisfaction with life experienced between men and women in work-study interface of working online students.

Overall, with one exception, the significant findings were in the hypothesized direction. Based on analysis, women in work-life balance and work-study interface were more likely to have a higher level of perceived stress than men, and women in work-

study interface were more likely to have lower levels of satisfaction with life than men. In the next section, I discuss the limitations of the current study.

### **Limitations**

The target population of this study was composed of working online students at an online university. In terms of external validity, the findings may not be applicable to working students who are not students of online education. As such, the scope of this study is limited as the sample was collected from a specific online institution, and it is not viable to generalize the results.

The next possible limitation of this study was participants' understanding and interpretation of the survey questions. As such, the use of a Likert scale in the survey may have limited some participants in providing an accurate assessment of their feelings, behavior, or beliefs. There was also a possibility for participants to fake good social desirability and provide demand effect responses. While the responses of the survey questions were deemed acceptable, results of this test needed to be interpreted carefully. In the next section, I discuss the recommendations for the current study.

### **Recommendations**

The findings of this study suggested a number of possibilities for future research. First, future researchers could examine the interaction effects of family-work-study to determine different relationships with a number of constructs when compared to work-life balance. For example, the researchers could investigate the effects of offering females working students with children promotions rather than offering benefits that may encourage gender inequalities. Second, future researchers could also examine the

interaction effect of family-work-study to age range as a predictor in determining gender social role between the younger and older generations of matured students. Furthermore, different gender roles (e.g., spouse, parent, employee, caregiver, matured student) as predictors may also extend this study. Third, future researchers may include specific analyses in a mixed study design that may provide additional useful qualitative analysis of daily events such as self-reported work-family-study conflict. This inclusion would enrich the findings with more insights into the struggle faced by working online students in managing and balancing their work-life balance. My study was conducted quantitatively where information was distilled and analyzed. For the future, a longitudinal study using a mixed-method could be beneficial as it would provide insightful information of working online students.

In summary, future researchers examining the moderating effects of gender in models of online student behavior might uncover other differences that may contribute to positive social change by providing new insights and useful information for policy makers to support online students as well as providing an understanding of the dynamic of the work-life-study balance for the students themselves. In the next section, I discuss the implications of the current study.

### **Implications**

The findings of this study might contribute to positive social change by providing useful information for policy makers to support online students and an understanding of the dynamic of the work-life-study balance for the students themselves. As such, it is crucial to continue studies between work, family, and study as working online students

will continue to enroll themselves in tertiary online education. More research providing information of changing social roles in gender and spillover experiences of working online students in their work-life balance and work-study interface will aid human resource personnel and higher education personnel of online education in designing and structuring appropriate settings for working online students such as work-study schedules. There is also a need to include family and conduct more work-family-study research about how family interferes with study and study interferes with family and to find out how the interactions of these variables affect work-life balance of the working online students.

Social implications of the current study exploring working online students' work-life balance and work-study interface served as an impetus for future research on inter-conflict of more than the two role domains. As such, it is beneficial to continue research on inter-role conflicts in study-, family-, and work-satisfaction to provide an understanding of the personal dimensions in the lives of online students. Furthermore, there is a need to continue study by tapping into the experience of working online student role in work-life balance and work-study interface to provide relevant information and understanding of the dynamic of work-family-study balance for the students themselves such as stress and satisfaction experienced by students in their work-life-study balance.

Furthermore, another social implication of the current study was to establish awareness and understanding of the role conflicts faced by working online students in their work-life balance. It is crucial to continue study so as to provide for policy makers useful information that may provide an insight into the plight of working online students

for any future interventions, for example. flexi-work schedule, and also assist working online students in upkeep of their studies in work-life balance, for example. university study leave. I conclude my study in the next section.

### **Conclusion**

The objective of this study was to quantitatively examine the moderating effects of gender on the relationships between work-life balance and work-study interface of working online students and their perceived stress and satisfaction with life. At the end of the interpretation of the findings, I concluded from the current study that working online women are more likely to report a higher level of perceived stress than men in both work-life balance and work-study interface and a lower level of satisfaction with life than men in work-study interface. It is evident that relationship exists in work-life balance, work-study interface, gender, perceived stress and satisfaction with life. The null hypotheses for Hypothesis 1, 2 and 4 were rejected. However, I failed to reject Hypothesis 3 as the gender did not moderate the relationship between work-life balance of working online students and their satisfaction with life. In conclusion, working online students should try to balance their work-life balance and work-study interface to reduce stress and get satisfied.

Overall, the findings from this study will add to the existing literature. With an awareness of spillover experiences and social role in gender of working online students in their work-life balance and work-study interface, the findings may contribute to positive social change by providing useful information for policy makers to support online students. The study may also provide an understanding of the dynamic of the work-life-

study balance for the students themselves. With the provision of new data and information regarding perceived stress and satisfaction with life of male and female undergraduates and graduates allow educational institutions to offer suitable resources and services to this population.



## References

- Adema, W. (2013). Greater gender equality: What role for family policy? *Family Matters, 93*, 7-16.
- Albright, M., Simonson, M., Smaldino, S., & Zvacek, S. (2006). Teaching and learning at a distance: *Foundations of Distance Education*. Upper Saddle River, NJ: Pearson Education.
- Alexander, M. G., Brewer, M. B., & Hermann, R. K. (1999). Images and affect: A functional analysis of out-group stereotypes. *Journal of Personality and Social Psychology, 77*, 78-93. doi:10.1037/0022-3514.77.1.78.
- Allen, D. G., Hancock, J. I., Vardaman, J. M., & McKee, D. N. (2014). Analytical mindsets in turnover research. *Journal of Organizational Behavior, 35*, 61-68.
- Allen, I. E., & Seaman, J. (2007). Online nation: *Five years of growth online*. Retrieved from [www.sloan-c.org/publications/survey/pdf/online\\_nation.pdf](http://www.sloan-c.org/publications/survey/pdf/online_nation.pdf)
- Allen, I. E., & Seaman, J. (2014). Grade Change: *Tracking Online Education in the United States*. Sloan Consortium and Babson Survey Research Group, p. 33. Retrieved from <http://www.onlinelearningsurvey.com/reports/gradechange.pdf>
- Allison, D., Alfonso, V., & Dunn, G. (1991). The Extended Satisfaction with Life Scale. *The Behavior Therapist, 5*, 15-16.
- Al-Omiri, M. (2007). A preliminary study of electronic surveys as a means to enhance management accounting research. *Management Research News, 30*(7), 510-524. doi:10.1108/01409170710759720

- American Psychological Association (2010). *Publication manual of the American Psychological Association* (6th ed.). Washington, DC: Author.
- Andrews, F. M., & Withey, S. B. (1976). *Social indicators of well-being America's perception of life quality*. New York, NY: Plenum Press.
- Atheya, R., & Arora, R. (2014). Stress and its brunt on employee's work-life balance (WLB): A Conceptual Study. *Journal of Humanities and Social Science*, 19(3), 57-62. doi:10.9790/0837-19355762
- Atici, B., & Bati, U. (2010). Changing structure of education and profile of learners. *Problems of Education in the 21st Century*, 21, 12-21.
- Baral, R., & Bhargava, S. (2011). Examining the moderating influence of gender on the relationships between work-family antecedents and work-family enrichment: Gender in management. *An International Journal*, 26(2), 122-147. doi:10.1108/17542411111116545
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediatory variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51, 1173-1182. doi:10.1037//0022-3514.51.6.1173
- Behere, S. P., Yadav R., & Behere, P. B. (2011). A comparative study of stress among students of medicine, engineering, and nursing. *Indian Journal of Psychology Medicine*, 33(2), 145-148. doi:10.4103/0253-7176.92064.

- Berges J. B. M., & Landa, M. A. (2014). Emotional intelligence and affective intensity as life satisfaction and psychological well-being predictors on nursing professionals. *Journal of Professional Nursing, 30*(1), 80-88.
- Beutell, N. J. (2010). Work schedule, work schedule control and satisfaction in relation to work-family conflict, work-family synergy, and domain satisfaction. *Career Development International, 15*(5), 501-518. doi:10.1108/13620431011075358
- Beutell, N. J., & Schneer, J. A. (2014). Work-family conflict and synergy among Hispanics. *Journal of Managerial Psychology, 29* (6), 705 – 735.  
doi:10.1108/JMP-11-2012-0342
- Bird, S. R. (2006). Theorizing masculinities: Recent trends in social sciences. *Gender Studies Journal of Eastern Europe, 33*(1), 1-21.
- Blackburn, R. T., Horowitz, S. M., Edington, D. W., & Klos, D. M. (1986). University faculty and administrator responses to job strains. *Research in Higher Education, 25*(1), 31-41. doi:10.1007/bf00991876
- Boehm, J. K., & Lyubomirsky, S. (2009). The promise of sustainable happiness. In S. J. Lopez (Ed.), *Handbook of positive psychology* (2nd ed.; pp. 667-677). Oxford, United Kingdom: Oxford University Press.
- Bohen, H. H., & Viveros-Long, A. (1981). *Balancing jobs and family life: Do flexible schedules help?* Philadelphia; Temple University Press.
- Breakwell, G. M., Hammond, S., Fife-Schaw, C., & Smith, J. A. (2008). *Research methods in psychology* (3rd ed.). Thousand Oaks, CA: Sage Publications.

- Brett, J. M., & Stroh, L. K. (2003) Working 61 plus hours a week: Why do managers do it? *Journal of Applied Psychology, 88*, 67-78.
- Brotheridge, C., & Lee, R. (2005). Impact of work-family interference on general well-being: A replication and extension. *International Journal of Stress Management, 12*, 203-221.
- Brus, C. P. (2006). Seeking balance in graduate school: A realistic expectation or dangerous dilemma? *New Directions for Student Services, 115*, 31-45. doi: 10.1002/ss.214
- Carey-Fletcher, K. (2007). The relationship of community college campus child care centers to the academic success of single mothers. *Dissertation Abstracts International: The Humanities and Social Sciences, 68(4)*, 1289.
- Cheng, B. H., & McCarthy, J. M. (2013). Managing work, family, and school roles: Disengagement strategies can help and hinder. *Journal of Occupational Health Psychology, 18(3)*, 241-251. doi:10.1037/a0032507
- Chickering, A. W., & Ehrmann, S. C. (1996). Implementing the seven principles: Technology as a lever. *AAHE Bulletin, 49(2)*, 3-6.
- Clark, S. C. (2000). Work/family border theory: A new theory of work/family balance. *Human Relations, 53*, 747-770. doi:10.1177/0018726700536001
- Cohen, J. (1992). Quantitative methods in psychology: A power primer. *Psychological Bulletin, 112(1)*, 155-159.
- Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior, 24*, 385-396. doi:10.2307/2136404

- Corrigan, J. (2000). The Satisfaction with Life Scale. *The Center for Outcome Measurement in Brain Injury*. Retrieved from <http://www.tbims.org/combi/swls>
- Creswell, J. W. (2003). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches* (2nd ed.). London: Sage Publications Ltd.
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative and mixed methods approaches* (4th ed.). London: Sage Publications Ltd.
- Crouter, A. C. (1984). Participative work as an influence on human development. *Journal of Applied Developmental Psychology, 5*, 71-90.
- Darrat, M., Amyx, D., & Bennet, R. (2010). An investigation into the effects of work-family conflict and job satisfaction on salesperson deviance. *Journal of Personal Selling & Sales Management, 30*(3), 239-251. doi:10.2753/pss0885-3134300304
- Diener, E. (1984). Subjective well-being. *Psychological Bulletin, 95*, 542-575.
- Diener, E. (2000). Subjective well-being: The science of happiness and a proposal for a national index. *American Psychologist, 55*, 34-43. doi:10.1037//0003-066x.55.1.34
- Diener, E., & Chan, M. Y. (2011). Happy people live longer: Subjective well-being contributes to health and longevity. *Applied Psychology: Health and Well-Being, 3*(1), 1-43. doi:10.1111/j.1758-0854.2010.01045.x
- Diener, E. D., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment, 49*(1), 71-75. doi:10.1207/s15327752jpa4901\_13.

- Doble, N., & Surpriya, M.V. (2010). Student life balance, myth or reality? *International Journal of Educational Management*, 25(3), 237-251.
- Dorin, M. (2007). Online education of older adults and its relation to life satisfaction. *Educational Gerontology*, 33, 127–143.
- Duxbury, L., & Higgins, C. (2012). Revisiting work-life issues in Canada: *The 2012 national study on balancing work and caregiving in Canada*. Retrieved from <http://www.healthyworkplaces.info/wp-content/uploads/2012/11/2012-National-Work-LongSummary.pdf>
- Eagly, A. (1987). *Sex differences in social behavior: A social role interpretation*. Hillsdale, NJ: Erlbaum.
- Eagly, A. (1997). Sex differences in social behavior: Comparing social role theory and evolutionary psychology. *American Psychologist*, 52(12), 1380-1383.  
doi:10.1037/0003-066X.52.12.1380.b
- Eagly, A., Wood, W., & Diekmann, A. B. (2000). Social role theory of sex differences and similarities: A current appraisal. In T. Eckes & H. M. Trautner (Eds.), *The developmental social psychology of gender* (pp. 123-174). Mahwah, NJ: Erlbaum.
- Erdwins, C. J., Buffardi, L. C., Casper, W., & O'Brien, A. (2001). The relationship of women's role strain to social support, role satisfaction, and self-efficacy. *Family Relations*, 50, 230-238. doi:10.1111/j.1741-3729.2001.00230.x
- Escoda, N. P., & Alegre, A. A. (2016). Does emotional intelligence moderate the relationship between Satisfaction in Specific Domains and Life Satisfaction? *International Journal of Psychology and Psychological Therapy*, 16(2), 131-140.

- Evans, A. M., Carney, J. S., & Wilkinson, M. (2013). Work-life balance for men: Counselling implications. *Journal of Counselling and Development, 91*(4), 436-441. doi:10.1002/j.1556-6676.2013.00115.x
- Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G\*Power3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods, 39*, 175-191. doi:10.3758/bf03193146
- Fiske, S. T., Cuddy, A. J. C., Glick, P., & Xu, J. (2002). A model of (often mixed) stereotype content: Competence and warmth respectively follow from perceived status and competition. *Journal of Personality and Social Psychology, 82*, 878-902. doi:10.1037/0022-3514.6.878
- Ford, M. T., Heinen, B. A., & Langkamer, K. L. (2007). Work and family satisfaction and conflict: A meta-analysis of cross-domain relations. *Journal of Applied Psychology, 92*, 57-80.
- Franke, G. R., Crown, D. F., Spake, D. F. (1997). Gender differences in ethical perceptions of business practices: A social role theory perspective. *Journal of Applied Psychology, 82*(6), 920-934. doi:10.1037/0021-9010.82.6.920
- Frone, M. R. (2003). Work–family balance. In J. C. Quick & L. E. Tetrick (Eds.), *Handbook of occupational health psychology* (pp. 143–162). Washington, DC: American Psychological Association.
- Gabre, H. G., & Kumar, G. (2012). The effects of perceived stress and facebook on accounting students' Academic Performance. *Accounting and Finance Research, 1*(2), 87-100.

- Galindez E., & Casas F. (2010). Adaptación y validación de la students' life satisfaction scale (SLSS) con adolescentes. *Estudios de Psicología*, 31, 79-87.
- Glaesmer, H., Grande, G., Braehler, E., & Roth, M. (2011). The German version of the Satisfaction with Life Scale (SWLS). Psychometric properties, validity, and population-based norms. *European Journal of Psychological Assessment*, 27(2), 127-132.
- Googins, B. (1991). *Work/family conflict: Private lives - public response*. Westport, CT: Auburn House.
- Grawitch, M. J., & Barber, L. K. (2010). Work flexibility or nonwork support? : Theoretical and empirical distinctions for work-life initiatives. *Consulting Psychology Journal Practice and Research*, 62(3), 169-188.
- Grawitch, M. J., Gottschalk, M., & Munz, D. C. (2006). The path to a healthy workplace: A critical review linking healthy workplace practices, employee well-being, and organizational improvements. *Consulting Psychology Journal: Practice and Research*, 58, 129 –147
- Gray, D. E. (2014). *Doing research in the real world*. Thousand Oaks, CA: Sage Publications.
- Greenhaus, H. J., & Allen, T. (2011). Work-family balance: A review and extension of the literature. In J. C. Quick and L. E. Tetrick (Eds.). *Handbook of Occupational Health Psychology* (2<sup>nd</sup> edition). Washington, DC: American Psychological Association.



- Greenhaus, J. H., & Beutell, N. J. (1985). Sources of conflict between work and family roles. *Academy of Management Review*, *10*(1), 76-88. doi:10.2307/258214
- Greenhaus, J. H., Collins, K. M., & Shaw, J. D. (2003). The relation between work-family balance and quality of life. *Journal of Vocational Behavior*, *63*(3), 510-531.
- Grönlund, A. (2007). More control, less conflict? Job demand-control, gender and work-family conflict. *Gender, Work and Organization* *14*(5), 476-497.
- Grund, A., Brassler, N. K., & Fries, S. (2014). Torn between study and leisure: How motivational conflicts relate to students' academic and social adaptation. *Journal of Educational Psychology*, *106*(1), 242-257. doi:10.1037/a0034400
- Grzywacz, J., & Marks, N. (2000). Reconceptualizing the work-family interface: a ecological perspective on the correlates of positive and negative spillover between work and family. *Journal of Occupational Health Psychology*, *5* (1), 111-126.
- Haar, J. M. (2013). Testing a new measure of work-life balance: A study of parent and non-parent employees from New Zealand. *International Journal of Human Resource Management*, *24*(17/18), 3305-3324.  
doi:10.1080/09585192.2013.775175
- Haar, J. M., Russo, M., Suñe, A., & Ollier-Malaterre, A. (2014). Outcomes of work-life balance on job satisfaction, life satisfaction and mental health: A study across seven cultures. *Journal of Vocational Behavior*, *85*(3), 361-373.
- Hale, J. C. III. (2013). *Differences in life satisfaction among graduate students from online and traditional universities*. (Doctoral dissertation, Walden University).

- Hansen, G. C., Hammer, L. B., & Colton, C. L. (2006). Development and validation of a multidimensional scale of perceived work-family positive spillover. *Journal of Occupational Health Psychology, 11*, 249-265. doi:10.1037/1076-8998.11.3.249
- Haugtvedt, C. P., Machleit, K. A., & Yalch, R. (2009). *Online consumer psychology: understanding and influencing consumer behavior in the virtual world (Vol. Advertising and consumer psychology)*. London, UK: Taylor & Francis e-Library. Retrieved from <http://openurl.ac.uk?sfx.sid=TALIS&genre=book&isbn=9781410612694>.
- Hecht, T. D., & McCarthy, J. M. (2010). Coping with employee, family, and student roles: Evidence of dispositional conflict and facilitation tendencies. *Journal of Applied Psychology, 95*(4), 631-647. doi:10.1037/a0019065
- Hill, E. J., Hawkins, A. J., Ferris, M., & Weitzman, M. (2001). Finding an extra day a week: The positive influence of perceived job flexibility on work and family life balance. *Family Relations, 50*(1), 49-58.
- Hill, E. J., Ferris, M., & Märtinson, V. (2003). Does it matter where you work? A comparison of how three work venues (traditional office, virtual office, and home office) influence aspects of work and personal/family life. *Journal of Vocational Behavior, 63*, 220-241. doi:10.1016/s0001-8791(03)00042-3
- Holmes, T. H., & Rahe, R. H. (1967). The Social Readjustment Rating Scale. *Journal of Psychosomatic Research, 11*, 213-218.
- Kanter, R. M. (1977). *Men and women of the corporation*. New York, NY: Basic Books.

- Kiecolt-Glaser, J. K., & Glaser, R. (2001). Stress and immunity: Age enhances the risks. *Curr. Dir. Psychol. Sci.* 10, 18 - 21.
- Kinman, G., & Jones, F. (2013). A life beyond work? Job demands, work-life balance, and wellbeing in UK academics. *Journal of Human Behavior in the Social Environment*, 17(1-2), 41-60. doi:10.1080/10911350802165478
- Kinnunen, U., Feldt, T., Geurts, S., & Pulkkinen, L. (2006). Types of work-family interface: Well-being correlates of negative and positive spillover between work and family. *Scandinavian Journal of Psychology*, 47, 149-162.
- Kirby, P. G., Biever, J. L., Martinez, I. G., & Gomez, J. P. (2004). Adults returning to school: The impact on family and work. *Journal of Psychology*, 138(1), 65-76.
- Klein, H. J., Cooper, J. T., Molloy, J. C., & Swanson, J. A. (2014). The assessment of commitment: Advantages of a unidimensional, target-free approach, *Journal of Applied Psychology*, 99 (2), 222-238.
- Kossek, E. E., Valcour, M., & Lirio, P. (2014). The sustainable workforce: Organizational strategies for promoting work-life balance and well-being. In C. Cooper & P. Chen (Eds.). *Work and wellbeing* (pp. 295-318), Oxford, United Kingdom: Wiley-Blackwell.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, Appraisal, and Coping*. New York, NY: Springer.
- Lei, S., & Gupta, R. (2010, June). College distance education courses: Evaluating benefits and costs from institutional, faculty, and students' perspectives. *Education*, 130(4), 616-631.

- Lim, Y., Tam, C., & Lee, T. (2013). Perceived stress, coping strategy, and general health: A study on accounting students in Malaysia. *Researchers World – Journal of Arts, Science & Commerce* 4 (1): 88-95.
- Lindholm, J. A., & Szelenyi, K. (2013). Faculty time stress: Correlates within and across academic disciplines. In Buckholdt, D. R., & Miller, G. E. (Eds.), *Faculty of Stress* (pp 19-40). London, England: Routledge.
- Lockwood, N.R. (2003). Work-life balance: Challenges and solutions. *Society for Human Resource Management Research Quarterly, Alexandria, VA.* 48(6).
- Lyubomirsky, S. (2008). *The how of happiness: A scientific approach to getting the life you want*. New York, NY: Penguin Press.
- Markel, K. S., & Frone, M. R. (1998). Job characteristics, work-school conflict, and school outcomes among adolescents: Testing a structural model. *Journal of Applied Psychology*, 83, 277-287.
- Maroufizadeh, S., Foroudifard, F., Navid, B., Ezabadi, Z., Sobati, B., & Omani-Samani, R. (2018). The Perceived Stress Scale (PSS-10) in women experiencing infertility: A reliability and validity study. *Middle East Fertility Society Journal*.
- Martinez, E., Ordu, C., Della Sala, M. R., & McFarlane, A. (2013). Striving to obtain a school-work-life balance: The full-time doctoral student. *International Journal of Doctoral Studies*, 8, 39-59. doi:10.28945/1765
- Matthews, R. A., Kath, L. M., & Barnes-Farrell, J. L. (2010). Short, valid, predictive measures of work-family interference. *Journal of Occupational Health Psychology*, 15(1), 75-90.

- Mauno, S., Kinnunen, U., & Ruokolainen, M. (2007). Job demands and resources as antecedents of work engagement: A longitudinal study. *Journal of Vocational Behavior, 70*, 149-171. doi:10.1016/j.jvb.2006.09.002
- Moore, F. (2007). Work-life balance: Contrasting managers and workers in an MNC. *Employee Relations, 29*(4), 385-399. doi:10.1108/01425450710759217
- Naithani, P. (2010). Overview of work-life balance discourse and its relevance in current economic scenario. *Asian Social Science, 6* (6), 148-155.
- National Center for Education Statistics. (2008). Digest of Education Statistics, 2007 (NCES 2008-022). Washington, DC. doi:10.3102/0002831208323277.
- Netemeyer, R. G., Boles, J. S., & McMurrian, R. (1996). Development and validation of work-family conflict and family-work conflict scales. *Journal of Applied Psychology, 81*(4), 400-410.
- Okeke, E. (2011). The Role work attitude and work-life conflict. *Journal of Management, 33*(4), 592-608.
- Olson, K. J. (2014). Development and initial validation of a measure of work, family, and school conflict. *Journal of occupational health psychology, 19*(1), 46-59.  
doi:10.1037/a0034927
- O'Meara, K., & Campbell, C.M. (2011). Faculty sense of agency in decisions about work and family. *Review of Higher Education, 34*(3), 447-476.  
doi:10.1353/rhe.2011.0000
- Overton, L. & Hills, H. (2009). *Driving business benefits: Towards Maturity learning technologies benchmark report, February 09*. London, UK: Towards Maturity.

- Padma S., & Sudhir Reddy, M. (2013). Role of family support in balancing personal and work life of women employees, *International Journal of Computational Engineering & Management*, 16 (3).
- Parker, K., & Wang, W. (2013). *Modern parenthood: Roles of moms and dads converge as they balance work and family*. Washington, DC: PEW Research Center.  
Retrieved from [www.pewsocialtrends.org/2013/03/14/modern-parenthood-roles-of-moms-and-dads-converge-as-they-balance-work-and-family](http://www.pewsocialtrends.org/2013/03/14/modern-parenthood-roles-of-moms-and-dads-converge-as-they-balance-work-and-family)
- Pavot, W. G., & Diener, E. (1993). Review of the Satisfaction with Life Scale. *Psychological Assessment*, 5, 164-172.
- Pavot, W. G., & Diener, E. (2008). The satisfaction with life scale and the emerging construct of life satisfaction. *Journal of Positive Psychology*, 3, 137-152.
- Pett, M. A., Lackey, N. R., & Sullivan, J. J. (2003). *Making sense of factor analysis: The use of factor analysis for instrument development in health care research*, Thousand Oaks, CA: Sage Publication.
- Pleck, J. H. (1977 ). The work–family role system. *Social Problems*, 24, 417-427.
- Pleck, J. H. (1978). *Work-family conflict: A national assessment. Presented at the Annual Meeting of the Society for the Study of Social Problems*, Boston, MA.
- Pocock, B. (2005). Work-life ‘balance’ in Australia: Limited progress, dim prospects. *Asia Pacific Journal of Human Resources*, 43(2), 198-209.  
doi:10.1177/1038411105055058
- Pookaiyaudom, G. (2015). Assessing different perceptions towards the importance of a work-life balance: A comparable study between Thai and international

- programme students. *Journal of Procedia Social and Behavioral Sciences*, 267-274.
- Quick, J. D., Henley, A. B., & Quick, J. C. (2004). The balancing act: At work and at home. *Organizational Dynamics*, 33(4), 426-438.
- Ramos, H. M., Francis, F., & Philipp, R. V. (2015). Work life balance and quality of life among employees in Malaysia. *International Journal of Happiness and Development*, 2(1), 38-51.
- Schmidt, S. (2011). Work-life conflict: Factors associated with negative spillover from home to work. *Journal of Undergraduate Research*, 13, 1-14.
- Shirom, A., Toker, S., Jacobson, O., & Balicer, R. (2010). Feeling vigorous and the risks of all-cause mortality, ischemic heart disease and diabetes: A 20-years follow-up of apparently healthy employees. *Psychosomatic Medicine*, 72, 727-733.
- Sieber, S. D. (1974). Toward a theory of role accumulation. *American Sociological Review*. 39, 567-578.
- Singh, Y. P. (2013). Quality of work life and its impact on organizational performance. *Asia Pacific Journal of Management & Entrepreneurship Research*, 2, 240-246.
- Skakon, J., Nielsen, K., Borg, V., & Guzman, J. (2010). Are leaders' well-being, behaviors and style associated with the affective well-being of their employees? A systematic review of three decades of research. *Work & Stress*, 24(2), 107-139.
- Small, S. A., & Riley, D. (1990). Toward a multidimensional assessment of work spillover into family life. *Journal of Marriage & the Family*, 52, 51-61.

- Soo, J. J., Zippay, A., & Park, R. (2012). Family roles as moderators of the relationship between schedule flexibility and stress. *Journal of Marriage and Family*, 74(4), 897-912.
- Staines, G. L. (1980). Spillover versus compensation: A review of the literature on the relationship between work and nonwork. *Human Relations*, 33, 111-1H9.
- Stimpson, R. L., & Filer, K. L. (2011). Female graduate students' work-life balance and the student affairs professional. In P. A. Pasque, & S. E. Nicholson (Eds.), *Empowering women in higher education and student affairs: Theory, research, narratives, and practice from feminist perspectives* (pp. 69-84). Sterling, VA: Stylus.
- Stranks, J. (2005). *Stress at work: Management and prevention*. Oxford: Elsevier
- Sturgis, J. (2012). The online frontier. *Diverse: Issues in Higher Education*, 29(3), 16-19.
- Thoits, P. A. (1992). Identity structures and psychological well-being: Gender and marital status comparisons. *Social Psychology Quarterly*, 55, 236-256.
- Thompson, C. A., & Prottas, D. J. (2006). Relationships among organizational family support, job autonomy, perceived control, and employee well-being. *Journal of Occupational Health Psychology*, 11(1), 100–118. doi.0.1037/1076-8998.10.4.100
- Vassar, M. (2007). A note on the score reliability for the satisfaction with life scale: An RG Study. *Social Indicators Research*, 86, 47-57.



- Vazquez, C., Duque, A., & Hervás, G. (2013). Satisfaction with life scale in a representative sample of Spanish adults: Validation and normative data. *Spanish Journal of Psychology, 16*(82), 1-15.
- Veenhoven, R. (1984). *Conditions of happiness*. Hingham, MA: Kluwer Boston Academic Publishers.
- Vera-Villaruel, P., Urzúa, A., Celis-Atenas, P. P. K., & Silva, J. (2012). Evaluation of subjective well-being: Analysis of the satisfaction with life scale in Chilean population. *Universitas Psychologica, 11*(3), 719-727.
- Verhagen, M., & Vossen, A. (2011). Is work-life balance influenced by control and schedule type, and does it affect various job outcomes? *Master Thesis Human Resource Studies*, Tilburg University.
- Walden University. (2015). Retrieved from <https://www.waldenu.edu/about/who-we-are/data/students>
- Wang, X. (2013). Why students choose STEM majors: Motivation, high school learning, and postsecondary context of support. *American Educational Research Journal, 50*, 1081-1121.
- Ware, J. E., Snow, K. K., Kosinski, M., & Grandek, B. (1993). *The SF-36 health survey manual and interpretation guide*, Boston, MA: Nimrod press.
- Whisnant, W. T., Sullivan, J., C., & Slayton, S. L. (1992). The "old" new resource for education: Student age. *Community Service Catalyst, 22*(3), 7-11.

- Wilkinson, M. (2010). Why distance learning can be a good way to study when you have a disability. Retrieved from <http://www.helium.com/items/1987584-why-distance-learning-can-be-a-good-way-to-study-when-you-have-a-disability>.
- Williams, J. E., & Best, D. E. (1982). *Measuring sex stereotypes: A thirty nation study*. Newbury Park, CA: Sage Publications.
- Wolfram, H. J. & Gratton, L. (2014). Gender role self-concept, categorical gender, and transactional transformational leadership: Implications for perceived workgroup performance, *Journal of Leadership & Organizational Studies*, 21(4), 338-353. doi: 10.1177/1548051813498421
- Zedeck, S. (1992). Introduction: Exploring the domain of work and family conflict. In S. Zedeck (Ed.), *Work, families, and organizations* (pp. 1-32). San Francisco, CA: Jossey-Bass.