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Impact of Teleworking During COVID-19 of Stress and Job Satisfaction for College Students

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Walden University

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Walden University

College of Social and Behavioral Sciences

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Dona Foreman

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Walden University
2021

Abstract

Impact of Teleworking During COVID-19 of Stress and Job Satisfaction for College
Students

by

Dona G. Foreman

MS, Troy State University, 2003

BS, Christopher Newport College, 1992

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

General Psychology

Walden University

November 2021

Abstract

The widespread outbreak of the Coronavirus (COVID-19) engulfed the United States and other countries across the world. This pandemic imposed restrictions which demanded a large majority of the population to telework, to close schools, and to close child-care facilities. One of the primary benefits of teleworking was the autonomy. However, the pandemic has now created an environment where the boundary of work and home are difficult to define. College students working from home during the pandemic are now faced with the responsibility of monitoring the virtual learning of their school-age children. This study was developed from the theoretical base of Gajendran and Harrison's mediation model and the theoretical framework of Zedeck's work-life spillover theory. This study explored the perceived stress and job satisfaction during the COVID-19 pandemic of 60 college students who worked from home and college students that did not work from home and those that had parenting responsibilities. This quantitative research examined if there were an interaction effect of the work status and parenting responsibilities with perceived stress and job satisfaction. The participants completed an online survey including the Perceived Stress Survey and the Minnesota Satisfaction Questionnaire. The results revealed that stress or job satisfaction of college students working during the pandemic were not impacted by their work status or their parenting responsibilities. The results of this study may be important for positive social change in that organizations may benefit from a better understanding of how work environment may influence job stress and job satisfaction.

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Dedication

I would like to dedicate this dissertation to my beloved son, Cameron, for the love and joy that he brings to my life. Camm, continue to aspire to become the man that God has intended you to be.

Acknowledgments

I would like to acknowledge everyone who played a role in my academic accomplishments. I would like to especially acknowledge my Best Friend Forever (BFF), Donna Speller Turner, who has encouraged me throughout this journey and my sister-in-law, Nashawn Gibbs for providing the tough love when I was uncertain.

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Chapter 1: Introduction to the Study

Introduction

The effects of the COVID-19 global pandemic have impacted all aspects of the community and the family systems (Walsh, 2020). The well-being and financial security of families have been severely impacted by the economic effects of the pandemic (Walsh, 2020). This widespread outbreak of COVID-19 resulted in a large majority of the population engaging in telework (Ogden, 2020). The restrictions imposed by the pandemic resulted in closed schools and discontinued after-school programs. Working parents had to monitor their children's virtual learning activities at home, in conjunction with doing their own work tasks while working from home. Thus, the critical challenge and potential stressor for working parents with young school-age children was balancing work and caregiving demands (Kim, 2020).

Prior to the COVID-19 pandemic, most people were managing the responsibilities of work and home simultaneously. Such obligations may affect one's level of stress, job satisfaction, and work-family conflict. Since the inception of the Telework Enhancement Act 2010, both employees and employers have been able to manage these outcomes better (Anderson et al., 2015). According to the United States Bureau of Statistics, over 24% of Americans were working some hours from home every week as of 2015 (Anderson et al., 2015). Telework has become more attractive for both the employer and the employee over the past decade. The employer benefits lower overhead costs, eliminate commuting times, and to empower employees. Empowerment of employees was believed to increase job satisfaction. The employee finds the phenomenon to be a

means of creating better well-being because of the flexibility it provides in determining where and how they complete their tasks, which contributes to balancing work-family conflict (Heelan et al., 2010). Divol and Fleming (2012) argued that telework creates satisfaction on the job and work for employees by providing flexibility and freedom to work whenever and wherever they choose.

The flexibility of working from home or some other remote location and having control over managing tasks has created a relationship with telework, job stress, and job satisfaction. Gajendran and Harrison (2007) found that the more days an employee teleworks is associated with higher perceived autonomy. This enhanced perceived autonomy was hypothesized to influence job satisfaction, job performance, and work-life balance (Gajendran & Harrison, 2007). Gajendran and Harrison hypothesized the cognitive operation used to comprehend and manipulate thoughts of teleworking influences thoughts of increased perceived autonomy and employee decision making authority of how, when, and where to complete their task. Several researchers argued that when the job demands were high, and job controls were low, the employee's ability to make decisions and use their skills at work was decreased; which results in depression, unhealthy habits and reduced job satisfaction (Bielecky & Smith, 2012; Brevik et al., 2011).

I developed this study using a mediation model by Gajendran and Harrison (2007), which illustrates individual outcomes that are associated with heightened levels of perceived autonomy that was gained by the flexibility an employee has in choosing where to work, when, and how to complete their assignments without direct supervision.

I also used the theoretical framework of the spillover theory developed by Zedeck (1992), which suggests a person's attitudes, emotions, skills, and behaviors generated in their personal life will flow into their work life. I compared the perceived stress and job satisfaction during the COVID-19 pandemic of college students who worked from home and college students that did not work from home and those that had parenting responsibilities and those that did not have parenting responsibilities.

In this study, I demonstrated how family systems adapted to crisis and their perceived stress. Understanding the effects of telework during the pandemic will assist employees to evaluate ways of managing work-family conflict and create better sense of well-being.

In this chapter, I will discuss the impact and restrictions of the COVID-19 pandemic have imposed on employees and their families. Following is a background section on various studies with similar findings on the outcomes of telework and the theoretical framework for the study. The other major parts of the chapter are the problem statement and purpose of the study. The problem statement section includes some contributing factors that negatively impacted employee psychological well-being.

Background

There is an overall agreement the world has changed considerably over the past decades with the advancement of technology and globalization (Korunka & Kubeck, 2015). One specific practice of globalization that has become widespread is teleworking. Anderson et al. (2015) noted the U.S. Bureau of Statistics 2011 reported that over 24% of Americans were working some hours from home every week. There is a large population

of employees who work from home a few hours per week or full-time work at home (Anderson, et al., 2015). Several researchers have found similarities in the outcomes of working from home or working from remote locations. Heelan et al. (2010) conducted research to identify the levels of job satisfaction based solely on work location. Konradt et al. (2003) conducted a cross-sectional questionnaire study to analyze the association of management behavior along with job-related and non-job-related stressors with stress experience and job satisfaction of teleworkers and non-teleworkers. Hill et al. (1998) collected data to explore the association of the virtual office with aspects of work and work-life balance. Feldman and Gainey (1997) developed a study identifying four dimensions to gain an understanding of the relationship of telework with employee quality of life and work experience. Gajendran and Harrison (2007) analyzed the hypothesized positive and negative consequences of telework by developing a theoretical framework and utilizing a meta-analysis which consisted of 46 studies. Several researchers (Belanger, 1999; Kurland & Bailey, 1999; Muame, 1991; Youngblood & Chambers-Cook, 1984) noted this human resource benefit was implemented to provide increased flexibility and commitment, and higher productivity and job satisfaction as an effort to retain employees. Bielecky and Smith (2012) also noted that when the opportunities to construct decisions are few and the pace of the job and mental intensity of the work has increased, the level of job strain was heightened. These findings have indicated that working in the traditional office setting was more stressful and less satisfying for the employee. Another practical implication was that work-related stressors and strains may prime individuals to hold implicit stress theories that increased their

perceptions of experienced pressures when they are under conditions of high work-related stress.

In this study, I focused on perceived stress and job satisfaction of college students who were working during the COVID-19 pandemic and who may or may not have school-age children at home during the day. Based on a review of the literature, there were no prior studies on college students teleworking during the COVID-19 pandemic. The information provided in this research will reiterate the importance of balancing psychosocial work environmental factors and employee psychological well-being.

Problem Statement

Research suggests that psychosocial work environmental factors (job demand and job control) are associated with employee psychological well-being (Aalto et al., 2015). The blend of high job demand and low job control is known as job strain (Bielecky & Smith, 2012). Karasek and Theorell's (1990) job strain model predicted there was a correlation between job strain and employee health and well-being (Huang et al., 2008). According to a study conducted by Bielecky and Smith (2012), job strain was identified as a predictor of depression. In the study conducted by Bielecky and Smith, job stress was not a complete description of job strain but was one aspect of job strain. In addition, employee absenteeism has become a major problem in U. S. organizations. Bakker et al. (2015) hypothesized that the combination of workload and emotional demands are impacted by the employees' perception of organizational support. Brevik et al. (2011) further suggested that psychological distress and reduced job satisfaction promotes unhealthy habits such as alcohol consumption and cigarette smoking. The expansion of

organizations into a global economy may have significantly affected factors of the psychosocial work environment.

Anderson et al. (2015) noted the Bureau of Statistics 2011 reported that over 24% of Americans were working some hours from home every week. Telework (also referred to as telecommute) is a policy permitting employees to work in locations other than a traditional office setting. Noted by Kurland and Bailey (1999), teleworkers typically work out of their homes, but can also work at satellite offices using computers and the internet. Teleworking allows the employee to perform their normal duties (regular paid hours) and responsibilities at home. The employee has the flexibility of choosing their work schedule. The organization provides all equipment and other resources. Heelan et al. (2010) conducted research and discovered job satisfaction and work-life balance support was perceived as high amongst those who were teleworking than those who performed their current job functions in a traditional office setting. Anderson et al. (2014) also noted the potential for teleworking to increase job satisfaction. Several researchers have predicted that teleworking can lower work-family conflict which in turn can reduce perceived job strain (Fonner & Roloff, 2010; Gajendran & Harrison, 2007; Golden & Veiga, 2005; Golden et al., 2006; Hill et al., 2003). Many employees have enrolled in telework agreements as a means to balance work and family and to lessen their daily commutes. However, some employees who are not teleworking have imagined the benefits of such an opportunity.

In this current study, I filled the gap in understanding the perceived stress and job satisfaction of college students who are working during the COVID-19 pandemic and

may or may not have school-age children at home during the day. My primary goal was to examine whether there was an association between teleworking during the COVID-19 pandemic with perceived stress and job satisfaction.

Purpose of Study, Research Questions, and Hypotheses

The purpose of this study was to compare perceived stress and job satisfaction during the COVID-19 pandemic of college students who work from home and college students that do not work from home and those that have parenting responsibilities and those that do not have parenting responsibilities. The Nature of Study Section will include the rationale for the three conditions. Below are the research questions and hypotheses:

Research Question 1 (RQ1): Do working college students who are working from home have higher levels of stress (as measured by the Perceived Stress Scale, PSS) than working college students who are not working at home?

Null Hypothesis (H_0): There is no difference in the level of stress for college students who work from home than those college students who do not work from home.

Alternative Hypothesis (H_a): College students who work from home will have higher levels of stress than those college students who are not working from home.

Research Question 2 (RQ2): Do working college students with parenting responsibilities have higher levels of stress (as measured by the Perceived Stress Scale, PSS) than working college students who do not have parenting responsibilities?

Null Hypothesis (H_02): There is no difference in the level of stress for working college students with parenting responsibilities than working college students who do not have parenting responsibilities.

Alternative Hypothesis (H_a2): Working college students with parenting responsibilities will have higher levels of stress than working college students who do not have parenting responsibilities.

Research Question 3 (RQ3): Do working college students who are working from home have higher levels of job satisfaction (as measured by the Minnesota Satisfaction Questionnaire, MSQ) than working college students who are not working at home?

Null Hypothesis (H_03): There is no difference in the level of job satisfaction for working college students who are working from home than those working college students who are not working at home.

Alternative Hypothesis (H_a3): Working college students who are working from home will have higher levels of job satisfaction than those working college students who are not working at home.

Research Question 4 (RQ4): Do college students who are working at home have children (yes or no) have higher levels of job satisfaction from those who are not working from home?

Null Hypothesis (H_04): There is no difference in job satisfaction for college students who work at home that have children than college students who are not working from home.

Alternative Hypothesis (H_{a4}): College students who are working at home who have children will have higher levels of job satisfaction than those college students who are not working at home and have children.

Research Question 5 (RQ5): Is there an interaction effect of work status and parenting responsibilities on perceived stress?

Null Hypothesis (H_05): There is no interaction effect of work status on parenting responsibilities on perceived stress.

Alternative Hypothesis (H_{a5}): There is a positive interaction effect of work status on parenting responsibilities on perceived stress.

Research Question 6 (RQ6): Is there an interaction effect of work status and parenting responsibilities on job satisfaction?

Null Hypothesis (H_06): There is no interaction effect of work status on parenting responsibilities on job satisfaction.

Alternative Hypothesis (H_{a6}): There is a positive interaction effect of work status on parenting responsibilities on job satisfaction.

Theoretical Framework

The theoretical base of the study included the theoretical framework of Gajendran and Harrison's (2007) mediation model and the theoretical framework Zedeck's (1992) work-life spillover theory. The mediation model introduces three conceptual themes as intervening mechanisms which act as psychological mediators: (a) perceived autonomy, (b) work-family conflict, and (c) relationship quality with supervisors and coworkers (Gajendran & Harrison, 2007). The model suggested the impact of teleworking on job

stress and job satisfaction were partly mediated by perceived autonomy. Spillover theory suggested a person's attitudes, emotions, skills, and behaviors generated in their personal life will flow into their work life (Balmforth & Gardner, 2006; Frone, 2003; Zedeck, 1992). Edwards and Rothbard (2000) developed two interpretations for spillover:

(a) the positive association between family and work satisfaction and family and work values (Zedeck, 1992) and (b) transference in entirety of skills and behaviors between domains (Repetti, 1987) such as when fatigue from work was exhibited at home or when family demands interfere with work schedule (p. 180).

Thus, work and family will function as one unit. Research also supports the idea that work flexibility leads to positive spillover and as a result a healthy balance of work and family is obtained (Hill et al., 2003).

Zedeck and Mosier (1990) argued the impact of working at home differs for every worker. For instance, the flexibility to telework can lessen the family responsibility of requiring day care. Olson and Primps (1984) agreed with Zedeck and Mosier (1992) that the flexibility to telework will differ amongst employees. Workers that do not require primary child-care responsibilities who telework can enhance the integration of work and family through increased control of their time and availability during the day. On the other hand, workers who do require primary child-care responsibilities who work at home encounter stress because of the simultaneous demands of conflicting work and family roles (Olson & Primps, 1984). The reality of the employee was their constant juggle of work and personal lives, which in their struggle to balance both was often the influence of one on the other that leads to either a positive or negative spillover (Bell et al., 2012).

I used the spillover theory in this study to explore the impact and severity of having to monitor virtual learning activities and provide childcare for school-age children that are at home. I also used the spillover theory in this study to explore the stress associated with these responsibilities and on the outcomes related to college students who are working from home virtually because of the COVID-19 pandemic.

Nature of the Study

I used a quantitative survey research design for this study (Creswell, 2009). Teleworking during the COVID-19 pandemic condition and parenting responsibilities were the independent variables and the dependent variables were stress and job satisfaction.

I chose the conditions for this study because it could be argued that it would be important to demonstrate how college students working virtually during a pandemic experience varying levels of stress at home. For example, differences between teleworking and taking care of school-age children and working from the traditional office may increase job stress.

I used Survey Monkey to collect data from the Walden University Data Participant Pool, LinkedIn, and Facebook. I selected the participants through probability sampling. All participants were college students who were working during the pandemic and who may or may not have had parenting responsibilities.

The operational definition of teleworking is when an employee enters into a work agreement that states the employee will work some portion of their work week at home performing their regular official duties. I asked the various groups to participate in a

survey. I used the information gathered from the questionnaires to examine levels of perceived stress and job satisfaction.

Definitions

Job control: Kossek et al. (2006) argue that job stress is when the employee has decision authority to choose when, where and how to complete their work.

Job demands: the psychological, physical and organizational aspects of the job (Brevik et al., 2011).

Job satisfaction: When an employee perceives they are: (a) empowered able to provide a positive contribution; (b) are engaged and motivated; (c) given career progression opportunities; and (d) can manage work-life conflict (Gajendran & Harrison, 2007; Fonner & Roloff, 2010; and Kurland & Bailey, 1999).

Job strain: Employee feels they have inadequate resources to complete their assigned tasks, whether those resources are time, skills, or access to professional development (Bielecky & Smith 2012).

Job stress: When the requirements of the job outweigh the capability and resources (Lambert, et al., 2009).

Perceived Autonomy: When the employee feels they have control of when, how, and under what conditions they complete tasks (Anderson et al., 2015; Heelan et al., 2010).

Role stress: the stress experienced due to the occupational role (Gajendran & Harrison, 2007).

School-Age Children: the age most states require children to be enrolled in school is from age five until age eighteen (Christensen et al., 2011).

Telework: an opportunity provided to employees which allows them to work at home or other alternate location for at least some portion of their work schedule. This work arrangement requires telework employees to interact with their organization via electronic media (Bailey & Kurland, 2002; Baruch, 2001; Feldman & Gainey, 1997).

Assumptions, Limitations, Scope and Delimitations

There are varying assumptions, limitations, and delimitations associated with this study. I will describe the varying aspects of the study that I assumed played vital roles in affecting the outcomes. I will also describe limitations that may affect the reliability and validity of the data.

Assumptions

There were two assumptions in this study. The first assumption was that employees who were involuntarily put on a telework program due to the COVID-19 pandemic may have some challenges with balancing work and family responsibilities due to the lack of external boundaries. The second assumption was that employees who have school-age children in the home are faced with both monitoring their virtual learning activities and childcare responsibilities due to the school's closures caused by the pandemic.

Limitations

There were several limitations to this research: (a) use of social media for recruitment of participants, (b) I only collected data from participants associated with the

selected social media sites, (c) participants that spend numerous hours on the computer may not have allocated time to participate, and (d) participants who volunteered to take the survey may not have represented the general population.

Scope and Delimitations

The scope of this study was the investigation to compare perceived stress and job satisfaction during the COVID-19 pandemic of college students who work from home and college students that do not work from home and those that have parenting responsibilities and those that do not have parenting responsibilities. The population for this study included men and women who reported directly to a supervisor or manager, were at least 18 years of age, and had been employed for a minimum of 6 months. I made the choice of identifying job stress during the COVID-19 pandemic based upon the lack of research on employee experiences when conducting business virtually and having to manage home responsibilities simultaneously. When an employee has the opportunity to telework, they begin to imagine the flexibility of determining where and when to complete their daily tasks. This level of perceived autonomy may create a sense of empowerment. I chose this specific focus because research suggests that job psychosocial work environmental factors (job demand and job control) are associated with employee well-being (Aalto et al., 2015).

I developed the questions in this study to investigate the relationship between perceived stress and job satisfaction of college students who are working during the COVID-19 pandemic and may or may not have parenting responsibilities. The sample consisted of college students who were working from home virtually, college students

who were not working from home, college students with parent responsibilities, and college students who did not have parenting responsibilities.

Significance

Grote and Guest (2017) and Jones et al. (2017) both agreed that the interest in well-being and quality of jobs in work organizations continue to be of heightened attention. Evidenced by Whitman et al. (2010), there is an association between employees' well-being and their performance within the organization. The original contribution of this study was to provide information on whether college students who are working from home during the COVID-19 pandemic are experiencing high levels of stress, which may suggest that the boundaries of work and home responsibilities have become blended. An employee who works from home is removed from the workplace communication, meetings, and other office distractions; consequently, providing more flexibility and greater production than an employee who works in the traditional office environment (Fonner & Roloff, 2010).

The data collected from this study could be useful to college students, organizations, and family systems. The implications for positive social change include: (a) providing information that will potentially assist organizations to understand better the relationship of teleworking with job stress and job satisfaction and (b) improving the quality of life among college students that have the opportunity to telework. Bielecky and Smith (2012) found that working in the traditional office setting was more stressful and less satisfying for the employee and that when the opportunities to construct decisions are few, and the pace of the job and mental intensity of the work has increased, the level of

job stress was more significant. Positive social change occurs by broadening the knowledge on the practical benefits of teleworking for both the organization and the student.

Summary

Telework has been viewed to better integrate work and family (Duxbury et al., 1998; Raghuram & Wiesenfeld, 2004). However, as noted by Gajendran and Harrison (2007), perceived autonomy is an essential feature of any work arrangement. Studies have been conducted for decades on the associations of telework with job satisfaction and job stress. Employees, as well as employers, have an interest in how to control or manage these variables. In this study, I wanted to explore whether working from home during the COVID-19 pandemic had increased job stress among college students who had school-age children at home during the day. In Chapter 2, I will discuss the consequences of telework and the mediating variables and the effects on individual outcomes.

Chapter 2: Literature Review

Introduction

Families have become accustomed to expecting such short-term crisis events that have rippling effects over time; however, with a pandemic such extreme conditions can remain unchanged over months and years with a cascade of disruptions sensed worldwide (Walsh 2020). As a result of the COVID-19 pandemic, the ability to obtain a greater understanding of the employee's feelings about telework concerning job stress was even more imperative for both the organization and the employee. Bielecky and Smith (2012) identified job stress as a predictor of depression. Job stress is high when the psychological demands are high and outweigh the employee's ability to make decisions and use their skills at work are low (Bielecky & Smith, 2012). Brevik et al. (2011) further suggested that psychological distress and reduced job satisfaction promotes unhealthy habits such as alcohol consumption and cigarette smoking.

The purpose of this study was to compare perceived stress and job satisfaction during the COVID-19 pandemic of college students who work from home and college students that do not work from home and those that have parenting responsibilities and those that do not have parenting responsibilities. I have presented information in this study that will assist in understanding how the COVID-19 pandemic has influenced teleworking and the impact home teleworking has on perceived stress and job satisfaction. The level of job stress is higher when the opportunities to construct decisions are few, and the pace of the job and mental intensity of the work increases (Bielecky & Smith, 2012). Both Kelly and Moen (2007) and Kim et al. (2003) speculated

that the traditional concept of job stress was an essential complement to an employee's degree of flexibility, which included the location of their work, and their choice over how much time they worked and when they worked. As such, the introduction of telework became a phenomenon. Noted earlier, the United States Bureau of Labor Statistics 2011 reports indicated over 24% of Americans were working some hours from home every week (Anderson et al., 2015). Several studies (Belanger, 1999; Kurland & Bailey, 1999; Muame, 1991; Youngblood & Chambers-Cook, 1984) have noted this human resource benefit was implemented to provide increased flexibility, increased commitment to the organization, higher productivity, and greater job satisfaction as an effort to retain employees. Research showed there was an association between teleworking and work-family conflict and job stress (Fonner & Roloff, 2010; Gajendran & Harrison, 2007; Golden & Veiga, 2005; Golden et al., 2006; Hill et al., 2003).

A theoretical framework for telecommuting developed by Gajendran and Harrison (2007) involves three conceptual themes identified as psychological mediators for job satisfaction, job performance, job stress, and employee turnover: (a) perceived autonomy, (b) work-family conflict, and (c) relationship quality (amongst co-workers and supervisors). The mediation model illustrates individual outcomes are associated with heightened levels of perceived autonomy that is gained by the flexibility an employee has in choosing where to work, when, and how to complete their assignments without direct supervision. Gajendran and Harrison (2007) suggested this level of perceived autonomy is proposed to influence job satisfaction, influence the level of performance, and improve work-life balance. Teleworking has become encouraged more and more by federal and

state agencies (Gajendran & Harrison, 2007). Employees who are teleworking from home are likely to experience increased levels of autonomy because of the flexibility of being able to work from home (Shamir & Salomon, 1985).

The spillover theory was a theoretical framework developed by Zedeck (1992), that proposed behaviors created in a person's personal life will transfer to their work life and behaviors created in their work life will transfer into their personal life. Several researchers, Balmforth and Gardner (2006), Frone (2003), and Zedeck (1992), argued that the spillover theory suggests a person's attitudes, emotions, skills, and behaviors generated in their personal life will flow into their work life. Edwards and Rothbard (2000) developed two interpretations for spillover:

- (a) the positive association between family and work satisfaction and family and work values (Zedeck, 1992) and (b) transference in entirety of skills and behaviors between domains (Repetti, 1987) such as when fatigue from work was exhibited at home or when family demands interfere with work schedule (p. 180).

When working from home it was common for employees to experience numerous role transitions, which makes the challenge of work-home interference (WHI) become more evident (Delaneioje et al., 2019). A study conducted by Wang et al. (2021), indicated that over 65% of participants struggled with home-to-work interference (HWI) and work-to-home interference (WHI).

Lim and Tan (2020) conducted a study of how family systems were disrupted and changed by the COVID-19 pandemic. The pandemic afforded families the benefit of working from home and improved some relationships between families. However, not

being able to establish boundaries between work and home became a concern. School-age children in the home created a burden and frustrations for situations where it affected the other spouse and dual-income parents (Lim and Tan, 2020). In addition, as noted by Wapshott and Mallett (2012), the employee's inability to decompress when surrounded by work taskings (i.e., working from home) may decrease the quality of family interactions.

In this chapter, I conducted the literature research primarily from various psychology databases of the Walden University Library. The theoretical foundation for the study was the mediation model developed by Gajendran and Harrison (2007) and the spillover theory developed by Zedeck (1992). The remaining literature review was of subtopics that include: (a) telework with job stress and job strain, (b) telework and perceived autonomy, (c) perceived autonomy with job stress and job strain, (d) telework with school-age children, and (e) telework and job satisfaction. This chapter concludes with the strength and limitations of studies and a summary to highlight critical points of the section.

Literature Search Strategy

The literature search strategy for this study involved the research of numerous databases. I used the databases available online through the Walden University Library research databases, including PsycARTICLES, PsycINFO, SocINDEX with full text, and Business and Management. The keywords I used included: *teleworking*, *telecommuting*, *job strain*, *occupational stress*, *role conflicts*, *working environment*, *major depression*, *information processing*, *knowledge accessibility*, *job*, and *home ecologies*, *job demand*,

job stress, flexibility, work-family conflict, job satisfaction, school-age children, employee satisfaction, mental representation, environmental motivation, COVID-19, and Coronavirus. The literature review included over 180 full-text information through January 2021. Articles dated between 1937 – 1999 were included because of its relevance and earlier documentations. A total of 88 articles are cited in this study.

Theoretical Foundation

The theoretical framework of Gajendran and Harrison (2007) mediation model and Zedeck's (1992) spillover theory was the theoretical foundation for this study. Gajendran and Harrison hypothesized the consequences of teleworking and why and when these consequences occur. They conducted a meta-analysis consisting of 46 studies, 27 published works, and 19 unpublished dissertations, with 12,883 participants. Surveys and interview techniques were used in the final sample to measure proximal and distal outcomes of teleworking. The mediation model by Gajendran and Harrison introduces three conceptual themes as intervening mechanisms which act as psychological mediators. The fundamental concept was that psychological mediators explain the influence of teleworking on individual outcomes. The conceptual ideas identified in this theory that act as psychological mediators are: (a) perceived autonomy, (b) work-family conflict, and (c) relationship quality. The first conceptual theme, perceived autonomy, was an element of job stress because the employee who teleworks was empowered to determine how, when, and where they complete their task. This level of flexibility increases self-reliance (Gajendran & Harrison, 2007). The second conceptual theme, work and family conflict, demonstrates that employees who telework could incorporate

home demands into their work schedule; therefore, establishing home routines which became dependent on telework. The model suggested that this idea could either be a benefit or a detriment, thus causing a negative effect. The third conceptual theme was relationship quality. This idea suggested that teleworking limits face-to-face interaction and, as a result, diminished the quality of communication and directly affected supervisor to employee relationships (Gajendran & Harrison, 2007).

The impact of these three conceptual themes on individual outcomes may have been based upon the intensity of telework (Gajendran & Harrison, 2007; Fonner & Roloff, 2010). Job satisfaction, job performance, role stress, and turnover intention were some of the outcomes associated with these mediators. The theoretical framework indicated perceived autonomy to be the most associated mediator of teleworking outcomes. Work-family conflict and employee relationship quality had much less of an association as a mediator compared to perceived autonomy. The mediation model proposed by Gajendran, and Harrison (2007) indicated that the higher the intensity of telework, the greater the association the mediators have on the individual outcomes. The level of intensity of teleworking was associated with how the mediator impacted different outcomes. The researchers discovered that perceived autonomy had a positive association with both job satisfaction, and job performance, but a negative association with turnover intention and job strain. They also stated that work-family conflict had a negative association with job satisfaction and job strain (Gajendran & Harrison, 2007).

In several correlational studies (DuBrin 1991; Duxbury et al., 1998; Gajendran and Harrison 2007; Raghuram et al., 2001), the idea was that perceived autonomy was

the most influential of the three mediators. According to Gajendran and Harrison (2007), perceived autonomy has a negative correlation with role stress. Such relationships are believed to be related to the flexibility in work locations, increased feelings of freedom and discretion caused by alleviating face to face supervision, and employee decision making authority of how, when, and where to complete their assigned task (DuBrin 1991, Duxbury et al., 1998; Gajendran & Harrison, 2007; Raghuram et al., 2001). The second psychological mediator, work-family conflict, has the most significant association with job stress when the employee teleworks 3 to 5 days a week. The believed individual outcomes of telework are: (a) job satisfaction was more significant, (b) role stress was lowered, (c), and turnover intervention was reduced (Gajendran & Harrison, 2007). Such outcomes are because the employees gain a more significant psychological commitment to their assigned tasks having the choice to work from home or other remote locations (Konradt et al., 2003). When employees have a more significant psychological commitment to work tasks, it creates a grander integration between areas of work and family (Konradt et al., 2003). The final psychological mediator, relationship quality, has a positive correlation with job satisfaction and job performance. Employees who telework had an enhanced ability to exercise control over scheduling when to conduct specific tasks and when to interact with organization members (Gajendran & Harrison, 2007). Such control assisted in managing interruptions, which cause for a more productive day and potentially lower level of role stress. According to Gajendran and Harrison, the frequency of face-to-face interaction was a delimiting factor to employee relations.

Gajendran and Harrison (2007) introduced the idea that the frequency at which an employee teleworks will affect the psychological mediators and thereby changing the individual outcomes. High intensity telework refers to employees who telework 3 or 4 days per week at home or in a satellite location. Low-intensity teleworkers are those employees who spend most of their time in the traditional office and only work 1 to 2 days a week in a telework status. The frequency of telework provides the employee with flexibility and control and promotes loyalty to the organization. The more frequent employees telework, the greater the perceived autonomy, the higher the degree of synchronization of work and home demands, and the more degraded relationships with management and co-workers (Gajendran & Harrison, 2007).

Gajendran and Harrison (2007) also hypothesized that when an employee has flexibility and control over the elements such as where they work, the amount of time they dedicate to work, the option to alleviate commuting time, and control with work-family conflict the following can be assumed: (a) teleworking was positively related to job satisfaction, (b) teleworking was negatively associated with employee role stress, (c) teleworking was positively associated with job performance, and (d) teleworking was positively related to perceived autonomy. Numerous telework researchers and theorists have annotated that employee attitudes, motivational qualities of work, and organizational perceptions are affected when employees are allowed to work away from central offices (Heelan et al., 2010). Lister and Harnish (2011) discussed there would be about 44 million teleworkers in America in 2016. Telework was encouraged by both government agencies and nongovernment companies/agencies by implementing telework

agreements with the premise of boosting productivity and lowering the cost of overhead (Anderson et al., 2014).

Several researchers (DuBrin, 1991; Fonner and Roloff, 2010; Gajendran and Harrison, 2007; Konradt et al., 2003) have hypothesized that the following conditions may have a positive effect on job strain: (a) the flexibility to choose how, when, and where to complete their work; (b) the loyalty promoted by the sense of psychological commitment to the nontraditional work environment; (c) the ability to manage interruptions; and (d) the social interaction and other meaningful connections gained in the workplace. However, accessibility to such mental representation was believed to reduce job strain (Gajendran & Harrison, 2007). Perception was the human ability to understand our environment (Valdez & Ziefle, 2018). The function of increasing accessibility of a mental representation of teleworking may heighten the perceptions of the potential benefits of flexibility and empowerment.

According to Gajendran and Harrison's mediation model (2007), the higher the intensity of teleworking, the more impact the mediators have on the outcomes. Therefore, the function of increasing accessibility of a mental representation of teleworking may heighten the perception of the potential benefits of flexibility and empowerment. High-intensity teleworkers are likely to experience a greater sense of autonomy and enhanced discretion over how they complete tasks (Gajendran & Harrison, 2007).

The second theoretical framework to be used in this study was the spillover theory developed by Zedeck (1992). Several researchers, Balmforth and Gardner (2006), Frone (2003), and Zedeck (1992), argued that the spillover theory suggested one's attitudes,

emotions, skills, and behaviors generated in their personal life will flow into their work life. Edwards and Rothbard (2000) developed two interpretations for spillover:

- (a) the positive association between family and work satisfaction and family and work values (Zedeck, 1992) and (b) transference in entirety of skills and behaviors between domains (Repetti, 1987) such as when fatigue from work was exhibited at home or when family demands interfere with work schedule (p. 180).

According to Balmforth and Gardner (2006), Hanson et al. (2006), and Hill et al. (2001), spillover can occur in both directions; work to personal life and personal life to work and can consist of positive or negative effects. Young and Kleiner (1992) discussed the notion that boundaries do not exist between the workplace and the home, which indicated a spillover of what happens at work will also happen at home. Thus, work and family will function as one unit. Research also supported the idea that work flexibility led to positive spillover and as a result a healthy balance of work and family were obtained (Hill et al., 2003).

A study conducted by Zedeck and Mosier (1990) argued the impact of working at home differs for every worker. For instance, the flexibility to telework can lessen the family responsibility of requiring day care. Olson and Primps (1984) agreed with Zedeck and Mosier (1992) that the flexibility to telework will differ amongst employees.

Workers that do not require primary child-care responsibilities who telework can enhance the integration of work and family through increased control of their time and availability during the day. On the other hand, workers who do require primary child-care responsibilities who work at home encounter stress because of the simultaneous demands

of conflicting work and family roles (Olson & Primps, 1984). As noted by Shamir and Salomon (1985) the physical boundaries between work and family are eliminated when working at home, which increases the conflict between the two environments. A study conducted by Bell et al. (2012), hypothesized that increased levels of job stress would project increased levels of work life conflict and decreased levels of work-life balance. The reality of the employee was their constant juggle of work and personal lives, which in their struggle to balance both were often the influence of one on the other that caused either a positive or negative spillover (Bell et al., 2012). Lingard et al. (2007) study revealed the damaging effects of work-life conflict on the individual levels was associated with mental health issues, employee burnout, substance abuse, and diminished family functioning. The authors also indicated the damaging effects of work-life conflict on the organizations was associated with organization commitment, job satisfaction, absenteeism, and performance.

The spillover theory will be used in this study to explore the impact and severity of having to monitor virtual learning activities and provide childcare for school-age children that are at home, and the stress associated with these responsibilities, on the outcomes related to college students who are working from home virtually because of the COVID-19 pandemic. The variables to be examined are perceived stress and job satisfaction.

According to the Gallup (2020), 65% of the workforce in the United States are teleworking full-time. This was an increase of 11% from those which had access to telework pre COVID-19 (U.S. Bureau of Labor Statistics, 2019). Europe (Lomas, 2020)

and Asia (Liang, 2020; Tay, 2020), and other regions have also had increased workforce teleworking. During the period of February 2020 to October 2020, many organizations were required to implement full-time telework for their employees due to the restrictions of COVID-19 to prevent the transmission of the virus (Chong et al., 2020). This hasty transition to mandatory telework was unlike the traditional flexible partial telework previously studied. Working from home virtually due to COVID-19 has removed a large degree of flexibility and purposefulness that telework used to offer workers (Chong et al., 2020).

Literature Review Related to Key Variables

Organizations and employees having a better understanding of the outcomes of teleworking was vital. Over 24% of Americans are teleworking in some capacity, rather a few hours from home or full-time work at home (Anderson et al., 2015). Researchers have found similarities in the outcomes of teleworking. This section mentions some of the research conducted that was relevant to this study and provides a foundation to build upon later in this chapter. Feldman and Gainey (1997) identified four dimensions to obtain a manageable taxonomy to gain an understanding of the impact of teleworking on employee quality of life and work experiences: (a) distinction between employees who telework full time and those who telework part-time; (b) distinction between employees who telework fixed hours and those who have flexible teleworking schedules; (c) distinction between employees who work from home and those employees who work at satellite locations; and (d) distinction between employees who telework due to the organization initiatives and those employees who seek job opportunities that offer

telework to accommodate their work and family needs. Feldman and Gainey (1997) used previous research on contingent employment, job design, and social isolation to develop a framework to study the outcomes of teleworking based on individual differences, job attributes, and teleworking arrangements. The authors found that increased job autonomy and decreased task interdependence are associated with both fixed schedules and part-time schedule teleworkers.

Heelan et al. (2010) conducted a study to compare the work-life balance of employees who worked in the traditional office environment and those who telework. The findings suggested that the levels of job satisfaction between home-based workers and primary office workers were similar. But the comparison of home-based workers and client-based workers indicated a higher level of job satisfaction among the home-based workers.

Hill et al. (1998) conducted a study to explore the association of the virtual office with aspects of work and work/life balance. The data collected was from a natural experiment at an IBM company that was in the process of implementing a virtual office program. In the timeframe of 18 months, 157 employees entered the virtual office program, while 89 employees continued to work in the traditional office environment. The study showed results that were like other correlational studies conducted by Gajendran and Harrison (2007), Fonner and Roloff (2010), and Konradt et al. (2003), that indicated telework was positively associated with flexibility and as such provides more autonomy. Some of the findings from a qualitative analysis disclosed the idea of greater productivity and increased flexibility due to teleworking. The authors conducted a

quantitative multivariate analysis that supported these qualitative findings related to productivity and flexibility. Both the qualitative and quantitative results indicated that telework has a positive association with flexibility and productivity.

Chung et al. (2020) conducted a study to assess how COVID-19 pandemic conditions were affecting parents in their roles of parenting. As cited by Cluver et al. (2020), the restrictions imposed by the pandemic has caused an estimated 1.38 billion children to be out of school or childcare and displaced from any extra curriculum activities, per the United Nation's Educational Scientific and Cultural Organization. Many countries closed schools and child-care facilities. Such measures have changed the daily lives of families and children. Countless parents are teleworking from home while caring for children and facing the demand of home-based schooling with their school-age children. The lockdown measures and physical distancing has resulted in slowing the transmission of the virus but has become detrimental to family life (Culver et al., 2020). After months of lockdown, the restrictions were extended. Employees working from home are now faced with the prolonged responsibilities of home-based learning responsibilities, and care giving due to these extended restrictions. Parents that are teleworking from home while conducting parental responsibilities without respite may encounter significant stress associated with the role of parenting due to the closure of schools, childcare services and mandatory telework. Parental stress as defined by Deter-Deckard (1998) occurred when the parents did not have the resources that were required to meet the parental demands. Chung et al. (2020) collected data from 258 parents living in Singapore by way of an online survey. The findings suggested that parents working from

home during COVID-19 experienced higher levels of parental stress and higher parental stress was associated with negative parenting behaviors. The findings also suggested that negative parental behaviors were associated with less parent-child relationship closeness.

Wang et al. (2021) explored the challenges experienced by employees who worked from home during the COVID-19 pandemic. The pandemic forced millions of workers across the world to become remote workers, which led to a global experiment on remote working (Kniffin et al., 2020). Overnight the phenomenon became a new normal. Most workers had little to no experience teleworking and their organizations were not prepared to aid this effort. As noted by others, Wang et al. (2021) also agreed that parents working from home during the pandemic faced a greater encounter in balancing work and family responsibilities. When interruptions from family occurs, the ability to telework could negatively impact work effectiveness (Wang et al., 2021). In addition, while working from home the responsibilities of work spill over to the life domains. Workers have been likely to feel exhausted when work domains flow into life domains (Wang et al., 2021). When working from home it was common for employees to experience numerous role transitions, which makes the challenge of work-home interference (WHI) become more evident (Delanoeiye et al., 2019). The study conducted by Wang et al. (2021) sample size consisted of 39 Chinese employees working from home during the early days of COVID-19 pandemic. The findings indicated that over 65% of participants struggled with home-to-work interference (HWI) and work-to-home interference (WHI). Work-home interference was the most mentioned challenge in working from home. Wang et al. study concluded that although job autonomy was identified as a crucial

virtual work characteristic, some participants complained that they worked more hours and the workload was more during the pandemic. Noted by Wang et al. (2021), in the past workers chose teleworking because of the flexibility and because the resources provided them the ability to balance work and home. However, the pandemic forced workers into the virtual work arena and their lack of preference or resources to make this choice has created significant challenges.

Both Walsh (2020) and Lim and Tan (2020) agreed that the effects of the COVID-19 pandemic have been disruptive for families and can persist for months or years. There has been a worldwide sense of loss to normalcy (Walsh, 2020). The family systems endured loss of lives, loss of income, and threats to their livelihoods due to the lingering impacts of the pandemic. Several researchers, Prime et al. (2020) and Walsh (2020) argued that resilient families have the capacity to withstand and can bounce back from the numerous challenges presented by crisis-precipitating events.

Konradt et al. (2003) conducted a cross-sectional questionnaire study to analyze the connection of management behavior along with job-related and non-job related stressors with stress experience and job satisfaction of teleworkers and non-teleworkers. The authors utilized a 4-point scale from the German job analysis instrument (Instrument for Stress-Oriented Task Analysis) ISTA to measure stressors related to work and a questionnaire in which participants answered on a 7-point scale to measure job satisfaction. The participants consisted of 2 groups; one group of 54 employees that teleworked and one group of 18 employees that did not telework. The results indicated that management by objective was not related to job-related or non-job related stressors

and, therefore, was considered an independent predictor of stress and viewed as the most reliable predictor. The primary outcome was that compared with other job related and non-job related stressors, the quality of management by objective had a positive association with job satisfaction and a negative association with job stress. However, no differences were observed between teleworking employees and members of the non-teleworking employees for psychological strain and job satisfaction.

Telework with Job Stress and Job Strain

There have been extensive studies and an increasing amount of attention involving the study of individual differences in perceptions of work as stressful (Hints et al., 2013). According to Hints et al. (2013), work stress was stimulated by individual differences in how a person experiences the degree of demands, the authority to make decisions, and the structural and environmental characteristics in the workplace. The authors found there was a negative association between job stress and job strain. This association explains why an employee who was conscientious carries enhanced feelings of power, are more organized and feel they have the skills to perform the work have higher job stress.

Gajendran and Harrison (2007) hypothesized that if telework was associated with enhancing perceived autonomy and lower work-family conflict, then the predicted outcomes would be improved job-related attitudes, improved performance, and reduced stress. The meta-analysis included 46 studies, 11 of which used the variable role stress. The mean r was $-.11$, which reflects a negative correlation between teleworking and role stress (Gajendran & Harrison, 2007).

According to Fonner & Roloff (2010), the diminished presence in the office may benefit teleworking by diluting their exposure to inevitable interruptions and distractions. According to Nardi and Whittaker (2002), when employees need time to concentrate, they will opt to telework, which removes them from the workplace communications, meetings, and other office distractions. Both Gajendran and Harrison and Fonner and Roloff concluded there was a negative correlation between telework and job strain, which may be due to the elimination of office distractions, which provides a controlled environment to complete work assignments.

Fonner and Roloff (2010) recruited 89 teleworkers and 103 office-based employees via email and through two telework websites to complete an online survey. The variables measured in the study were: (a) work arrangement (office-based environment or telework); (b) information exchange frequency; (c) information exchange quality; (d) work-life conflict; (e) stress from meetings and interruptions; (f) general politics; (g) get ahead politics; and (h) job satisfaction. The researchers found employees who telework experienced significantly less stress due to meetings and interruptions relative to office-based employees.

Several researchers in this study, Gajendra and Harrison (2007), Fonner & Roloff (2010), and Hill et al. (1998) argued there was a positive relationship between telework and perceived autonomy which generates a level of flexibility for employees that reduces stress. However, when the Coronavirus Disease 2019, an acute respiratory disease that transmits through physical contact, swept rapidly across the globe in early 2020, a new meaning to telework was launched (Chong et al., 2020). Many organizations have either

discouraged or forbidden nonessential employees from physically reporting to their workplace to halt the virus spread (Guyot & Sawhill, 2020). Telework offered as a flexible work arrangement was nonexistent (Chong et al., 2020). Workplace flexibility was an important aspect of balancing work and caregiving demand challenges for working parents with young children (Kim, 2020). Significant changes to all aspects of life have occurred as result of the pandemic lockdown measures (Ogden, 2020). As noted by Chong et al. (2020) the COVID-19 circumstances have eradicated a large degree of flexibility or volition that telework used to offer employees.

Telework and Perceived Autonomy

The meta-analysis conducted by Gajendran and Harrison (2007) consisted of 46 studies, 11 of which involved perceived autonomy. There was a positive relationship between telework and perceived autonomy. The results were derived from a sample size of 3, 040 with a mean r of .19. The authors also found that perceived autonomy was the psychological mediator that has the most association with job satisfaction, job performance, turnover intention, role stress, and perceived career prospects. Hill et al. (1998) also found that teleworking was positively associated with flexibility. Telework provides more autonomy than the traditional office environment or satellite/remote sites (Anderson et al., 2015; Gajendran & Harrison, 2007). The elements of perceived autonomy created in the telework environment are control, schedule flexibility, increased independence, decreased interruptions and increased ability to accomplish goals (Fonner & Roloff, 2010). The enhancements of such elements may explain why telework was associated with improved experiences of actual events (Anderson et al., 2015).

Perceived Autonomy with Job Stress and Job Strain

There is a negative correlation between perceived autonomy and job strain (Fonner & Roloff, 2010; Gajendran & Harrison, 2007; Anderson et al., 2014). Stress from office distractions such as meetings and interruptions may cause employees to feel rushed to complete a task and meet deadlines, creating fatigue (Fonner & Roloff, 2010). Fonner and Roloff explained the level of perceived autonomy was lower for workers in the main office due to the limited control (the loss of psychological control) and those unexpected conversations, telephone calls, emails, and other background noise (Fonner & Roloff, 2010). There is a relationship between perceived autonomy and greater boundary control and power to diminish interruptions and distractions (Fonner & Roloff, 2010). When an employee can withdraw themselves from the traditional office environment and make the decision to work from home, this affords boundary control to eliminate office distractions and becomes an avenue to lower job stress (Fonner & Roloff, 2010).

One of the tests conducted by Perry et al. (2018) was to determine if there was a correlation between autonomy and job strain. The authors defined autonomy as the employee's ability to perceive whether they had authority over how and where to do their jobs. Job strain was defined as when job demands exceed job resources and was measured in the form of exhaustion, disengagement, and dissatisfaction. The findings suggest that autonomy was negatively correlated with all three forms of job strain (exhaustion $r = -.35$ $p < .01$; disengagement $r = -.46$ $p < .01$; and dissatisfaction $r = .41$ $p < .01$).

Working from Home with School-Age Children

According to Fox et al. (2013) and the U.S. Bureau of Labor Statistics (2017), in 2017 dual-earner families increased to 62%, almost doubled from that of 1967. In addition, the single-parent family household in 2017 increased to 73%, more than half of those in 1967. There are over 55 million children enrolled in schools in the United States from the age of 5 to 18 years of age (Christensen et al., 2011). The critical challenge of working parents with young school-age children is balancing work and caregiving demands (Kim, 2020). Christensen et al. (2011) conducted a study to evaluate meeting the needs of working families whether adjusting school schedules and after school programs would meet the needs of working families and determined that the flexibility required to balance family-work responsibilities most likely could not be established in the school setting. The research conducted by Christensen et al. (2011) indicated the flexibility needed to enhance the children's academic performance and emotional and social well-being was more attainable from the workplace than the school setting.

The primary responsibility of a parent was to incorporate those actions which guarantees the basic physical and safety needs of their children (Christensen et al., 2011). Christensen also noted the most predictable responsibility is making certain children are in school. However, even with the flexibility of workplace, the structure of the workplace can interrupt the responsibility of ensuring their children are in school (Christensen et al., 2011). There are several types of flexible work arrangements that allows working parents the ability to choose when and where they work daily (Christensen et al., 2011).

Telework is one type of flexibility which allows working parents to work from home (Christensen et al., 2011).

This widespread outbreak of COVID-19 has demanded a large majority of the population to telework and in many instances enforceable by law (Ogden, 2020). The effects of the COVID-19 global pandemic have been difficult to fathom on all aspects of the community and the family systems (Walsh, 2020). The pandemic has demanded that most schools are closed, and after-school programs have been discontinued. Working parents are now required to monitor their children virtual learning activities at home, in conjunction to doing their work task while working from home.

Telework and Job Satisfaction

The meta-analysis conducted by Gajendran and Harrison (2007) was constructed from 46 studies and over 12,000 employees who telework. The authors utilized 28 studies to determine the association of job satisfaction and telework and concluded there was a positive relationship between the two variables. The authors found a mean r of .09.

Fonner and Roloff (2010) revealed there are negative correlations between job satisfaction and teleworking. The authors further explained that due to the diminished presence in the office, employees with high intensity telework schedules are not allowed the opportunity to create unrestricted channels of communication with co-workers. The inability to develop this level of communication may explain why there was a negative outcome of job satisfaction.

Telework has a positive association with an employee's perceptions of job satisfaction (Heelan et al., 2010). In agreement with Gajendran and Harrison (2007),

Baltes, et al., (1999), and Golden and Veiga (2005) found that the individual autonomy and flexibility of telework was positively correlated to job satisfaction. Golden and Veiga (2005) examined the moderating role of teleworking intensity and concluded there is a relationship between the levels of job satisfaction and the depth of telework; a tandem effect exists between the two variables. The limitation of this was determining whether work location was a factor (Heelan et al., 2010). Because home-based telework was a privileged work arrangement, home-based telework employees should have reported higher levels of job satisfaction than those employees at satellite locations or in the main office. Heelan et al. (2010) hypothesize that employees working from home and those working from the main office will have similar levels of job satisfaction. This hypothesis was derived from the thought that being in the main office provided a level of socialization and that employees working in the office were better able to compartmentalize work and home responsibilities. On the other hand, Anderson et al. (2015) argued that because teleworkers have more autonomy, they yield greater satisfaction, which generally creates a positive attitude towards one's job.

Heelan et al. (2010) examined the differences in job satisfaction as a function of work locations. Their research began by examining differences in job satisfaction across workers based at four primary locations: (a) traditional office environment; (b) home; (c) satellite office; and (d) client location. A total of 749 participants responded. The survey was anonymous and confidential. Heelan et al. (2010) utilized data collected from a previous study that was used as part of an organizational initiative to understand exiting remote work practices. Data for this study consisted of 1,426 individuals from a U.S.-

based, not for profit engineering and technology research organization. Similar levels of job satisfaction were found for home-based employees and traditional office employees. However, employees who telework from home reported higher levels of job satisfaction than those who worked from client-based locations.

This widespread outbreak of the COVID-19 has demanded a large majority of the population to telework and in many instances enforceable by law (Ogden, 2020). The well-being and financial security of families have been severely impacted by the economic shock waves of the pandemic (Walsh, 2020). Households with dual-income families were faced with the challenges of achieving work-family balance. Because both partners are working, it is difficult to focus exclusively on family demands (Ferguson et al., 2016). However, maintaining a balance between work and family responsibilities was the shared intention of many workers (Carlson et al., 2009).

Strengths and Limitations

This research consisted of mostly correlational studies. Correlation simply described a relationship between two variables; it does not explain the reason why the two variables were related. Therefore, the correlational studies were limited because one cannot interpret them as proof of a cause-and-effect relationship between two variables.

The empirical evidence from a meta-analysis study conducted by Gajendran and Harrison (2007) consisted of the following limitations: (a) the consequences of teleworking were examined only from the effects telework has on the individual, not from the impact telework has on the organization; (b) partial information in previous studies on teleworking and relationship quality; and (c) limited studies which imagined

the effects of telework to take time in developing in a natural setting. Heelan et al. (2010) examined the work-life balance of workers in a traditional office environment and working from home. However, the limitation was determining whether teleworking from home or working from a remote satellite location was a factor. Fonner and Roloff (2010) identified the following barriers: (a) high-intensity teleworkers may not have involved a good representation of telework employees and collocated employee population; and (b) telework participants may have worked previously in the office setting and now work in remote location which could have influenced their work experiences and satisfaction. The intensity of telework was a limiting condition which affected the individual outcomes (Gajendran & Harrison, 2007). Because the frequency in which an employee teleworks impacts the effects the mediators have on individual outcomes, both Gajendran and Harrison and Fonner and Roloff agreed the intensity of telework was a limiting condition.

A major strength of the literature reviewed was the ability to capture many participants. Utilizing meta-analysis yields increased sample sizes, which enhances the ability to study associations of interest. Also, the major strength of the meta-analysis was the analytical techniques used to summarize the results of multiple studies. As noted by Heelan et al. (2010), an advantage of their research was the capability to gain greater internal validity by using a large sample from a single organization.

Summary and Conclusions

Organizations have increasingly utilized telework programs as a benefit of the organization as well as the employee. Many studies confirmed the positive relationship

between teleworking and perceived autonomy and the association with reduced job stress. It was known that employees that work from home have more flexibility with their task and have better work-life balance, and this may be associated with lower job strain than those employees who work in a traditional office. However, while reviewing the literature, there were several unknowns identified by the researchers. It was unknown if the prevalence of telework and the intensity of telework effects the office worker (Golden, 2007). A similar unknown presented by Gajendran and Harrison (2007) was the extent to which high intensity telework may affect co-worker relationships. Hill et al. (1998) stated it was undetermined whether the outcome of the variables would have been the same if measured before teleworking.

Furthermore, it was not known whether organizational justice perceptions entirely contributed to the relationship between reasons for not teleworking and perceived work-life balance support (Allen et al., 2013). A review of the current literature revealed the need for the present study to fill the research gap to compare perceived stress and job satisfaction during the COVID-19 pandemic of college students who work from home and college students that do not work from home and those that have parenting responsibilities and those that do not have parenting responsibilities.

Next, in Chapter 3, are explanations on the choice of the quantitative methodology and survey design for conducting the dissertation study. Studies on telework and the employee population and convenience sampling procedures provided a basis for the data collection methods along with the relevant techniques required for collecting data.

Chapter 3: Research Method

Introduction

The purpose of this study was to compare perceived stress and job satisfaction during the COVID-19 pandemic of college students who work from home and college students that do not work from home and those that have parenting responsibilities and those that do not have parenting responsibilities. I have presented in this chapter the research methods chosen to examine the relationship between teleworking during the pandemic and job stress and job satisfaction. As stated in Chapter 1, I have compared the impact of home telework on perceived stress and job satisfaction by way of examining 6 research questions.

In this chapter, there is a more detailed discussion of the quantitative research design selected to examine the relationships between variables. I have provided more information on the participants in the study, the minimum sample size, and the criteria required for the participants later in the chapter. The chapter concludes with the instrument and operationalization of constructs, data analysis, threats to validity, ethical concerns, and summary.

Research Design and Rationale

I chose a survey design with the goal of receiving maximum insights and to understand and analyze opinions related to stress and job satisfaction of college students who are working from home during the COVID-19 pandemic and have school-age children at home during the day. The independent variable of interest was teleworking

and parenting responsibilities. The dependent variables were perceived stress and job satisfaction. This research was designed to answer six research questions:

Research Question 1 (RQ1): Do working college students who are working from home have higher levels of stress (as measured by the Perceived Stress Scale, PSS) than working college students who are not working at home?

Research Question 2 (RQ2): Do working college students with parenting responsibilities have higher levels of stress (as measured by the Perceived Stress Scale, PSS) than working college students who do not have parenting responsibilities?

Research Question 3 (RQ3): Do working college students who are working from home have higher levels of job satisfaction (as measured by the Minnesota Satisfaction Questionnaire, MSQ) than working college students who are not working at home?

Research Question 4 (RQ4): Do college students who are working at home have children (yes or no) have higher levels of job satisfaction from those who are not working from home?

Research Question 5 (RQ5): Is there an interaction effect of work status and parenting responsibilities on perceived stress?

Research Question 6 (RQ6): Is there an interaction effect of work status and parenting responsibilities on job satisfaction?

I chose this design because of it provided a set of predetermined questions to a large population. I used the survey design to ensure broad capability and created a more accurate sample to gather targeted results in which to draw conclusions. Another advantage to using survey design was having access to data from large populations which

offered the skill to gauge the representativeness of individual views and experiences, that could be used to make key decisions. I used an online survey method to collect data. The survey method afforded the opportunity to gain easy access to potential participants, provided a higher response rate, and to collected data in a short period.

Methodology

Population, Sampling, and Recruitment

The population for this study was college students that were working during the pandemic. The population consisted of both men and women who reported directly to a supervisor or manager, were at least 18 years of age, and had been employed for a minimum of 6 months. These workers were composed of those who had and had not switched to telework in response to COVID-19 as well as those who did and did not have school-age children at home.

Sampling

The criteria for selection were volunteers who currently were college students, employed, and at least 18 years of age. The participants for this study were recruited from the Walden University research participation pool, Facebook, and LinkedIn online group pages. College students who were working from home and college students that were not working from home were the interest groups. Recruitment was only from these groups that provided permission to recruit participants for the study. The participants were accessible via these social media platforms. By using this source, I had access to a broad and diverse population. This was a low cost and flexible means of getting participants.

I calculated the sample size by performing a priori power analysis using G*Power 3.1.9.4 version software (Buchner et al., 2006, 2009). The ANOVA fixed effects, main effects, and interactions F test with an effect size $f = 0.25$ for the research study. The other parameters I used to calculate the sample size were alpha .05, power .80, and 4 groups. The output parameters indicated a total sample size of 196 is recommended.

The participants in this study were college students who were teleworking, college students who were not teleworking, college students with parenting responsibilities, and college students that did not have parenting responsibilities. Participants consisted of both men and women who were 18 years of age and older. Each participant was required to answer questions to identify their demographics, such as gender, age, ethnicity, level of education, and work status. (Appendix A). A link was cited on the web page for those interested in completing the survey with a recruitment statement (Appendix C). The link navigated the participant to the survey. The survey included an informed consent statement for those participants who agree to take the survey, and a debriefing statement (Appendix B), which described the purpose of the study. Before beginning the survey, there were three qualifying questions to determine if the participant meet the criteria for the study: (a) age 18 years or older, (b) enrolled in college, and (c) employed for a minimum of 6 months. The participants that met the criteria for participation were advanced to the first page of the survey, which had a link to complete the consent form. Once consent had been granted, the participants completed the tasks in the following order: (a) completed the Perceived Stress Scale Survey, (b) complete the Minnesota Satisfaction Questionnaire, (c) completed the demographic

questionnaire, and (d) read the debriefing statement. I designed the surveys to provide the option to exit without completion. Once all questions have been answered, the participants selected the completion tab. When participants completed the survey, they received an autogenerated message acknowledging receipt, and a statement regarding their information would be used for research purposes only. There were no follow up requirements.

Instrumentation and Operationalization of Constructs

I used the online survey tool SurveyMonkey to collect data. I also used this online survey tool to build surveys, gather results, and conduct analysis of the results.

SurveyMonkey had an automated feature that allowed the user to see real-time results on the number of participants; it analyzed large volumes of data and exported in various formats, and had an SPSS integration feature. Most importantly, this online web tool came with a secure platform that used several encryption methods to protect the data. I have used the remainder of this section to provide detailed information for the variables and how the variables were operationalized.

Independent Variables

Work status and parenting responsibilities were the two independent variables. Work status was expressed as either teleworking from home or working in the traditional office environment. Parenting responsibilities were measured by whether parents at home were required to provide home-based schooling and/or must provide childcare responsibilities for school-age children.

Dependent Variables

The dependent variables for this study were score data from the Perceived Stress Scale (PSS) measuring the levels of stress of each participant and score data from the Minnesota Satisfaction Questionnaire (MSQ) measuring levels of job satisfaction.

The instrument of measure for stress were items measuring perceived stress from the PSS developed by Cohen et al. (1983), which was one of the most widely used psychological instruments for measuring the perception of stress. I chose the PSS because the questions were geared to the employee's response based upon their feelings and thoughts during certain periods. The PSS determined the degree to which employees found their lives uncontrollable, unpredictable, and overloaded. The questionnaire consisted of 10 questions about their feelings and thoughts during the last month. A 5-point scale was used, ranging from 0, meaning *never* to 4, meaning *very often*. Participants were asked questions such as "In the last month, how often have you felt difficulties were piling up so high that you could not overcome them; and in the last month, how often have you been able to control irritations in your life (Cohen et al., 1983). The questions in the PSS focused on the participant's feelings and thoughts during the past month and were general in nature and quite unrestricted of content specific to any particular group. Khalili et al. (2017) conducted a study to identify the validity and reliability of the Cohen 10-item PSS and determined that Kaiser-Meyer-Olkin (KMO) test coefficient was 0.82; Bartlett's test yielded 0.327 which was statistically significant representing a quality sample; a Cronbach's Alpha coefficient of 0.72 was obtained. The researchers determined Cohen 10-item PSS has good internal consistency and reliability.

Another study conducted by Sun et al. (2019) indicated that PSS had a reliability coefficient = 0.954 and internal consistency, Cronbach's alpha = 0.810. Permission to use the PSS for study purposes was granted by the author, Sheldon Cohen, free of charge through an email response (Appendix D).

The dependent variables for this study were stress and job satisfaction. Weiss et al. (1967) developed the short version of the MSQ. I chose the short version for this research. The short version consisted of 20 items, which were measured on a 5-point Likert-type scale. The 20 items measured consisted of the following two subscales: (a) intrinsic satisfaction, which evaluated employee satisfaction based on essential features of the job; and (b) extrinsic satisfaction, which evaluated employee gratification from external aspects of the job. The total subscale consisted of the combination of the two subscales (Senter et al., 2010). The survey took between 15 and 20 minutes to complete. Participants were asked questions such as freedom to use judgment, working conditions, feelings of accomplishments and other general job satisfaction questions. These questions were rated on a scale of 1 to 5, with one being *not satisfied* and 5 being *extremely satisfied*. I used the complete scale which consisted of 20 items. The maximum score was 100, meaning *highly satisfied*.

I chose the MSQ for this study because it measured both the employee job satisfaction and job dissatisfaction. Participants were more likely to complete a short survey than a long survey. Abugre (2014) found the reliability of MSQ to be acceptable in both forms. The reliability and validity of the MSQ have been established because it was a well-known instrument (Dhammika et al., 2012). As estimated by Hoyt's analysis-

of-variance, the reliability of the short form yielded median Hoyt's reliability coefficients on a scale of .86 to .90 (Weiss et al., 1967). Hoyt (1941) followed the study of Kuder and Richardson (1937), which defined a first coefficient known as KR-20 that estimated the reliability of a test composed of some dichotomously scored questions.

A study conducted by Senter et al. (2010) indicated that Hoyt reliability coefficients for the intrinsic satisfaction scale reliability coefficient of .80, the extrinsic satisfaction scale coefficient of .90, and the general satisfaction scale (the total scale) coefficient ranged from .89 and .70 within a 1-week and 1-year intervals; all of which demonstrated the reliability of the MSQ Short Form. The Hoyt reliability coefficient was a formula for estimating the reliability of a test based on the analysis of variance.

According to Senter et al.(2010), evidence of validity for the MSQ Short Form showed Emotional Exhaustion and Depersonalization were significant predictors of General Job Satisfaction. Results of the Pearson correlation indicated there was a significant negative association of Emotional Exhaustion ($r(192) = -.487$) and Depersonalization ($r(191) = -.335$) with General Job Satisfaction. Vocational Psychology Research no longer sells the MSQ Questionnaires and have authorized the instrument to be used free of charge for research or clinical work without written consent (Appendix E).

Data Analysis Plan

I used the SPSS software to analyze the hypotheses. I used data collected through SurveyMonkey to determine the statistical significance of the research questions. Frequencies and percentages were included for each demographic variable. This study

was a survey design. The purpose of this study was to compare perceived stress and job satisfaction during the COVID-19 pandemic of college students who worked from home and college students that did not work from home and those that had parenting responsibilities and those that did not have parenting responsibilities. The descriptive statistics included the means, standard deviations, and effect sizes. I conducted tests of the research hypotheses using the 2 x 2 Factorial ANOVA to evaluate if there was an interaction effect on the dependent variables stress and job satisfaction.

Research Question 1 (RQ1): Do working college students who are working from home have higher levels of stress (as measured by the Perceived Stress Scale, PSS) than working college students who are not working at home?

Null Hypothesis (H_01): There is no difference in the level of stress for college students who work from home than those college students who do not work from home.

Alternative Hypothesis (H_a1): College students who work from home will have higher levels of stress than those college students who are not working from home.

This RQ will be tested by examining the main effect for telework status on perceived stress.

Research Question 2 (RQ2): Do working college students with parenting responsibilities have higher levels of stress (as measured by the Perceived Stress Scale, PSS) than working college students who do not have parenting responsibilities?

Null Hypothesis (H_02): There is no difference in the level of stress for working college students with parenting responsibilities than working college students who do not have parenting responsibilities.

Alternative Hypothesis (H_{a2}): Working college students with parenting responsibilities will have higher levels of stress than working college students who do not have parenting responsibilities.

This RQ will be tested by examining the main effect for parenting status on perceived stress.

Research Question 3 (RQ3): Do working college students who are working from home have higher levels of job satisfaction (as measured by the Minnesota Satisfaction Questionnaire, MSQ) than working college students who are not working at home?

Null Hypothesis (H_{03}): There is no difference in the level of job satisfaction for working college students who are working from home than those working college students who are not working at home.

Alternative Hypothesis (H_{a3}): Working college students who are working from home will have higher levels of job satisfaction than those working college students who are not working at home.

This RQ will be tested by examining the main effect for telework status on job satisfaction.

Research Question 4 (RQ4): Do college students who are working at home have children (yes or no) have higher levels of job satisfaction from those who are not working from home?

Null Hypothesis (H_{04}): There is no difference in job satisfaction for college students who work at home that have children than college students who are not working from home.

Alternative Hypothesis (H_{a4}): College students who are working at home who have children will have higher levels of job satisfaction than those college students who are not working at home and have children.

This RQ will be tested by examining the main effect for parenting status on job satisfaction.

Research Question 5 (RQ5): Is there an interaction effect of work status and parenting responsibilities on perceived stress?

Null Hypothesis (H_{05}): There is no interaction effect of work status on parenting responsibilities on perceived stress.

Alternative Hypothesis (H_{a5}): There is a positive interaction effect of work status on parenting responsibilities on perceived stress.

This RQ will be tested by examining the interaction effect of telework status and parenting status on perceived stress.

Research Question 6 (RQ6): Is there an interaction effect of work status and parenting responsibilities on job satisfaction?

Null Hypothesis (H_{06}): There is no interaction effect of work status on parenting responsibilities on job satisfaction.

Alternative Hypothesis (H_{a6}): There is a positive interaction effect of work status on parenting responsibilities on job satisfaction.

This RQ will be tested by examining the interaction effect of telework status and parenting status on job satisfaction.

Threats to Validity

The internal threats to validity for this study were: (a) related to the participants willingness to provide deliberate feedback, (b) loss of connectivity, and (c) failure to complete the survey (Lancsar & Swait, 2014).

Research conducted outside a controlled environment were subjected to external threats. External threat to validity heightens if the participant requested help with the survey or were distracted and did not complete the survey. According to Lancsar and Swait (2014), the ability to generalize the results of the study to other populations that were not in the study could be a threat to external validity. There was no way to determine if the participant were distracted or to ensure the survey was completed.

Ethical Issues

According to Vayena and Tasioulas (2013), there are several factors that determine the ethics of a study: (a) risk to participants, (b) competency of the researcher, and (c) informed consent requirements. The study will be submitted to the Walden University Institutional Review Board. An invite to complete the survey was posted on various online group pages with an explanation for the research, the criteria to participate, and instructions on how to access the survey. All participants received information regarding their right to discontinue the study and how to exit the survey prior to submission. The consent form was read from the SurveyMonkey website. The form explained the disclosure and other file security information. Participants provided responses to questions anonymously. Measures were implemented to protect the identity of the participant.

Summary

In this chapter, I provided a detailed explanation of the research, methodology, recruitment of participants, how data was collected, and other details regarding the implementation of the study. I also identified the demographics of the participants and served as the basis for the study. Chapter 4 includes the results of the data and a detailed discussion on the findings and its implications for social change.

Chapter 4: Results

Introduction

In this study, I intended to address whether college students who are working from home and college students who are not working from home during the COVID-19 pandemic are experiencing stress due to the challenges and restrictions generated from the pandemic. Employers were forced to impose mandatory telework programs due to the pandemic. The levels of perceived stress and job satisfaction that may have been influenced by work status and parenting responsibilities was the specific problems addressed in the study.

I administered the PSS and MSQ via link on social media to test six hypotheses related to whether the work location or work status of college students and their parenting responsibilities during the COVID-19 pandemic had a relationship with the levels of perceived stress and job satisfaction. In this chapter, I provided a description of how the study was conducted, the data collection procedures administered, and the data analysis techniques performed. In addition, Chapter 4 explained the results of the analyses conducted to answer the research questions and test the hypotheses.

Data Collection

Participants received an invite via social media sites (LinkedIn, Facebook, and Walden University Participant Pool) in the study under the condition of anonymity. The invite outlined the inclusion criteria and included an informed consent statement. The web-based survey included 41 items, of which 30 required respondents to report thoughts on stress in the last month and attitudes toward job satisfaction. Also included were three

inclusion criteria items and eight demographic questions. The survey remained open for 2 months. A total of 122 participants took the survey. However, 45 participants did not meet the criteria to complete the survey (36 were not currently enrolled in college courses and nine had not been employed in the last 6 months). There were an additional 17 surveys missing data and could not be included in the analysis. This resulted in a sample size of 60. A few of the variables were collapsed to create a new variable that combined totals to conduct the analysis, because of the small sample sizes. The variable of those that teleworked 3 to 6 months and those that teleworked 6 months or more were collapsed to a new variable which included any time teleworked. The variable for those with school-age children 5 to 12 years old and school-aged children 13 to 18 years old were collapsed into one variable to indicate any parenting responsibilities. A response rate could not be determined due to the anonymous nature of the data collection.

I generated a frequency table on all collected data to check for any potential outlying values. It appeared that most of the missing values were from the MSQ and the demographic questions, which indicates the participants only responded to the PSS survey. In the next section, I provided an analysis of the demographics, a summary of the outcomes for the PSS and the MSQ based upon the survey responses, and the basic descriptive statistics.

Descriptive and Demographic Characteristics

The data collected was exported from SurveyMonkey to SPSS for statistical analyses. Respondent perceived stress and job satisfaction was measured using validated and reliable liker-type scales. Descriptive statistics and frequency distribution were calculated to describe the sample population. The mean scores and standard deviation were computed for total PSS and the total MSQ responses. The research hypotheses were tested using an independent t test and a 2 x 2 factorial ANOVA to evaluate the interaction effect on the dependent variables: stress and job satisfaction.

Table 1

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
pss_total	60	16.00	40.00	32.5500	4.40117
msq_total	60	26.00	85.00	53.7167	17.23919

The sample was comprised of 27% men ($n=16$), 73% women ($n=44$); with ages ranging from 18 and over; 15% ($n=9$) reported being between 18 and 24; 28% ($n=17$) between 25 and 34; 23% ($n=14$) between 35 and 44; 20% ($n=12$) between 45 and 54; 12% ($n=7$) between 55 and 64; and 2% ($n=1$) 65 and above. Fifty-three ($n=32$) percent of the participants reported their race as Caucasian, Black/African American 40% ($n=24$); Hispanic 5% ($n=3$), and Asian/Pacific Islander 2% ($n=1$). Most participants reported being a college graduate (82%), with 8% reporting having a high school diploma. Forty

percent reported they had children at home between 5 and 12 years of age during COVID-19 that were in a virtual school environment, and 12% reported having children at home between 13 and 18 years of age that were in a virtual school environment. A total of 75% of the population reported teleworking. This group, some participants were identified teleworking some days and working at the traditional office. Fifteen percent reported teleworking 3 to 6 months during the pandemic; 60% reported teleworking more than 6 months. While 65% reported working at a traditional office building or other work location. Details on the demographics can be found in Table 2.

Table 2*Frequency Distribution for Demographics*

Demographics	Responder	
	<i>n</i>	%
Gender		
Male	16	27
Female	44	73
Ethnicity		
White or Caucasian	32	53
Black or African American	24	40
Hispanic or Latino	3	5
Asian or Asian American	1	2
Age		
18 – 24 Years	9	15
25 – 34 Years	17	28
35 – 44 Years	14	23
45 – 54 Years	12	20
55 – 64 Years	7	12
65 +	1	2
Education		
High School	5	8
Associates Degree	2	3
Bachelors Degree	18	30
Masters Degree	34	57
Doctorate Degree	1	2

Table 2 Continued

Demographics	Responder	
	<i>n</i>	%
Number of Months Telework during COVID-19		
3 to 6 Months	9	15
More than 6 Months	36	60
None	15	25
Worked at Traditional Office of Other Location		
Worked at office/ other location	39	65
Did not work at office/other location	21	35
Children between ages 5 and 12 at home in virtual school environment		
Children at home	24	40
No children home	36	60
Children between ages 13 and 18 at home in virtual school environment		
Children at home	21	35
No children at home	39	65

Analysis of Perceived Stress Scale

The PSS is designed to measure a person's perception of stress by asking questions about feelings and thoughts during the last month to assess how unpredictable, uncontrollable, and overloaded they find their lives. The PSS is a scale of 10 questions, rated on a Likert-type scale from 0 (*never*) to 4 (*very often*) with a questionnaire $M = 32.55$ and $SD = 4.40$ (Table 1). It was hypothesized that the perceived stress of college students was based upon their work status and parenting responsibilities.

Three hypotheses were made to examine whether there were mean differences between work status and perceived stress. The first hypothesis focused on work status; working from home (also referred to as teleworking) versus working in a traditional office. It was hypothesized that college students working from home would have higher levels of stress than those college students working in a traditional. The analysis revealed that the null hypotheses could not be rejected. The first research question, I examined

level of stress indicated that there were no significant differences between the groups. Data were inspected for outliers and none were observed; the data were also evaluated for normality and the data reported here follow a normal distribution. An independent-samples *t*-test was conducted to compare the levels of stress for college students working from home ($N = 45$) and college students working from a traditional office or other location ($N = 39$). There was no significant difference in scores for working from home ($M = 32.38$, $SD = 4.091$) and working from traditional office or other location, ($M = 33.07$, $SD = 5.35$); $t(58) = -0.52$, $p = .452$, two-tailed). The participants identified in the group of working in the traditional office or other location is a mix match of employees who have an adjusted work schedule which allows them to work some days at home and some days at the traditional office.

The second research question, I examined the mean differences between working college students with parenting responsibilities and perceived stress. It was hypothesized that working college students with parenting responsibilities would have higher levels of stress than working college students who did not have parenting responsibilities. The analysis revealed that the null hypothesis could not be rejected. The second research question, I looked at levels of stress indicated that there were not significant differences between the groups. Data were inspected for outliers and none were observed; the data were also evaluated for normality and the data reported here follow a normal distribution. An independent-samples *t*-test was conducted to compare the levels of stress for college students with parenting responsibilities ($N = 31$) and college students with no parenting responsibilities ($N = 29$). There was no significant difference in scores for parenting

responsibilities ($M = 32.87$, $SD = 2.77$); and the scores of no parenting responsibilities ($M = 32.21$, $SD = 5.69$) with $t(58) = 0.23$, $p = 0.631$, two-tailed.

The final research question for perceived stress, I focused on whether there was an interaction effect of work status and parenting responsibilities. A 2 x 2 factorial ANOVA showed that the interaction of work status and parenting responsibilities did not influence perceived stress. Data were inspected for outliers and none were observed; the data were also evaluated for normality and the data reported here follow a normal distribution. The fifth research question, I looked at levels of stress, which indicated that there was no interaction of telework and parenting responsibilities, $F(1,59) = 0.017$, $p = .898$. The mean stress score for those who telework and have parenting responsibilities ($N = 23$) was $M = 32.74$ ($SD = 2.38$) while the mean for those who telework and have no parenting responsibilities ($N = 22$) was ($M = 32.01$, $SD = 5.37$). The mean for those working from a traditional office setting and having parenting responsibilities ($N = 22$) was 32.91 ($SD = 2.64$) while the mean for those working from a traditional office setting and having no parenting responsibilities ($N = 17$) was ($M = 32.00$, $SD = 6.63$).

Analysis of Minnesota Satisfaction Questionnaire

The MSQ is designed to measure an employee's satisfaction with their job. The MSQ is comprised of 20 questions, rated on a Likert-type scale ranging from 1 (*not satisfied*) to 5 (*extremely satisfied*); with a questionnaire $M = 53.71$ and $SD = 17.23$ (Table 1). It was hypothesis that the job satisfaction of college students was based upon their work status and parenting responsibilities.

Three hypotheses were made to determine whether there were mean differences between work status and job satisfaction. The first hypothesis, I focused on work status; teleworking versus working in a traditional office. It was hypothesized that college students who are teleworking would have higher levels of job satisfaction than those college students working in a traditional office. The analysis revealed that the null hypotheses could not be rejected. The third research question, I looked at levels of job satisfaction, which indicated that there were not significant differences between the groups. Data were inspected for outliers and none were observed; the data were also evaluated for normality and the data reported here follow a normal distribution. An independent-samples *t*-test was conducted to compare the levels of job satisfaction for college students working from home ($N = 45$) and college students working from a traditional office or other location ($N = 39$). There was no significant difference in scores for working from home ($M = 55.58$, $SD = 18.02$) and working from traditional office ($M = 48.13$, $SD = 13.68$; $t(58) = 1.46$, $p = .303$ two-tailed. As noted in the perceived stress analysis, the participants in the group of working in the traditional office or other location is a mix match of employees who have an adjusted work schedule which allows them to work some days at home and some days at the traditional office.

The second hypothesis, I examined whether there were mean differences between working college students with parenting responsibilities and job satisfaction. It was hypothesized that working college students with parenting responsibilities would have higher levels of job satisfaction than college students who are not working from home that have parenting responsibilities. The fourth research question, I was looked at levels

of job satisfaction, which indicated that there were not significant differences between the groups. Data were inspected for outliers and none were observed; the data were also evaluated for normality and the data reported here follow a normal distribution. An independent-samples t -test was conducted to compare the levels of job satisfaction for college students with parenting responsibilities ($N = 31$) and college students with no parenting responsibilities ($N = 29$). There was no significant difference in scores for parenting responsibilities ($M = 54.68$, $SD = 18.76$); and the scores of no parenting responsibilities ($M = 52.69$, $SD = 15.71$) with $t(58) = 0.43$, $p = 0.236$, two-tailed. The analysis revealed that the null hypotheses could not be rejected.

The final hypothesis for job satisfaction focused on the interaction effect of work status and parenting responsibilities. A 2x2 factorial ANOVA showed that the interaction of work status and parenting responsibilities did not influence job satisfaction. Data were inspected for outliers and none were observed; the data were also evaluated for normality and the data reported here follow a normal distribution. The last research question, I looked at levels of job satisfaction, which indicated that there was no interaction of telework and parenting responsibilities, $F(1,59) = 2.64$, $p = .110$. The mean stress score for those who telework and have parenting ($N = 23$) was ($M = 59.22$, $SD = 19.11$) while the mean for those who telework and have no parenting responsibilities ($N = 22$) was ($M = 51.77$, $SD = 16.38$) The mean for those working from traditional office and have parenting responsibilities ($N = 22$) was ($M = 52.59$, $SD = 18.24$) while the mean for those working from a traditional office setting and having no parenting responsibilities ($N = 17$) was ($M = 56.06$, $SD = 12.76$).

Summary

This study was designed to evaluate demographic variables, work status and parenting responsibilities as predictors of perceived stress and job satisfaction of college students working during the COVID-19 Pandemic. A total of 60 participants completed the survey package, which consisted of the perceived stress survey to measure respondents' thoughts in the last month on their current levels of experienced stress in the last month, Minnesota Satisfaction Questionnaire to measure employee job satisfaction, and a demographic questionnaire. The overall findings indicated that the levels of perceived stress and job satisfaction were not influenced by the work status or parenting responsibilities.

Further discussion of the findings from the research are presented in Chapter 5. The theoretical and social significance in the research findings, limitations and recommendations of the study are also be discussed.

Chapter 5: Discussions, Conclusions, and Recommendations

Introduction

The COVID-19 pandemic has affected millions of people throughout the world. This pandemic plagued the United States in 2020 and is still present at the time of this writing. In an effort to control the spread of the disease, many countries have imposed very strict rules and guidelines that must be followed by the community, businesses, employers, and families. This outbreak has resulted in many people conducting their jobs through telework modalities (Ogden, 2020). The pandemic restrictions resulted in most schools moving to online classes. Many after-school programs have been discontinued or minimally temporarily closed. Working parents during this pandemic are now required to conduct their parenting responsibilities while at home working.

The purpose of this study was to explore the relationship between working during the pandemic and parenting responsibilities with perceived stress and job satisfaction among college students during the COVID-19 pandemic. Data were collected online through Survey Monkey. There were 60 participants in this study after removing partial protocols. Participants were recruited from three social media sites (LinkedIn, Facebook, and Walden Participant Pool). One-way ANOVAs and *t*-tests were used to analyze the data, which showed that the effect of work status and parenting responsibilities during COVID-19 did not have a significant impact on stress or job satisfaction.

Interpretation of the Findings

Previous research conducted by Delaneioije et al. (2019) suggested that when working from home it is common for employees to experience numerous role transitions. The role transitions make the challenge of working at home interference more evident. As a result of COVID-19, many people were forced to work at home using online platforms. Some families found this new way of working beneficial, while it is likely that others did not. This new way of functioning may have improved some family relationships, but not all. School-age children were now at home due to the restrictions, and this created a burden and frustration for dual-income parents (Lim & Tan, 2020). However, Gajendran and Harrison (2007) suggested that telework offers an employee several controls, i.e., scheduling when to complete specific tasks, managing interruptions, and determining when to interact with organization members. Gajendran and Harrison hypothesized that when an employee has the flexibility to make decisions of where to work and some control over work-family conflicts the following can be assumed: (a) teleworking is positively related to job satisfaction, (b) teleworking is negatively associated with employee role stress, (c) teleworking is positively associated with job performance, and (d) teleworking is positively related to perceived autonomy. The findings of this study revealed there was no significant differences in stress and job satisfaction for those who teleworked and those who worked at a traditional office.

The current study reflects responses from both male and female college students who were working during the COVID-19 pandemic. An analysis of the findings revealed that there is no significant relationship between work status and perceived stress or job

satisfaction. There was no significance between parenting responsibilities and perceived stress or job satisfaction. The results further indicated there were no interactive effects between work status and parenting responsibilities on perceived stress. Also, there were no interactive effects of work status and parenting responsibilities on job satisfaction. These findings are consistent with existing research conducted by Olson and Primps (1984) and Zedeck and Mosier (1992). Both studies found the flexibility of telework and job satisfaction will differ amongst employees. For example, there was no impact on stress or job satisfaction for college students who worked 3 to 6 months at home or those that worked 6 months or more at home. In addition, some participants indicated they were on an alternate work schedule that allowed them to work some days at home and some days in the office. The results for the group of participants on the alternate work schedule had the same results, there was no impact on stress or job satisfaction.

Olson and Primps (1984) also stated that workers who are required to provide primary child-care responsibilities who also work at home encounter stress because of the simultaneous demands of conflicting work and family roles. This concept is further explored in the spillover theory by Zedeck and Mosier (1992) which stated that events in one's home life may spillover into one's work life and vice versa. The employees are constantly having to rearrange their work life and their personal life. Their struggle to balance both is often the influence of one on the other that leads to either a positive or negative spillover (Bell et al., 2012).

The findings of this study did not determine whether there was a positive or negative spillover; however, the findings do indicate that stress or job satisfaction of

college students working during the pandemic were not impacted by their work location or their parenting responsibilities. The results of this showed that even while working from home during COVID-19, college students did not differ in terms of stress or job satisfaction. The information presented can be useful to employers and college advisors, giving them a better understanding of how work environment is related to job stress and sources of job satisfaction.

Limitations of the Study

There were several limitations in this study that have affected its generalizability. I used an on-line survey to conduct this study. It was posted on three social media websites. The first limitation was data were collected only from participants associated with the selected social media sites. Perhaps posting the recruitment to various college websites would have provided more data. The second limitation was the number of respondents who did not complete their protocols. This caused a significant diminution in data, resulting in a 51% reduction in analyzable data. Another limitation was the design of the research questions. Some participants associated themselves with more than one group which made it impossible to separate the groups for the purposes of analysis.

Recommendations

This study was designed to examine working college students who both attended college and worked throughout the COVID-19 pandemic. Future researchers may want to broaden their approach and explore the experiences and perspectives of college students that are working during a pandemic. Researchers may also want to focus on

college students who were not working during the pandemic but were balancing their studies with the care of school-age children who were home due to the COVID-19 restrictions.

The current study was quantitative and used standardized test instruments, but future studies may benefit from developing an instrument that would include specific questions pertaining to working and living during a pandemic . A questionnaire specific to the pandemic could potentially allow the participants to better respond about their experiences and help them explain how they chose to manage such experiences.

Implications

The potential impact for social change is presented to organizations and college students. Organizations may benefit from a better understanding of how work environment may influence job stress and job satisfaction. In addition, businesses may want to consider how the pandemic influenced childcare. Lim and Tan (2020) argued that family systems were disrupted and changed by the COVID-19 pandemic which afforded people the flexibility to work from home. However, not being able to establish boundaries between work and home during the COVID-19 pandemic became problematic for others. Understanding the effects of how telework impacts levels of stress in college students during the COVID-19 pandemic may assist college students in making decisions about whether to work remotely.

Conclusion

The Gallup (2020) stated that 65% of the workforce in the United States is teleworking full-time. This is an increase of 11% from those which had access to

telework before COVID-19 (U.S. Bureau of Labor Statistics, 2019). The analysis of findings revealed that the stress levels and job satisfaction levels were not impacted by working from home or working in traditional office. The analysis of findings also revealed that stress levels and job satisfaction were not impacted by parenting responsibilities. The findings from this study may mean that everyone was equally stressed during the COVID-19 pandemic. However, the findings of this study may be a result of how resilient and resourceful families have become during the COVID-19 pandemic crisis.

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Appendix A: Demographic Questions

1. What is your gender?
 - Male
 - Female
 - Other
2. What is your age?
3. What is the highest degree or level of school you have completed?
 - High school
 - Associate Degree
 - Bachelor's Degree
 - Master's Degree
 - Doctorate Degree
4. Ethnicity / Race?
 - Caucasian
 - Hispanic or Latino
 - Black or African American
 - Native American or American Indian
 - Asian / Pacific Islander
 - Other
5. Do you have school-age children at home; between 5 and 12 years old that are in a virtual school?
 - Yes
 - No
6. Do you have school-age children at home between ages 13 and 18 years old that are in a virtual school?
7. How long have you been teleworking?
 - 3 to 6 months
 - More than 6 months
8. Is there a spouse or significant other in the household?
 - Yes
 - No
9. If there is a spouse or significant other in the household, what is their employment status?
 - Working
 - Laid off

Appendix B: Debriefing Statement

Thank you for taking the opportunity to complete this survey. I am aiming to gain an understand of the stress imposed on college students working from home during the COVID-19 pandemic that may have school-age children in the home, work part-time or full-time, and are cohabitating in a romantic relationship. Most people are managing the responsibilities of work and home simultaneously. Such responsibilities may affect one's level of stress, job satisfaction and work-family conflict. The purpose of this study is to address job satisfaction and perceived stress of college students who are working from home for pay during the COVID-19 pandemic that may be associated with parenting responsibilities. Below are the research questions:

1. Do working college students who are working from home have higher levels of stress (as measured by the Perceived Stress Scale, PSS) than working college students who are not working at home?
2. Do working college students with parenting responsibilities have higher levels of stress (as measured by the Perceived Stress Scale, PSS) than working college students who do not have parenting responsibilities?
3. Do working college students who are working from home have higher levels of job satisfaction (as measured by the Minnesota Satisfaction Questionnaire, MSQ) than working college students who are not working at home?
4. Do college students who are working at home have children (yes or no) have higher levels of job satisfaction from those who are not working from home?

Appendix B: Debriefing Statement (Continued)

5. Is there an interaction effect of work status and parenting responsibilities on perceived stress?
6. Is there an interaction effect of work status and parenting responsibilities on job satisfaction?

The information collected in today's study will be confidential and all data is secured by way of encryption. In addition, there is no means of your identity being disclosed.

Appendix C: Online Recruitment Statement

We are addressing whether college students who are working from home during COVID-19 are experiencing stress due to the challenges and restrictions generated from the pandemic. In the survey, you will be presented with a series of questions and asked to select the answers which are most suitable for you. Your participation is anonymous. You may withdraw from the survey at any time, and you may skip questions if needed. The survey should take between 10 to 15 minutes to complete. If you are interested in participating, please click the link provided. By clicking the link and taking the survey, I am acknowledging that I am 18 years of age or older.

If you have questions pertaining to the survey, please contact me at:

Dona G. Foreman, PhD Candidate
Walden University

Appendix D: Permission for use of Perceived Stress Scale

Permission was granted via email from the author on February 1, 2020.

Appendix E: Permission for Use of Minnesota Satisfaction Questionnaire

Vocational Psychology Research (VPR) no longer sells MSQ questionnaires. All forms are available under a Creative Commons Attribution-Noncommercial 4.0 International License. This license allows the instrument to be used for research or clinical work free of charge and without written consent, provided that you acknowledge Vocational Psychology Research, University of Minnesota, as the source of the material in your reproduced materials (printed or electronic). This license does not allow commercial use or reproduction for sale. The MSQ may be used without cost, however, for employee surveys provided that the survey is implemented within an organization and that no charges are made for its use. (Retrieved from <http://www.vpr.psych.umn.edu>)