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Servant Leadership's Influence on Job Satisfaction and Personal Well-Being of Teleworking Employees

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Abstract

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by

Michael Stuart McKenzie Cottam

MPhil, Walden University, 2025

MSc, University of Utah, 2016

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Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Management and Information Systems Management

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Abstract

Employees who suffer from telework often experience physical and psychological isolation, anxiety, loss of sleep, stressors, and burnout. The availability of digital spaces with advancements in information and communication technologies has created a trend of accepting teleworking in many job functions and industries. Managing these digital teams following the enhanced deployment of telework during the years affected by COVID-19 is a primary concern to prevent poor working conditions and deteriorating mental health for teleworking employees. The purpose of this quantitative correlational study was to examine the relationship between servant leadership and job satisfaction and personal well-being of teleworking employees in the United States. Servant leadership and job-demands resource theories grounded this study. The participants comprised 368 teleworking employees across the United States. They completed the Servant Leadership Scale short version, Copenhagen Psychosocial Questionnaire third version, and the Psychological General Well-Being Index short version. The results of the hierarchical multiple regression were statistically significant, $R^2 = .52$, $F(2, 194) = 105.47$, $p < .001$, adjusted $R^2 = .52$. There is a statistically significant relationship between servant leadership and job satisfaction and personal well-being of teleworking employees. Understanding this relationship can help virtual team leaders revise their leadership strategies and curriculum to emphasize the follower-centric aspects of servant leadership. The implications for positive social change include the potential for organizational leaders to apply servant leadership to remote-working environments, increasing teleworking employees' job satisfaction and well-being within the United States.

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Dedication

This dissertation is dedicated to my family who supported me throughout this process, and God, who has both given me the capability to complete this monumental task and the opportunity to be of assistance to others. My family has tirelessly worked to smooth my path and has acted as guiding lights during the times of strife. God has put the tools in my hand to perform this work, and I wish to dedicate this work to him so that I may have a positive impact on the lives and working conditions of people worldwide in the near and far future.

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Chapter 1: Introduction to the Study

The growth and acceptance of teleworking in businesses in the last several decades have encouraged a growing number of industries and workforces to adapt to a digital workspace (Adamovic, 2022; Beckel & Fisher, 2022; Meske & Junglas, 2021). Information and communication technology (ICT) is an area of ongoing research and development that increased the capability, innovation, and cooperation of managers, subject matter experts, team members, and customers through digital means that allow for more personalized and direct means (Camp et al., 2022; Kashive et al., 2022; Medina-Rodriguez et al., 2020; Popovici & Popovici, 2020; Stiles, 2020). As ICT has become more ubiquitous and powerful, workers in a growing number of teams, companies, and industries are being converted toward remote working structures to take advantage of cross-department or intercompany collaboration, work hour flexibility for around-the-clock or international operations, and opportunities to leverage technical expertise from around the world (Adamovic, 2022; Medina-Rodriguez et al., 2020; Popovici & Popovici, 2020).

This physical distance and separation between employees are not without downsides. Removing employees from a centralized office space in favor of working from home, offsite with the customer, or during travel has coincided with a deteriorated mental well-being within remote working employees that manifests in depression, frustration, and stress issues (Adamovic, 2022; Kashive et al., 2022; Oberländer & Bipp, 2022; Park & Cho, 2022). The social problem addressed at the time of the current study was how the increased use of ICT to collaborate and interact sacrifices significant aspects of interpersonal relationships such as body language, tone, and physical presence that leads to isolating mentalities for remote workers that must be managed by a leadership strategy (see Assar & Hafsi, 2019; Berman et al., 2020; Hale et al, 2017; Orsini & Rodriguez, 2020).

Background

Since its original ideation by Greenleaf (1970), servant leadership has been developed and tested in the contexts of generational preferences for leadership styles, overcoming organizational challenges through interpersonal and within team communication and support, and other-focused leadership (Bertsch et al., 2022; Bilal et al., 2021; Eva et al., 2019). With the increasing importance, availability, and prevalence of digital spaces due to advancements in ICT as well as a growing acceptance of teleworking, the management of digital teams is a relatively unexplored area of research. With the advent of COVID-19, which encouraged many companies to reorganize their workforces and adopt more teleworking components into their businesses, more managers who were once overseeing teams in-person were being made responsible for digital teams (Chamakiotis et al., 2021; Contreras et al., 2020). However, there are differences between leading in-person teams versus digital teams due to several factors including methods of interaction, the mental and physical well-being of the individual, and tools to perform their work (Camp et al., 2022; Chamakiotis et al., 2021).

The swift growth of telework combined with the social concerns derived from recent global events such as the COVID-19 pandemic and the general desire for a more global cooperative workspace has created a demand for leadership that is able to manage remote workers while guiding and instructing team members without sacrificing job satisfaction and supporting employee personal well-being (Erickson, 2021; Heyler & Martin, 2018; Popovici & Popovici, 2020). Leadership in this growing space needs to adapt to the desires and demands of multiple generations caused by widespread government or organizational mandates requiring social isolation during the COVID-19 pandemic (Kanthawongs, 2022; Meske & Junglas, 2021; Salvosa & Hechanova, 2020). Younger generations (who may be more comfortable with technology and more responsive to leaders who acknowledge a more individualistic view for teams) and older generations (who are likely to be less capable with technology and prefer a leader who manages the well-being of the team) have been shifted into telework with leaders who will need to adapt to the technology necessary to interact with, monitor, and manage a digital team as well as the leadership style or styles that are positively received by the team members of all generations (Kanthawongs, 2022; Meske & Junglas, 2021; Salvosa & Hechanova, 2020).

Servant leadership has not been researched under the auspices of teleworking relationships to improve the task effectiveness of employees, reduce the psychological stressors experienced by employees, and minimize the sensation of isolation that remote workers can experience (Adamovic, 2022; Camp et al., 2022; Eva et al., 2021). This is not to say that telework has not been studied. Telework has been a focus of study, but little has been done to target the use of different leadership styles in the remote working context, especially servant leadership. Servant leadership in other contexts and in-person work scenarios has been shown to increase job satisfaction and the personal well-being of employees by creating a community of collaboration and open communication, managing the needs and demands of individuals, and providing for the personal and professional development of team members in office environments though information is lacking in telework scenarios (Berman et al., 2020; Camp et al., 2022; Eva et al., 2019; Sfetcu, 2021; Siangchokyoo et al., 2020).

If the current trend of the last several decades observed for telework continues into the near future, an increasing number of workers in the United States and abroad will be teleworking (Hacker et al., 2019; Medina-Rodriguez et al., 2020). Digital competency in team members and leadership will, by necessity, need to become a more common component of the workspace to manage the developing ICT tools being made available and inherent in developing industries (Camp et al., 2022). Although there is unlikely to be a one-size-fits-all answer for digital leadership due to differences in generational preferences, cultural ideals and perceptions, and the demands of each individual team and industry, digital leaders need to develop autonomy, competency, and organizational commitment in their team members (Adamovic et al., 2021; Bertsch et al., 2022; Gabelica & Popov, 2020). There is evidence that servant leadership, through items such as the development of community, communication, and a culture of service, can be useful for leading a digital team through developing autonomy in individuals, supporting competency, and encouraging organizational commitment (Camp et al., 2022; Eva et al., 2021; Sfetcu, 2021; Siangchokyoo et al, 2020). As it becomes more possible and more likely for workers to become physically separated from each other due to the growth and deployment of telework, simultaneous deployment of a leadership style that focuses on the development of interconnected community to share knowledge and support between team members becomes important to drive positive outcomes from the new working scenario (Beckel & Fisher, 2022; Han et al., 2019; Park & Cho, 2022; Siangchokyoo et al, 2020).

Problem Statement

The adoption of teleworking into a growing number of businesses and teams within businesses offers an opportunity for greater collaboration and communication across the world but also presents new challenges for affected employees in the form of physical isolation (Adamovic, 2022; Camp et al., 2022; Kashive et al., 2022). The leadership style of management has been shown to have a significant impact on the job satisfaction and mental well-being of teleworkers, especially those who have been forced into teleworking roles due to the COVID-19 pandemic (Carnevale & Halak, 2020; A. Lee et al., 2020). Employees who suffer from telework often experience physical and psychological isolation, anxiety, loss of sleep, stressors, and burnout (Beckel & Fisher, 2022; Feitosa & Salas, 2020; Teimouri et al., 2018). A leadership style such as servant leadership, which creates a community of relationships within the workspace, an open and honest communication network, and a sense of service among team members, encourages employees to believe their work has value, the organization is committed to their goals, and the employee has a say in the decision-making process for their organization (Ali et al., 2023; Eva et al., 2021; Tuzovic & Kabadayi, 2021; Sfetcu, 2021; Siangchokyoo et al, 2020).

The social problem that shaped the current study was the applicability of servant leadership to improve the job satisfaction and personal well-being of teleworking teams. As more and more employees are added to virtual teams, the sacrifice of aspects of in-person relationships within the workplace, including body language, tone, and physical presence, leads to a loss of job satisfaction and damages mental and physical states for these employees (Assar & Hafsi, 2019; Berman et al., 2020; Hale et al, 2017; Orsini & Rodriguez, 2020). Counteracting these negative effects of telework through the application of a leadership style such as servant leadership can offer a fulfilling experience for the individual within their role and motivate higher job performance represented by job satisfaction (Ali et al., 2023; Ćulibrk et al., 2018; Siengthai & Pila-Ngarm, 2016).

Additionally, the quality of life for the teleworking team member in the form of environmental, organizational, and psychosocial factors should be a central focus for organizations that wish to improve in-role performance, reduce turnover, and develop capable employees (Contreras et al., 2020; Dewi & Sjabadhyni, 2021; Ferrara et al., 2022). Servant leadership is a well understood and tested theory that is undergoing further development, especially in terms of quantifying its effects in different scenarios, and has been positively linked to improving job satisfaction and personal well-being in team members who experience it, though the theory has not been adequately evaluated with respect to telework (Adamovic, 2022; Camp et al., 2022; Eva et al., 2021; Heyler & Martin, 2018; Popovici & Popovici, 2020). The specific research problem of this study is that it is unknown whether servant leadership's aspects of community, communication, and service influence job satisfaction and the personal wellbeing of teleworking employees, this suggests adopting a quantitative, correlational research design.

Purpose of the Study

The purpose of this quantitative correlational study was to examine the relationship between servant leadership and job satisfaction and personal well-being of teleworking employees (see Adamovic, 2022; Camp et al., 2022; Eva et al., 2021; Sfetcu, 2021; Siangchokyoo et al, 2020). The effects of servant leadership and its various aspects as used by leaders of teleworking teams include creating a web of relationships that promote task effectiveness, reduce stressors to employees, and create a sense of team identity among physically separated team members (Qiu & Dooley, 2019; Qiu & Zhang, 2022; Sfetcu, 2021; Siangchokyoo et al., 2020). Especially concerning digital teams, there is a positive trend linking occupational stressors, workload, and declining mental health in workers (Soni & Agarwal, 2018). In the current study, servant leadership was the independent variable measured through survey responses and evaluated against the dependent variables of job satisfaction and personal well-being. Job satisfaction and personal well-being were measured through the respondent’s perceived level of impact and empowerment in their job, perceived sense of community and communication, and workload stressors through multiple regression analysis.

Research Questions and Hypotheses

The research problem that was addressed in this study was that it was not known whether servant leadership influences job satisfaction and the personal well-being of teleworking employees.

RQ1: What is the relationship between servant leadership and job satisfaction of teleworking employees?

H_o1: There is no correlation between servant leadership and job satisfaction in teleworking employees.

H_a1: There is a correlation between servant leadership and job satisfaction in teleworking employees.

RQ2: What is the relationship between servant leadership and personal well-being in teleworking employees?

H_o2: There is no correlation between servant leadership and personal well-being in teleworking employees.

H_a2: There is a correlation between servant leadership and personal well-being in teleworking employees.

Theoretical Framework for the Study

The theories surrounding servant leadership and its usefulness in the workplace that grounded this study included the scholarly work of Greenleaf (1970), Lan et al. (2021), Liden et al. (2014), Siangchokyoo (2020), and Sfectu (2021). Servant leadership within the digital leadership context provided a methodology to understand how to motivate followers by creating a focus from the leadership side to care for and satisfy follower needs, leading to greater innovative behaviors and creating a supportive and performative environment (Greenleaf, 1970; Lan et al., 2021; Liden et al., 2014; Siangchokyoo, 2020; Sfectu, 2021). In the area of telework, a lack of connection between individual team members and between leadership and their team can create an environment that increases stress, fails to develop a sense of team identity or belonging, and reduces effective communication, which may result in a lessening in job satisfaction in remote workers. However, organizations that include servant leadership aspects should experience a reduction in harmful stressors to their team members, individuals who have a natural desire to interact within and outside the team due to shared values and experiences, and individuals who communicate more effectively and more commonly to complete tasks. Servant leadership is composed of an other-oriented approach to leading teams and empowering people by prioritizing the individual needs, interests, capabilities, and competencies of the team members through integrity of the leaders, self-sacrifice, building community, empowering people, emotional healing, and visioning (Eva et al., 2019; Qiu & Zhang, 2022).

Within the digital context of telework, where physical separation of the team can very cause team members to lose a sense of community, become isolated, and suffer mental anguish, servant leadership may be applied by managers to reduce workplace stressors for employees, create a sense of team identity, and ensure that communication between team members remains strong and open so that issues can be communicated and solved in a reasonable manner (Medina-Rodriguez et al., 2020; Oberländer & Bipp, 2022; Qiu & Zhang, 2022; Sfectu, 2021). Current leaders put in charge of telework teams, as well as the team members who are placed on telework teams, may not have the level of competency in the necessary levels of communication and the knowledge to operate the ICT tools available to them due to the increasing number of workers adjusted into this new style of work, which can lead to breakdowns in understanding between leadership and follower, creating a downward spiral leading to a loss of mental well-being and loss of employees (Adamovic, 2022; Medina-Rodriguez, 2020; Camp et al., 2022). Investigating the methods leadership has used in recent years, especially with the sudden shift toward telework due to the COVID-19 pandemic creating a stronger case for decentralized workplaces, to create a foundation of successful or unsuccessful means of open and honest communication between manager and employee (Adamovic, 2022; Berman et al., 2020; Farahdiba et al., 2022; Innes-Taylor et al., 2019). Servant leadership can, as a platform for digital leadership, focus on developing a web of relationships between team members based on developing community, vision, empowerment, integrity, communication, accountability, and service that can be measured against markers of job satisfaction among physically separated team members (Qiu & Dooley, 2019; Qiu & Zhang, 2022; Siangchokyoo et al., 2020; Sfectu, 2021).

The team-focused approach to lead and empower people by prioritizing the various needs and requirements of the individual members through the various aspects of servant leadership that has been demonstrated by other studies to improve team innovation, task effectiveness, and the development of a strong team identity through community can be translated into a multidimensional questionnaire survey to compare the strength of servant leadership in the telework context (Siangchokyoo et al., 2020; Sfetcu, 2021). Determining a quantifiable link (either positive or negative) between servant leadership and the demands of digital leadership could promote healthier working relationships in current teleworking teams and into the future as more teams are moved to digital working relationships (Adamovic, 2022; Kashive et al., 2022; Popovici & Popovici, 2020).

Nature of the Study

To address the research questions in this quantitative study, I used a correlational design to measure the relationship between servant leadership and the job satisfaction and personal well-being of remote workers (see Adamovic, 2022; Kashive et al., 2022; Medina-Rodriguez et al., 2020; Popovici & Popovici, 2020). Using a survey offered to respondents that addressed telework wholly or partly in a hybridized manner, I collected primary data on telework, communication, and aspects of servant leadership to evaluate the relationship (Siangchokyoo et al., 2020; Sfetcu, 2021). The abilities of managers to lead communication, training, and teamwork development, even when physically separated from their team through the use of telework organizational strategies, may be examined through the use of a survey focusing on the aspects of servant leadership through the lens of a digital working relationship between team members (Adamovic, 2022; Kashive et al., 2022; Medina-Rodriguez et al., 2020; Popovici & Popovici, 2020; Siangchokyoo et al., 2020; Sfetcu, 2021). Dependent variables (job satisfaction and personal well-being) were correlated against the independent variables of components of servant leadership. The participants were drawn from a convenience sample of wholly or partly hybridized teleworkers available through untargeted outreach with survey platforms and through testing groups.

Definitions

This study included the following definitions:

Job satisfaction: The sense of fulfillment an individual experiences within their team or organization while performing their work tasks that can be a strong motivator for job performance, intention to remain within the organization, and personal enjoyment (Ali et al., 2023; Ćulibrk et al., 2018; Siengthai & Pila-Ngarm, 2016). Because job satisfaction is an inherently personal experience, job satisfaction can shift based on the individual perceptions, cultural expectations, and even the experiences that a person may have inside and outside of the organization (Adamovic, 2022; Bertsch et al., 2022; J. Cheng et al., 2022; Gabelica & Popov, 2020; Salvosa & Hechanova, 2020).

Personal well-being: The quality of life for an individual in relation to their physical health and psychological health (Beckel & Fisher, 2022; de Vincenzi et al., 2022). An individual's well-being is a personal experience and perception that includes physical aspects, such as sleep quality, pain or the lack of it, or stress and its management, and mental components such as anxiety or depression and its management that may lead to or away from an individual's tendency toward burnout or leaving an organization (Beckel & Fisher, 2022; Feitosa & Salas, 2020; Teimouri et al., 2018).

Servant leadership: A leadership style developed by Greenleaf in 1970 that is a follower-centric method of approaching management. Servant leadership is a leadership style characterized by a leader focusing on a deep commitment to follower growth, empowerment, and the well-being of their team (Greenleaf, 1970; A. Lee et al., 2020). This approach demands that the leader has empathy for their team; understands their individual wants, needs, and goals; and is altruistic in their actions to others and the larger community to be a desirable role model for the members of the team to perpetuate servant leadership outside of the team (Greenleaf, 1977, A> Lee et al., 2020; Sfetcu, 2021; Spears, 2021). Servant leadership is characterized by communication, empathy, healing, awareness, influence, conceptualization, foresight, stewardship, commitment to the growth of others, and community development through relationships (Bilal et al., 2021).

Telework: The working arrangement or scenario characterized by employees who work in a setting other than an office such as the employee's home, an on-site location (e.g., a customer's place of business or facility), while traveling, or from a place outside of the building that contains the remainder of the working team (Charalampous et al., 2019; Ferrara et al., 2022). This arrangement requires a method of communication and collaboration, often through digital means such as communication programs, document sharing or shared editing programs, and reporting structures that present unique challenges to both leadership and employees working in the same (often virtual) team (Adamovic et al., 2021; Ali et al., 2023; Buonomo et al., 2023; Wang et al., 2021).

Assumptions

This study contained three assumptions. I assumed that the participants who were able to voluntarily complete the survey were able to do so without generating bias. A second assumption of this study was that participants would engage fully with the study, answering all questions as accurately as possible. The third assumption was that participants had experienced servant leadership within their roles at a significant enough level to measure the effect on job satisfaction and personal well-being.

Scope and Delimitations

This study was based on a quantitative nonexperimental correlational design that focused on the relationship between servant leadership, job satisfaction, and personal well-being of teleworking employees. The study aimed to measure the extent that leaders of virtual teams currently exhibit aspects of servant leadership, especially in the forms of the development community, encouraging communication, and creating a sense of service within the team to promote task effectiveness, reduce stressors experienced by the employees, and create a sense of team identity among the dispersed team members. The study focused on a population of teleworking employees, either full-time or in a hybrid arrangement, in various industries without restriction to encourage generalizability of results in digital teams. A delimitation of the study included using a follower-targeted questionnaire to reduce risk of participant bias of self-rating leadership styles for teleworkers who may also be leaders within their digital teams.

The purpose of this study was to examine the effects of servant leadership on digital teams and its relationship to job satisfaction and personal well-being of the affected teleworkers within those teams. Although the data were gathered from various companies, industries, countries, and cultures, it is unlikely that the results can be generalized throughout all instances of telework without greater study. Additionally, this study had the delimitation of convenience sampling strategies, which can limit generalizability.

Limitations

This study had three limitations. First, a possible limitation in common method bias existed due to the collection of data on dependent and independent variables from the same source (the survey offered). Second, the use of convenience sampling to create a significant population of teleworking participants limited the generalizability of the results based on estimates of the target population. Third, because the participants reported their perceptions of the variables addressed in the survey, there was a possibility that even with identities being anonymized an individual respondent may have provided false or misleading information due to shame, guilt, lack of knowledge, or other factors (see Butler et al., 2022).

Significance of the Study

The increasing capabilities of ICT and the growing use of telework is creating a growing demand to understand the benefits and drawbacks of remote working organizational strategies so that employees and management have the greatest possibility of success (Medina-Rodriguez et al., 2020; Popovici & Popovici, 2020; Saeidi et al., 2021). The current study examined the influence of servant leadership on the job satisfaction and personal well-being of teleworking employees through the creation of communities of collaboration, open communication, and managing the needs and demands of individuals within teleworking teams (see Adamovic, 2022; Camp et al., 2022; Eva et al., 2021; Siangchokyoo et al., 2020; Sfetcu, 2021). Servant leadership had been widely studied on various teams within numerous industries but had not been examined in the context of teleworking teams and virtual leadership, especially in terms of improving employee task effectiveness, reducing psychological stressors on employees, and reducing experienced isolation that can have significant and negative effects on employee job satisfaction and personal well-being (Adamovic, 2022; Camp et al., 2022; Eva et al., 2021). In this way, the theory of servant leadership and the literature for virtual leadership were advanced.

The trend seen in multiple industries to adopt and expand telework is creating a scenario in which a growing number of employees and experts are collaborating instantaneously across the world while being physically separate from their collaborators (Adamovic, 2022; Camp et al., 2022; Kashive et al., 2022). Millennials, who have been observed to prefer more collaborative and cooperative leadership styles and are entering the digital workplace, must be addressed with a leadership style, such as servant leadership, that will encourage their highest levels of performance and engage them even when there is geographic distance between them (Adamovic, 2022; Camp et al., 2022; Eva et al., 2021). The current study sought to create positive social change through examining the effectiveness of servant leadership for virtual teams and offering useful and applicable findings for virtual teams. Servant leadership can improve relationships between leaders and employees by creating a community, encouraging open communication, and creating a culture of service to improve task effectiveness, reduce sources of stress, and encourage a sense of team identity (Sfetcu, 2021; Siangchokyoo et al., 2020).

Significance to Theory

Servant leadership, as originally described by Greenleaf (1970), has grown and developed over several decades and is now being investigated and quantified in different situations, industries, and cultures (Eva et al., 2019; Lan et al., 2021; Nauman et al., 2022). The increasing number of teleworking individuals across the world in numerous cultures, industries, and roles requires a change in the approach to leadership due to the changes in power and distance due to the physical separation of leaders and teams that organizational leadership must address as teams become more and more virtual (Adamovic, 2022; Cheng et al., 2022; Kanthawongs, 2022). The application of servant leadership to virtual teams was not a well-studied topic, though research indicated that leaders who encourage communication, strong relationships, and methods to manage the unique stressors to virtual work can drive improved or higher employee job satisfaction and personal well-being (Ali et al., 2023; Kanthawongs, 2022; Kashive et al., 2022).

Significance to Practice

Virtual teams are impacted by the effectiveness and style of the leader who manages the team (Kashive et al., 2022). As these teams grow in population and number and capabilities grow to allow more individual members of an industry to collaborate and more industries to adopt virtual teams to handle growing responsibilities within their organizations, leadership must adopt new strategies to cooperate with and manage these virtual teams (Camp et al., 2022; Oberländer & Bipp, 2022; Qiu & Dooley, 2019). Identifying effective leadership styles, appropriate to the industry, nature of work, and the individual team members is critical for organizational success with virtual teams that have different requirements, strengths, and weaknesses (Eva et al., 2021; Gabelica & Popov, 2020; Qiu & Dooley, 2018). Servant leadership offers an opportunity for leaders of virtual teams to encourage fluid communication between team members and collaborators, create a community forged of strong interpersonal relationships connecting the individuals to each other and the organization, and manage the various stressors that individuals may experience as a part of a virtual team (Ali et al., 2023; Kanthawongs, 2022; Kashive et al., 2022).

Significance to Social Change

At the organizational level, it is important to have employees and teams of employees who are dedicated and engaged with the work they perform to be successful in their industry through completed projects and delivered goals (Han et al., 2019; Nauman et al., 2022). To reach these goals, however, the teams that make up the organization and the individual employees who make up the teams (much like the organs that make up a body and the cells that make up the organs) must be engaged in the work they do, be motivated, and be comfortable (Bakker et al., 2023; Medina-Rodriguez et al., 2020). In virtual teams that experience a unique aspect of physical isolation from their organization and team members who require a unique approach from their leadership to be engaged with their work and their organization, team members must be motivated to focus on their tasks and avoid the stressors or demands on their time, attention, and health that can limit their ability to perform their roles (Beckel & Fisher, 2022; Carnevale & Halak, 2020; Feitosa & Salas, 2020).

Servant leadership, with its emphasis on communication, community, and service between not only the immediate team but with all interactions, has a possibility of generating positive social change through teleworking individuals and teams (Qiu & Zhang, 2022). Virtual leaders who are able to implement servant leadership as a means of managing the demands and needs of individual team members, creating a follower-centric culture, and creating a sense of citizenship with their organization within their virtual teams can improve the performance, job satisfaction, and personal well-being of their team members in a manner that will affect the organization as a whole (Adamovic, 2022; Camp et al., 2022; Eva et al., 2021; Kashive et al., 2022; Lan et al., 2021). Similar to improving the health of cells to improve the health of the whole body, the individual team members will be influenced by servant leadership to create a stronger organization in their industry (Bilal et al., 2021; Nauman et al., 2022; Qiu & Zhang, 2022).

Summary

Recent developments in ICT have allowed for a significant growth in the communication and collaboration capabilities of many industries and workforces by adopting digital technologies and teleworking arrangements for their employees and teams. However, although these changes offer unique opportunities for improvements in the flexibility and performance of many digital teams, there are also unique challenges in how to lead and manage teleworking teams as well as the stressors experienced by those employees. Chapter 1 of this study offered an introduction of the study, background, problem statement, and purpose of the study. These sections described the need for the study that is more fully addressed in Chapter 2, including the social issue of how the growing acceptance and use of ICT for digital teams may sacrifice critical components of human-to-human interaction between employees that impacts the job satisfaction and personal well-being of teleworking employees. This quantitative nonexperimental correlational study examined the relationship between servant leadership and the job satisfaction and personal well-being of teleworking employees. The research questions, theoretical foundation, and nature of the study clarified the boundaries that were followed to investigate the use of servant leadership in digital working teams. The correlational design was useful in examining the relationship between the components of servant leadership, job satisfaction, and personal well-being of teleworking employees.

Chapter 1 provided the foundation for the literature review and deeper investigation into the history of the teleworking teams studied. The literature review in Chapter 2 further supports the need for the study by providing additional information on existing literature relevant to this study. I describe the search strategy for the literature, explain the theoretical framework used to guide the study, and review the literature relevant to the study.

Chapter 2: Literature Review

The increasing adoption of telework in a growing number of organizations has created a scenario where a greater number of team members and experts have the capability to collaborate on multiple projects from anywhere in the world at any time, though this has created a system of physically separated team members (Adamovic, 2022; Camp et al., 2022; Kashive et al., 2022). The increasing use of ICT to collaborate and interact that sacrifices body language, tone, and physical presence for greater connectivity, flexibility, and capability may lead to isolation, stress, and harm to those engaged in teleworking (Assar & Hafsi, 2019; Berman et al., 2020; Hale et al, 2017; Orsini & Rodriguez, 2020). This quantitative study will examine the relationship of servant leadership on the job satisfaction and personal well-being of teleworking employees (Adamovic, 2022; Camp et al., 2022; Eva et al., 2021; Siangchokyoo et al, 2020; Sfetcu, 2021). The leader of a digital team has the capability to directly influence the job satisfaction and personal well-being of teleworkers through the development of trust within the team and supporting the needs of team members (Han et al., 2019; Inceoglu et al., 2018). Leaders must adapt to these changing team dynamics to properly serve their teams as more and more workers become digital and have greater capability and connectivity (Contreras et al., 2020; Laura et al., 2019; Vidal et al., 2017). Servant leadership, with its aspects, has not been appropriately studied (especially in the context of digital teams) to promote create a web of relationships that promote task effectiveness, reduce stressors to employees, and create a sense of team identity among physically separated team members (Qiu & Dooley, 2019; Qiu & Zhang, 2022; Siangchokyoo et al., 2020; Sfectu, 2021).

Literature Search Strategy

I used multidisciplinary databases and resources to gather pervious and current information on teleworking and servant leadership. The vast majority of resources used for this literature review are peer-reviewed journals and excerpts from textbooks both current and seminal. To locate these resources, nine search engines and databases were primarily used including EBSCO, Elsevier, Emerald Insight, IEEE Xplore Digital Library, ProQuest Central, SAGE Journals, and ScholarWorks. These searches offered a significant number of studies related to Servant Leadership, Telework, Job Satisfaction ranking systems, and Personal Well-being ranking systems. The search terms used for this literature review included Servant Leadership, Telework, Job Satisfaction, Virtual Teams, E-Leadership, Employee Well-being, Team Effectiveness, Team Performance, and Remote Work OR Work from Home. These search terms offered a wide range of peer-reviewed studies and articles that were parsed through to arrive at a focused body of work.

The literature review includes both quantitative and qualitative studies performed primarily from 2019 to the present day with additional resources drawn from the previous two and a half decades of research into teleworking and servant leadership as well as selected seminal works. According to a systematic review of servant leadership performed by Eva et al. (2019) performed for articles published between 1998 to 2018, 270 articles were created, representing a strong research focus on servant leadership, though little focused specifically on digital teams. There has been a shift in servant leadership research, according to Eva et al. (2008), from a qualitative position describing and expanding the theory first produced by Greenleaf in 1970 with “The Servant as Leader” and towards a more quantitative measurement of the servant leadership in practice in various applications.

This body of work performed within the previous two to three decades offers a growing body of research geared towards individual-focused leadership. Tests developed since 2008 by researchers following Greenleaf’s studies such as Barbuto, Dooley, Liden, Henderson, Wayne, Wheeler, Qiu, and Zhao developed methodologies to quantify the aspects and effects of servant leadership that are still in use today, though often with modification (Barbuto & Wheeler, 2006; Liden et al., 2008; Qiu & Dooley, 2019; Qiu & Zhang, 2022). Recent studies, following 2008, have focused more on understanding, measuring, and drawing connections between management and teams in areas of workplace stressors, team effectiveness and performance, and the perpetuation of behaviors stemming from role models in leadership for their teams, specifically for servant behaviors, for modern teams (Bilal et al., 2021; Nauman et al., 2022; Wu et al., 2019; Wu et al., 2021).

Much of the work performed on telework has been affected by the recent growth in demand for digital teams and digitization of the workplace due to the twin effects of technological augmentations in ICT but also to COVID-19 driving many companies and nations to shut down office spaces and customer-facing actions to limit person-to-person interactions (Bartsch et al., 2021; Brynjolfsson et al., 2020). Different leadership styles, in the context of digital teams and the adaptations that must be made by management teams for these changes, are being investigated but often focused on the effects of remote work on employees and the management strategies required for the new working strategy (Adamovic et al., 2021; Ali et al., 2023; Bartsch et al., 2021; Vidal et al., 2017). Connecting aspects of digital leadership being studied for growing teleworking teams with servant leadership is possible due to the studies investigating the benefits and detriments that virtual team members are experiencing, what aspects of various leadership styles show benefit or detriment, and employee performance (Buchanan et al., 2021, Buonomo et al., 2023; de Vincenzi et al., 2022). Correlating studies performed directly on servant leadership in various teams and scenarios with the findings of studies performed on teleworking teams and growing digital management strategy allows for novel information to be derived and further pathways for research to be found.

Theoretical Foundation

The theoretical foundation for this study involves the theory of servant leadership as developed by Greenleaf (1970) and the job-demands resource theory which is a unifying job design theory based on the job stress and motivational perspective work of various researchers (Bakker & Demerouti, 2017; Bakker et al. 2023; Greenleaf, 1970). These theories contribute to the core aspects of this study through research on servant leadership as a follower-centered style of leadership and the influence of job demands and resources on the well-being and job satisfaction of workers (Bakker et al., 2023; Greenleaf, 1970). These theories offer a foundation that allow an investigation into the research questions by testing (a) the aspects of servant leadership's impact on teleworker's job satisfaction and (b) the aspects of servant leadership's impact on teleworker's personal well-being.

Servant leadership

The theory of servant leadership, developed by Greenleaf (1970) and further explored over the previous several decades by other scholars such as Barbuto (2006), Chiniara and Bernstein (2016), Liden (2014), and Spears (1996). Servant leadership, as described by Greenleaf in his 1970 work, as a style in which "the servant-leader is servant first. It begins with the natural feeling that one wants to serve, to serve first. Then conscious choice brings on to aspire to lead" (Greenleaf, 1970, p. 13). This follower-focused leadership style seeks to place the manager, supervisor, or leader into a position where the needs of their followers and team members are a top priority (Sfectu, 2021). There have been several components to servant leadership, increasing or modifying as the theory has been refined over its lifetime, including the development of leader-follower relationships through impactful communication, empowerment of followers, the ethical behavior of the leader, empathy from the leader to the needs and experiences of the followers, compassion from the leader to understand their followers, and community management to balance and direct the relationships created (Sfectu, 2021). Additional factors from other researchers have been included in other literature over the years such as emotional healing, altruism on the part of the leader, conceptualization of skills or the goals of the organization or team to focus the efforts of the team, and the leader adopting a position of stewardship over the team's actions (Chiniara & Bernstein, 2016; Liden et al., 2014). These factors are still under investigation and evaluation as the theory only transferred from a qualitative theory development stage into quantitative investigations circa 2008 and is still being investigated in various contexts, industries, and in comparison, to different forms of leadership (Eva et al, 2019).

By focusing on the development, empowerment, and management of followers needs, both in personal and professional areas, to improve the in-role performance, organizational commitment, self-efficacy, and service behaviors the servant leader expects to create more servant leaders of their followers (Qiu & Dooley, 2019; Sfectu, 2021). Servant leadership has been suggested to make healthier, stronger, and more autonomous teams filled with like-minded individuals that are more likely to continue the serving behaviors that they have been exposed to, thereby making more servant leaders that propagate the system (Bilal et al., 2021; Eva et al., 2019; Qiu & Dooley, 2019).

As teleworking groups develop and grow with the increasing prevalence and usefulness of ICT, more team members are being physically separated from each other and their leadership (Assar & Hafsi, 2019; Camp et al., 2022). Teleworkers experience different benefits and detriments than their in-office coworkers, though the specifics of these differences are still under investigation (Buonomo et al., 2023; Charalampous et al., 2019). Especially because of COVID-19 and the rapid increase of teleworkers that have forced businesses and even governments to encourage or force workers into teleworking scenarios that they may or may not have been well suited for, the benefits and detriments experienced by teleworking individuals are still being evaluated and quantified (Buonomo et al., 2023; Carnevale & Hatak, 2020; Chamakiotis, et al., 2021). There is an observed trend, however, of teleworkers experiencing deteriorated mental well-being and comfort within employees, leading to depression, frustration, stress, and isolation issues (Adamovic, 2022; Kashive et al., 2022; Oberländer & Bipp, 2022; Park & Cho, 2022).

There is also a growing body of research demonstrating that leaders have a significant impact on how their followers and the organization interact with ICT at the individual level as well as the well-being of their followers (Avolio et al., 2000; Dewi & Sjabadhyni, 2021). The development of stronger relationships, communication structures, competency with the tools and requirements of their jobs does seem to have a positive relationship with job satisfaction indicators, especially when it directly targets issues of isolation between workers, assuaging fears of being overlooked for opportunities at work, and the individual belief that the teleworker is making an impact with their contributions (Adamovic et al., 2021; Ali et al., 2023). Recent studies concerning the appropriate leadership styles for teleworkers have revealed a trend linking leadership styles that focus on coaching followers towards self-efficacy, high levels of communication, and managing the needs of the team member can combat a deteriorating mental well-being as well as improve the performance of team members (Adamovic et al., 2021; Ali et al., 2023; de Vincenzi et al., 2022). As servant leadership is a follower-focused form of leadership that focuses heavily the management of interpersonal relationships within the team and specifically between the follower and the leader, on impactful communication, and empowering followers by addressing their specific personal and professional needs, there is a possible link between the application of servant leadership in teleworking work scenarios and the job satisfaction and personal well-being of teleworking employees (Sfectu, 2021).

Job Demands-Resources Theory

The job-demands resource theory, or JD-R, is a synthesis of multiple job design theories focused on job stress and motivational perspectives that seeks to explain how the requirements of a position and the features that an employee can leverage to meet those requirements impact the job performance and well-being of employees in their role (Bakker et al., 2023; Bakker & Demerouti, 2017). Including Herzber's (1966) two-factor theory, Hackman & Oldham's (1976) job characteristics theory, Karasek's (1979) job demands-control model, Siegrist's (1996) effort-reward imbalance model, Hobfoll et al.'s (2018) conservation of resources theory, and studies into burnout and work engagement. The concepts of "job demands" (or physical, cognitive, and / or emotional effort components of a role that require a certain cost on the employee including stress from within or outside the organization, workload, well-being, job insecurity, and even concepts of role ambiguity) must be balanced against concepts of "job resources" (or aspects of a position that assist in achieving goals and stimulate personal growth such as social support from the team and/or leadership and/or the organization, helpful feedback that drives development, and personal aspects such as self-esteem) for employees to avoid burnout, attain and keep a positive personal well-being, and be engaged in their organization (Aronsson et al., 2017; Bakker & Demerouti, 2017; Bakker et al., 2023; Lee & Ashforth, 1996; Lesener et al., 2020).

The first proposition is the definition of job demands and job resources discussed above, but Bakker et al (2023) also outlines eight other components of the job-demands resource theory. Second, a health impairment process created by the strength and repetitiveness of job demands can deplete employee physical, emotional, and cognitive resources which can result in health issues. However, there is also a simultaneous motivational process supported by job resources satisfying psychological needs that engenders creativity and increased performance (Bakker et al., 2023; Bakker & Xanthopoulou, 2013; Demerouti et al., 2001; Li et al., 2022). Third, job resources can reduce the effect that job demands have on creating strain for the employee while those job demands simultaneously augment the engagement and motivation created by job resources (Bakker et al., 2005; Bakker et al., 2023). Fourth, personal resources can act as positive self-evaluations that reflect the individual's ability to control and manipulate their environment in a way that is helpful to the individual, which can increase the individual's access to and reach with job resources (Bakker et al., 2023; Hobfoll et al., 2003). Fifth, when an individual believes that they have a measure of control over their work environment, they are more capable at managing and balancing work demands (Bakker & Sanz-Vergel, 2013; Bakker et al., 2023). Sixth, job crafting, or the ability for an employee to manipulate their job demands and job resources to align their role with their abilities and preferences, can amplify job and personal resources, leading to work engagement and performance improvements in role (Bakker et al., 2023; Tims & Bakker, 2010; Wrzesniewski & Dutton, 2001). Seventh, employees that are engaged are often motivated to remain engaged with their role and can proactively optimize their position, leading to increased resources and optimized demands (Bakker et al., 2023). Employees that have dysfunctional behaviors such as poor communication skills, are untrustworthy, or are prone to conflict with their team or the organization are likely to create self-undermining behaviors that will increase job demands and are likely to result in poor performance and increased strain on personal well-being (Bakker & De Vries, 2021; Bakker et al., 2023). And lastly, increased job strain leads to a cycle of self-undermining and increasing job demands can lead to in-role mistakes, psychological and physiological tension, and loss of personal well-being for the employee (Bakker et al., 2023).

These components offer a foundation for the job-demands resources theory that can be useful for studying job performance, well-being, and the effect leadership may have on the resources and demands an employee experience within their role (Bakker et al., 2023). In a recent study by Oberländer & Bipp (2021), the researchers sought to evaluate the digital communication methods and strengths of German teleworkers and how digital communication can create a virtual community that offers social support that can be relied on during a time of crisis (such as COVID-19). The capability of virtual teams to have a large reach to communicate, collaborate, and interact does require that the members of the virtual team use this capability and take advantage of this reach to fulfill not only their requirements in role as well as satisfy their personal demands (Bakker et al., 2023; Oberländer & Bipp, 2022).

Prior research on the job-demands resources theory highly supports the position that social support (relationships with coworkers, friendships, and other interpersonal relationships) from fellow employees and leadership do improve work engagement in workers as well that can be relied upon to manage demands, especially under times of high stress or crisis (Britt et al., 2020; Kisely et al., 2020; Oberländer & Bipp, 2022). Although Oberländer & Bipp (2022) did not find evidence that digital communication or collaboration competencies do not lead to increased work engagement during COVID-19 through social support, though there is support for improving worker well-being through improving community and communication (Ali et al., 2023; Oberländer & Bipp, 2022). Studying the effects that teleworking has on virtual team members, especially with the actions and leadership style of their manager in terms of what job demands the individual experiences and what job resources they have to balance against it allows for possible improvements in teleworkers moving forward (Bakker et al., 2023; Oberländer & Bipp, 2022). With the use of servant leadership to guide actions within virtual teams, there is a possibility of directly affecting and guiding the development of job resources in the form of a created community, open and easy communication, and service for improved job satisfaction and personal well-being (Bakker et al., 2023; Huang et al., 2021; Ingusci et al., 2021).

Literature Review Related to Key Variables and/or Concepts

The ever-advancing developments in ICT have allowed for a growing number of both industries and employees to begin adopting telework into their normal working strategies (Beckel & Fisher, 2022). Especially with the recent occurrence of COVID-19, U.S. employees experienced a significant shift away from working within an office space and towards working from home or another form of telework as approximately 35% of workers reported they shifted from commuting to work to working from home (Brynjolfsson et al., 2020). COVID-19, however, only seemed to ramp up the growing trend, especially in the United States and Europe, towards increasing the prevalence and capabilities of telework in the modern workforce (Popovici & Popovici, 2020).

In this literature review, I will analyze recent studies focused on the nature and aspects of telework as it relates to individuals and leadership that engage through ICT, the effects of servant leadership on currently studied teams in various industries, the current literature on measuring and studying job satisfaction in teleworking and non-teleworking individuals, the current literature on measuring and studying personal well-being (both physical and psychological) in teleworking and non-teleworking individuals, and the unique aspects of virtual teams and their requirements for leadership as it differs from more conventional in-office teams. I will offer descriptions for what telework is as opposed to other forms of work, what characterizes servant leadership, the variables, and methods by which job satisfaction and personal well-being are measured, and the unique nature of virtual teams that present its own forms of challenges and differences. I will reference the scholarly literature on these subjects to explore the viability of servant leadership as a strong candidate for leading virtual teams with the purpose of maintaining or improving the job satisfaction and personal well-being of teleworking employees

Telework

In a more conventional working environment, it may be expected for the average employee to commute from home to work, perform their duties and interact with coworkers physically while within an office, production, or other setting, and commute back home at the end of their working day as part of a normal routine. Telework has a connotation of working from a location outside of the more “normal” working environment such as an office, such as working from home, working from a customer location, working while travelling, or another location where it is necessary for the employee to carry with them the means to both perform their duties and communicate with their team at a distance (Charalampous et al., 2019; Ferrara et al., 2022). This change in strategy is more than a mere change in scenery, however, as it does create unique challenges for the employee, the team that employee is a part of, the leadership of that team, and the management of the organization as a whole to properly organize and direct teleworking team members in their duties (Adamovic et al., 2021; Ali et al., 2023; Buonomo et al., 2023; Wang et al., 2021).

Teleworking, as defined as remote working away from an office environment either fully (the employee is unlikely to be within an office environment routinely) or in a hybrid role (the employee may work away from the office part of the time and within an office the remainder of the time such as on a weekly or monthly basis), was introduced in the early 1970's as a means to possibly combat societal issues such as pollution, traffic, and land use (Beckel & Fisher, 2022; Charalampous et al., 2019; Stiles 2020). Other names for telework such as "telecommuting," "remote work," "virtual work," "working from home," or "flexible work arrangements" have been used relatively interchangeably with some slight variations in definition over the body of work that has been compiled on this subject (Beckel & Fisher, 2022; Klindžić & Marić, 2019; Sekhar & Patwardhan, 2023). In the previous 5 decades, telework has been steadily increasing in popularity as a means of developing and deploying work resources, heavily linked to the growing capabilities, reach, and speed of new ICT, which has seen a recent augmentation due to the global effects of COVID-19 (Contreras et al., 2020; Popovici & Popovici, 2020; Stiles, 2020).

ICT has been a driving factor in changing the nature and means by which work is performed which, in turn, allows for evolution in the organizational culture for organizations that encourage or allow this growing system (Anshari et al., 2022; Popovici & Popovici, 2020). As new technology is being developed and adapted either by individuals or organizations, traditional roles around work change as the tools used to complete that work modernize as well as entirely new industries can grow to take advantage of new capabilities in the technology even to the point of being able to perform that work away from an office environment and either on the move or at home for individuals (Cortellazzo et al., 2019; Larson & DeChurch, 2022; Popovici & Popovici, 2020). Freedom from working solely within an office environment, with coworkers and leadership nearby, and gaining the ability to work from home created an opportunity for telework to be useful in addressing societal issues like traffic and pollution (Stiles, 2020).

Los Angeles in the 1970s experienced a rapidly deteriorating air quality due to the success and growing popularity of vehicles, freeways, and a growing notoriety for traffic congestion combined with local geographic features (Stiles, 2020). Continuing the trend of attempting to harness recent technologies to solve problems, researchers of the time including Nilles and Lindsey, suggested telecommuting could reduce traffic congestion and pollution by removing drivers from the roads (Nilles, 1974; Nilles et al., 1976). Creating options and policies at the local government and organizational levels to encourage busses or ridesharing as transportation options, flexible schedules, and working from home when possible and allowable (Lindsey 1984a; Lindsey 1984b).

Although not all forms of work are capable of being moved away from the office, when possible and allowed, telework and the ICT that supports it has changed the ability and outreach of organizations through connecting a significant portion of the global population, allowing for cultural and societal shifts towards the nature of work (Avolio et al., 2014; Larson & DeChurch, 2020). Management and Leadership especially have been affected by this changing digital landscape, especially in how leaders should focus their efforts within their organization on developing a more connected and open working environment, directly engaging and interacting with their consumer base with the knowledge available on individual and generalized populations derived from widespread social technologies, and strengthening networks and relationships for both partners and competitors (Cortellazzo et al., 2019). At the team level, leadership can function as an ambassador for their team to new technologies by setting examples for how the technology is meant to be used, coaching the team in the expanding expectations of new technologies, and collaborating with their team concerning how to best use the resources of the team to complete the desired goals (Larson & DeChurch, 2020).

This growing component of many industries has pros and cons that are currently being researched to be better understood. The full impact of telework on individuals and organizations is yet to be understood, though this has not slowed its growing acceptance and use among many organizations (Popovici & Popovici, 2020). Teleworkers are a growing population, especially in western nations such as those in North America and Europe, that are experiencing their own challenges and benefits based on the specifics of their working strategy, much like more traditional in-office workers do (Beckel & Fisher, 2022; Brynjolfsson et al., 2020; Popovici & Popovici, 2020). Recent global events such as COVID-19 have only served to accelerate the drive towards a greater percentage of the working population adopting teleworking strategies in their organizations.

Brynjolfsson et al. (2020) gathered data on US workers and the shift towards teleworking during the pandemic through Google Consumer Surveys performed in two waves, one in April and second the following month in May of 2020. The second wave of surveys (May, 2020), with over 25,000 responses showed that 37.1% of U.S. workers they reached continued to commute to work, while 35.2% had begun working from home in the previous 2 months, 15% had already been working from home prior to COVID-19, 10% had been furloughed or laid-off, and the remainder (approximately 2.7%) had actually gone the other way and used to work from home but now commuted into their work (Brynjolfsson et al., 2020). The European Union saw a similar shift to telework with approximately 5.4% of the workforce reported teleworking full-time with as much as 9% working a hybrid schedule prior the COVID-19 and that growing to an estimated 40% full-time teleworkers during the pandemic (Beckel & Fisher, 2022; Eurofound, 2020).

The dramatic shift towards a more remote and virtual workforce, where possible, in the United States and Europe was not caused solely by COVID-19, but has been an increasing trend within businesses of various sectors and industries as these organizations undergo digital transformations over time and entirely new means of business like the gig economy and online platforms enter the marketplace (Larson & DeChurch, 2020; Oberländer & Bipp, 2022; Weber et al, 2022). New organizations and recent technologies are a method of changing how work is performed and how the workplace functions as new concerns, new abilities, new methods, and more or encouraged (DeLucas Ancillo et al., 2021). Collaboration and communication platforms such as online meeting programs, cloud sharing, and computing applications have allowed for a growing level of flexibility in how work is performed as well as opening up the possibilities of who can be on the team to assist with performing work duties such as subject matter experts across the globe as the total population of teleworkers increase (Buchanan et al., 2021; Han et al., 2019; Medina-Rodriguez et al., 2020). Leaders of digital teams can encourage knowledge sharing and collaboration between team members by specifically requesting, facilitating, and participating in efforts to share knowledge, improving communication strategies inside and outside the immediate team and organization, and interacting with their team (Han et al., 2019; Medina-Rodriguez et al., 2020).

This, however, does not mean that the entirety of the workforce could be shifted to teleworking strategies. Although COVID-19 created a dramatic shift towards telework with regulations handed down by governments and directives from the management of organizations which drove many employees from in-office environments to either hybrid or full telework working situations, telework is not a one-size-fits-all answer for all industries and all workers (Anshari et al., 2022; Carnevale & Halak, 2020; Chamakiotis et al., 2021). An employee’s person-environment fit is a measure between how an individual and their work environment as crafted by the organization reflects the values, culture, beliefs, and desires (Carnevale & Halak, 2020). As individuals (especially across cultures and industries) differ in their values and beliefs concerning the nature of and effectiveness of telework, preferences in the extent to which the individual desires and allows for direct supervision, developing relationships at work, and have different situations in their lives (living alone or with family, children that require care, roommates, limited access to internet, etc.), telework is not a preferred working strategy for each and every employee with a job that would allow for remote work to occur (Adamovic, 2022; Carnevale Halak, 2020; Gabelica & Popov, 2020). Employees who are highly self-motivated, autonomous, and disciplined to create and manage their own working environment and schedules are more likely to be successful in a teleworking environment (Wang et al., 2021). It is the responsibility of leaders of virtual teams to create a community of trust and communication that can shape the work around the team and the demands of the organization (Avolio et al., 2000; Feitosa & Salas, 2020; Kanthawongs, 2022).

Teleworking employees, especially in recent years due to COVID-19, are encompassing a more significant portion of the working population in the United States, especially as more businesses and customer-focused aspects of businesses like shopping become more prevalent and capable online (Anshari et al., 2022; de Lucas Ancillo et al., 2021; Popovici & Popovici, 2020). These employees are either joining or already within teams that are either partially or entirely virtual with a demand for leadership that fits their needs (Chamakiotis et al., 2021; Kanthawongs, 2022). Leadership within these virtual teams cannot be approached in the same ways that leadership has been approached in more traditional, in-office settings (Chamakiotis et al., 2021). As teleworking becomes a stronger and more capable strategy for collaborative work, organizations must adapt to the change in demand and capabilities as well as the individual requirements of the members of the team (Carnevale & Halak, 2020; Chamakiotis et al.; 2019; Vidal et al., 2017). Each new employee within an organization may not be best suited for telework and this must be understood and managed by virtual team leaders (Carnevale & Halak, 2020).

In a recent study performed by Ingusci et al. (2021) focused on a testing population of 530 participants who experienced working from home or remote working during COVID-19 demonstrated the positive role of job crafting used by employees put into a new situation and managing new types and new levels of stress. Ingusci et al. highlighted the technology-related stress and “techno overload” (a growing demand on employees related to the use of technology, especially when it comes to the workload, demand to work faster, provide quicker response, be multitaskers, and more) experienced by these teleworkers and how this relates to employee’s stress at work. With increasing demands at their workplaces, and the added demands and stressors of a pandemic occurring in their lives among other things, employees must find ways to balance the demands of their job with the resources they have available according to the Job Demands-Resources theory through job crafting (Ali et al., 2023; Bakker et al., 2003; Ingusci et al., 2021). Job crafting focuses on increasing structural resources through enhancing their talents and influence, increasing social resources through strengthening relationships within the workspace, increasing challenging demands by implementing and defending innovative ideas or paradigms, and hindering demands through avoiding behaviors that slow or halt well-being improvements (Ingusci et al., 2021). Ingusci et al.

measured work overload (via workload and techno overload), behavioral stress, and job crafting techniques (through its subdimensions of increasing structural resources and challenging demands) with validated scales on a questionnaire sent to the participants via an online link and snowball-procedure.

The researchers were able to show that work overload is positively related to behavioral stress, following previous studies, indicating a direct and significant impact on the health and well-being of teleworkers (Ingusci et al., 2021). An imbalance in the resources that teleworking employees have available and the demands that they are required to fulfill can create situations that increase stress and develop failing well-being for the individual (Ingusci et al., 2021). They were also able to show that job crafting has a negative impact on stress, relating that employees can adjust around their roles to reduce outcomes that the teleworking employee may not desire as well as improve productivity and well-being outcomes (Ingusci et al., 2021). The third hypothesis evaluated, that if work overload will increase job crafting strategies, was also confirmed through an elevated level of work overload increased job crafting strategies, and represent a strategy triggered by growing demands requiring balanced resources (Ingusci et al., 2021). The suggestion that self-managing employees that are offered greater leeway to job craft may lead to greater productivity (Ingusci et al., 2021).

The effect of virtual team leaders on teleworking employees (especially those who have been shifted from in-office work to telework when they are poorly prepared or do not desire to do so) is important to note in the context of the dramatic shift driven heavily by COVID-19 (Ahrens et al., 2021; Turesky et al., 2020; Zeike et al., 2019).

Stressors in the workplace for individual employees are not purely derived from what happens to the individual employee but can also come from what is happening in the life of that employee surrounding work (Beckel & Fisher, 2022; Feitosa & Salas, 2020; Soni & Agarwal, 2018). A global pandemic is a significant source of stress which can lead to a pronounced decrease in productivity, increase in anxiety, increase in depression symptoms, decrease in mental well-being, and more (Ahrens et al., 2021; Soni & Agarwal, 2018). As mental well-being decreases, the elevated levels of mental distress can lead to mental disorders in a population (Butterworth et al., 2020). Though mental disorders were being shown to have a positive trend over time through surveys, such as those conducted in Australia, the addition of a global pandemic as a source of mental distress is likely to increase the rate by which psychological distress is felt by workers, especially younger workers entering the workforce (Ahrens et al., 2021; Butterworth et al., 2020). A method of combating this growing mental distress is through the judicious and careful application of telework, which can reduce the physical and mental stressors employees experience (Ferrar et al., 2020; Kazekami, 2020).

The job satisfaction of teleworkers has been sparsely studied, but there are studied links between the adoption of teleworking and employee job satisfaction (Adamovic et al., 2021; Ali et al., 2023; Buonomo et al., 2023). In a recent study of teleworking employees following the adaptations businesses made for COVID-19 by Buonomo et al. (2023) found that a sense of community influences the job satisfaction of teleworkers. The active participation in planning, problem-solving, and decision-making processes within a positive relationship climate is positively linked with the job satisfaction of the studied population of Italian teleworkers (Buonomo et al., 2023). The resources available to employees to combat the stressors of telework has a positive effect on the job satisfaction of teleworkers especially when combating issues surrounding work-life balance and social or professional isolation (Adamovic, 2022; Buonomo et al., 2023; Kazekami, 2020).

For those well suited to telework, or have been doing so for some time, the health of teleworking employees, both physical and mental, has been associated with the spread of teleworking as flexibility in working hours, (Beckel & Fisher; 2022; Henke et al., 2016; Zeike et al., 2019). Zeike et al. (2019) prior to COVID-19 studied the growing digitalization of the workforce and how teleworking employee's well-being is affected by the leadership the employee experiences. Low mental well-being in employees can lead to psychological issues like depression, burnout, and loss of organizational commitment while low physical well-being can impact employees in the form of stress-related illness, exhaustion, heart disease, and reduced performance (Bakker et al., 2023; Beckel & Fisher, 2022; Buonomo et al., 2023; Zeike et al., 2019). Leadership is highly linked to the behavior, performance, and well-being of the employees within their teams (Inceoglu et al., 2018; Turesky et al., 2020).

These growing virtual teams represent an increasingly novel approach to leadership using new technologies, new capabilities, and even entirely new means of work. Leaders of virtual teams are the liaisons between upper management and individual employees by creating platforms for collaboration and participation through the development of trust, process gains, inclusion of the individuals within the team, and creating an open environment to communicate and generate teamwork and between members of the team those the team interacts with (Avolio et al., 2014; Feitosa & Salas, 2020; Zeike et al., 2019). Leaders that can quickly and effectively adapt to a digital workspace with team members that may be spread throughout different locations and cultural boundaries to build a community of trust and overcome technological, personal, diversity, communication, and other issues between team members have been required since virtual teams began to become possible alongside telework (Carnevale & Halak, 2020; Chamakiotis et al., 2021; Hacker et al., 2019).

Leaders have a direct impact on the job satisfaction and well-being of the members of their team. A study on remote workers from Utah performed by Ali et al. (2023) used a survey based on the Ability, Motivation, and Opportunity (AMO) framework and how this relates to job satisfaction (defined within the study as "the pleasurable emotional state resulting from the appraisal of one's job as achieving or facilitating the achievement of one's job values" based on Locke's work in 1969). With over 100 respondents taken from the Utah State University Institutional Review Board, the researchers found that remote workers who see that their work has purpose or value, have enjoyment in their role, were committed to the organization, and had a say in the decision-making process for their organization were positively linked to higher levels of job satisfaction (Ali et al., 2023; Erickson, 2021). Leadership is critical in nurturing positive perceptions in the members of their teams, especially perceptions around organizational support, commitment, and collaboration (Cheng et al., 2022; Chiniara & Bentein, 2018; Kashive et al., 2022). The predictors evaluated by Ali et al. (2023) also were linked to higher levels of personal well-being due to higher levels of confidence in their abilities, purpose in their work, and job satisfaction leading to positive psychological perceptions that reduced mental strain and physical stress (Ali et al., 2023; Buonomo et al. 2023; Inceoglu et al., 2018). As virtual teams become more prevalent, including the recent augmentation from COVID-19, having leadership that can connect with individual team members, develop community, effective communication, and serving the unique needs of teleworking employees will strengthen the job satisfaction and well-being of future virtual teams.

Servant Leadership

In the essay *The Servant as Leader* written by Greenleaf in 1970, he coined the phrase "servant-leadership" and began the idea of servant leadership. In his own words, Greenleaf describes "the Servant-Leader is servant first… It begins with the natural feeling that one wants to serve, to serve first. Then conscious choice brings one to aspire to lead." (Greenleaf, 1977). The Servant Leader makes a conscious choice to lead in such a way to so that those served grow and develop (Greenleaf, 1977). "Do they, while being served, become healthier, wiser, freer, more autonomous, and more likely themselves to become servants? And what is the effect on the least privileged in society? Will they benefit, or at least not further be harmed" (Greenleaf, 1977)? From the beginning, servant leadership was meant to target success through serving the needs of the people within their care to make each member of the team better in their role, better as an individual, and to encourage serving behaviors in them so that these team members would go out into the world to perpetuate the serving mindset (Liden et al., 2014; Sfectu, 2021).

The concept of servant leadership can be seen as inverting the social order by putting the leader at the "bottom" rather than the assumed top of the social hierarchy as a servant to their followers (Heyler & Martin, 2018; Spears, 2021). If the leader can approach their role with an honest and personal desire to understand and cooperate with their team members to develop each employee's talents and abilities to their full potential so they can benefit the team, the organization, and their community at large the leader is truly a Servant to Greenleaf's original estimations (Greenleaf 1977; Heyler & Martin, 2018; Sfetcu, 2021; Spears, 2021). The specific components of servant leadership have gone through several variations and changes throughout the decades that it has been studied, beginning with the defining work of Greenleaf and continuing with the quantitative examinations (Barbuto & Wheeler, 2006; Liden et al., 2008; Qiu & Dooley, 2019; Qiu & Zhang, 2022). The research into servant leadership has passed through three generalized phases beginning with the conceptual development of the theory with the works of Greenleaf (1970; 1977) and Spears (1996), then moving into a phase of measuring the effects of servant leadership and the relationship between servant leadership and its outcomes with Graham (1991), Liden (2008), and others , and finally into the current phase of research where servant leadership models are being developed to understand antecedents, mediation, and boundary conditions with the works of Liden (2014; 2021), Eva (2019), and Sfetcu (2021) (Greenleaf, 1970; Greenleaf, 1977; Eva et al., 2019; Liden, 2008; Liden et al, 2014; Liden et al., 2021; Sfetcu, 2021; Spears, 1996; Spears, 2021).

Servant leadership has gone through several iterations where different attributes have been assigned, shifted, and translated from study to study. Eva et al. (2019) offers the definition of servant leadership stating that it "is an (1) other-oriented approach to leadership (2) manifested through on-on-one prioritizing of follower individual needs and interests, (3) and outward reorienting of their concern for self towards concern for others within the organization and the larger community." This definition, created through a thorough review of the literature at the time, speaks to the motive, mode, and mindset of servant leadership as a placement of a servant in a leadership position to guide their team and other observers towards a service lifestyle in and outside of work duties, highlighting the personal motivation of the leader in taking this particular approach, and the intrinsic focus away from the personal gain and status of the leader and towards the benefit and development of the team members into stronger, more capable individuals in their job and their communities (Eva et al., 2019; Lan et al., 2021; Lee et al., 2020). A recent study on servant leadership and its impact on team effectiveness performed by Bilal et al. (2021) offered a list of 10 characteristics for servant leaders, offered below.

1. "Listening, emphasizing the significance of communication between leader and follower and seeking to determine the drive of people" (Bilal et al., 2021, p. 701).
2. "Empathy, understanding followers from their position and accepting them as who and what they are" (Bilal et al., 2021, p. 701).
3. "Healing, facilitating followers to heal and recover after failure" (Bilal et al., 2021, p. 701).

4. “Awareness, being knowledgeable about tasks and contexts of performing task” (Bilal et al., 2021, p. 701).
5. “Persuasion, seeking to influence others via two-way communication and constructive arguments, not through coercive or positional power” (Bilal et al., 2021, p. 701).
6. “Conceptualization, visualizing possible future and making the environment conducive for followers’ growth and welfare” (Bilal et al., 2021, p. 701).
7. “Foresight, foreseeing consequences of different situations and working with institution” (Bilal et al., 2021, p. 701).
8. “Stewardship, holding something in trust and serving the needs of others” (Bilal et al., 2021, p. 701).
9. “Commitment to the growth of people, facilitating the personal and professional development of followers” (Bilal et al., 2021, p. 701).
10. “Building community, focusing on the welfare of society and community” (Bilal et al., 2021, p. 701).

Over the years and through the various definitions, there have been some consistent items that have been maintained. The concepts of open and earnest communication between leadership and individual team members, the creation of a strong community built on interlocking relationships between team members and the leader to create a support structure for the benefit of the group, and an ingrained lifestyle of service that uplifts and empowers others appear to be central, in one form or another, in various definitions of servant leadership (Bilal et al., 2021; Chiniara & Bentein, 2016; Chiniara &

Bentein, 2018; Eva et al., 2019; Heyler & Martin, 2018; Lapointe & Vandenberghe, 2018; Lee et al., 2020; Liden et al., 2014). Because of these factors, Servant leadership has been positively correlated to job satisfaction and the personal well-being of employees, especially when focused on creating a community of collaboration, open communication, and culture of service that manages the life and work needs of individual employees by providing for the personal and professional development of team members in office environments (Berman et al., 2020; Camp et al., 2022; Eva et al., 2019; Sfetcu, 202; Siangchokyoo et al, 2020).

Servant leadership, although still within a phase of quantifying, evaluating interactions between factors, and understanding the scenarios in which servant leadership is most effective, there are positive strides in understanding that servant leadership has a unique and powerful effect on leader-member exchange relationships, employee satisfaction, commitment, intention to stay within an organization, organizational citizenship, in-role performance, team performance, and even firm performance through verification of the servant leadership behavior scale (Eva et al., 2019; Sendjaya et al., 2019). The use of servant leadership within a team empowers both the leader and the followers as their individual selves are developed and explored through the characteristics of servant leadership such as creating and using a strong community that drives a sense of belonging (Bilal et al., 2021; Sendjaya et al., 2019).

Servant leadership is still a new leadership style, though a recent study performed by Bilal et al. (2021) and its follower-centric style can assist in improving the performance of certain teams. The study by Bilal et al. (2021) focused primarily on project management teams, using a population of Pakistani project teams using a paper-pencil survey issued to three software development companies, delivering responses from 58 teams and 228 members. The concept that team perception of goal and process clarity are necessary to the functionality and success of the team so that the team can interact and cooperate to reach objectives shared across members and teams fits well with servant leadership's tenets of community, communication, awareness, and conceptualization (Bilal et al., 2021). Servant leadership was measured in these project teams through team members rating the behavior of their project leader based on a 14-item scale developed by Erhart (2004), while team goal and process clarity were measured through a scale created by Sawyer (1992), and project team effectiveness were measured according to a nine-item scale formed by Turner and Müller (2005) to be measured against control variables of team familiarity, team size, team experience, and team education (Bilal et al., 2021). The hypotheses of team goal clarity and team process clarity mediate the project leader's servant leadership style and project team effectiveness were both supported through the study, though team effectiveness was indirectly related to the leader's servant leadership style while team effectiveness was positively impacted by clarity (Bilal et al., 2021). Project success is strongly linked to people-oriented leadership that can translate the requirements and aspects of a task and properly apply those to their team in pursuit of attaining a shared objective (Bilal et al., Nauman et al. 2022).

The creation of in-group identity through the creation of a strong community can assist in empowering individual team members to strive for and reach their goals in their roles (Adamovic et al., 2022; Mortensen & Haas, 2018). Especially for team members that may be experiencing a sense of exclusion or isolation from other factors (for example, being a migrant worker, a recent immigrant, or the existence of a widespread government or organizational mandate requiring social isolation during a pandemic), engendering a sense of belonging and identity can drive productivity and grow commitment to the organization (Mortensen & Haas, 2018; Sendjaya et al., 2019). Encouraging team members to forge an in-group identity, either as a member of a team, organization, life experiences, or other items affects the job satisfaction and effectiveness of team members through the belief of belonging and working within a team-orientated structure (Ashforth & Mael, 1989; Hess, 2020; Sendjaya et al., 2019). For Millennial workers, who trend towards flexibility and personal relationships within their working arrangements, the development of this community can be a strong method for feedback, cross-functional teams, and growing a level of organizational commitment using servant leadership through reciprocation. (Hess, 2020; Huang et al., 2021; Sendjaya et al., 2019).

Similar studies linking servant leadership to teleworking teams are lacking in the current literature. A recent study coming out of the shift towards telework due to COVID-19 performed by Toscano et al. (2022) as a cross-sectional study of 455 employees of public and private organizations found that the actions of direct supervisors and leadership to give teleworking employees a support structure and community, like one of the central components of telework, can help combat the stress experienced by teleworkers. The impact of a leader’s choice in style and drive can impact the abilities of their followers in managing stress levels with more ethical and follower-focused methods, like servant leadership, can help in managing follower stress (Huang et al., 2021). When combining both the stress of team members as well as the additional stress of world events in the form of a pandemic and a shift towards telework for team members that may or may not have been adequately prepared and desiring that new strategy (Huang et al., 2021; Ingusci et al., 2021).

The development of a support structure and the management of the needs of remote workers as they balance work responsibilities with conflicts in their home and family lives (Toscano et al., 2022). Teleworkers that are isolated from their peers physically and socially are more likely to have lower job satisfaction (Suh & Lee, 2017; Toscano et al., 2022). In addition to supporting the personal and life needs of employees, the servant leader should include training and professional development for the work needs of the employee (Toscano et al., 2022; Kanthawongs, 2022). Especially as virtual teams grow in prevalence and capabilities, improving the abilities and comfort of teleworking team members is critical for a digital team to be professionally managed (Kanthawongs, 2022). Teleworkers that have the perceptions that they are forgotten, excluded, or overlooked from decision-making, promotion opportunities can experience heightened stress in their work that can cause a reduction in job satisfaction and even mental and physical strain (Feitosa & Salas, 2020; Suh & Lee, 2017).

A similar result has been observed by other studies focused on employee well-being, such as that done by research done by Buonomo et al. (2023) where the actions of leadership in creating a sense of a sense of community and structural support has a mediating relationship between the job demands of teleworkers, their job satisfaction, and the well-being of employees. Social distancing and isolating employees from each other while trying to either continue service as much as possible had a significant impact on the well-being of employees affected by lockdowns, travel bans, and other responses by regulatory bodies during COVID-19 (Tuzovic & Kabadayi, 2021). Employee well-being during social distancing was affected by an increase in anxiety, loneliness, depression, increasing substance abuse, and in some cases even suicide for remote workers (Braverman, 2020; Higgins-Dunn, 2020; Staglin, 2020). Servant leadership, through the development of a strong community built on interlocking relationships between team members and the leader to create a support structure for the benefit of the group, and an ingrained lifestyle of service that uplifts and empowers others may be a powerful tool in combatting the issues teleworkers face.

Job Satisfaction

Early studies in the 1930's suggested that "satisfied and happy" workers are more productive than unsatisfied workers stemming from the "happy-productive worker hypothesis" coming from the Human Relations Movement in the 1930's (Wright et al., 2007). These initial studies have been tested and retested over the years and results have been mixed over the decades since with studies performed by Vroom's (1964) and Iaffaldano and Muchinsky's (1985) finding correlation between the job satisfaction and productivity between 0.14 and 0.17, showing weak relations. Further investigations in the 1980's by Petty et al., (1984) and Judge et al. (2001) showed stronger correlation factors around 0.3 between job satisfaction and productivity. This does offer an indication that the core aspects of the happy-productive worker hypothesis, that a satisfied worker is, on average, performs better in their task, though there is some concern in evaluating the degree of that correlation though there are positive relationships between the development of leader/member relationships to combat issues and stress derived from work-life balance concerns (Toscano et al., 2022). In a more modern strategy, like teleworking, there are measurable links between performance and job satisfaction, especially when tracking a team member's improvements on performance can be driven by job satisfaction (Jensen et al., 2020).

Job satisfaction was defined by Locke (1969) as "the pleasurable emotional state resulting from the appraisal of one's job as achieving or facilitating the achievement of one's job values." The fulfilling experience that an individual has while doing their work tasks, which is often a strong motivator to have higher job performance, likely because there is a sense of achievement related to their work tasks (Ali et al., 2023; Ćulibrk et al., 2018; Siengthai & Pila-Ngarm, 2016). Job satisfaction may be difficult to measure across such a long period of time and across differentiators like culture, generations, and industry as the experiences that an individual has with their work will be very different and unique to each person (Adamovic, 2022; Bertsch et al., 2022; Cheng et al., 2022; Gabelica & Popov, 2020; Salvosa & Hechanova, 2020). This can be further confused as job satisfaction can be an individual experience based on the perception the employee has concerning their alternative options for employment, how they react to the specific stressors and demands of their position, how secure they feel within their position, and more (Bianchi et al., 2021; Srivastava & Chandra, 2018).

The success or failure of the use of digital tools and capabilities is heavily dependent on the perceptions, trust, and support given by leaders (Bianchi et al., 2021;

Srivastava & Chandra, 2018; Teimouri et al., 2018). With current studies, such as those performed by Poulsen and Ipsen (2017) focused on teleworking employees found that work-life balance (including conflicts between work-time and family- or personal-time, the equipment and availability of a home-office, interruptions, and more) isolation, technological competency, inadequate or lack of communication, and uncertainty in the quality or impact of their work were major challenges for teleworking employees (Ali et al., 2023; Eva et al., 2021). With remote work capabilities growing in the world, the impact of a team member's role and how their role is measured and judged can have a significant impact on their perception of their role (Jensen et al., 2020). While improving performance is linked to and possibly driven by job satisfaction in remote workers, monitoring remote workers might lead to quality improvements in their work as the worker may feel their role has critical importance that demands high quality and they, in their role, are valued (or, more negatively, that they may suffer consequences if their quality drops below acceptable levels) (Ali et al., 2023; Jensen et al., 2020). Alternatively, monitoring may cause a reduction in performance and quality because of a perceived level of distrust in their ability to deliver, additional stressors put onto the worker, or other additional concerns (Ali et al., 2023; Jensen et al., 2020). An organization that can address the needs of teleworking employees so that the individual employee has a fulfilling and motivating experience at work, that organization would have a higher rate of job satisfaction across the various teams within the organization.

A recent study by Ali et al. (2023) concerning the factors that affect the job satisfaction of Utahan teleworkers strongly links the personal motivation of an employee to their job satisfaction in role as well as their personal well-being. Using the AMO (ability, motivation, opportunity) framework to study a sample of 143 remote working respondents to an online questionnaire, Ali et al. (2022) was able to show a strong link between teleworkers that perceived their work to have value or impact were more likely to be pleased or even excited about their roles, were connected to their organization, felt as though they were a part of the decision-making process in their organization, and have higher levels of job satisfaction. This was done by measuring five variables (self-efficacy, intrinsic motivation, affective commitment, opportunity, and amotivation) related to the three components of the AMO framework to relate to higher job satisfaction, productivity, and performance (Ali et al., 2022). Intrinsic motivation, opportunity, and affective commitment were statistically significant and positive predictors of job satisfaction as employees that ranked highly in these traits would perform their tasks and derive pleasure, found the tasks interesting, or were emotionally attached to the organization and would be satisfied with their roles (Ali et al., 2022). Similarly, amotivation was significant but had a negative association with job satisfaction as teleworkers that could not derive a purpose or value from their work are likely to lose motivation, feel helpless, or were not being offered opportunity (Ali et al., 2022).

Ensuring that the needs of teleworking employees are satisfied and fulfilled within their work duties can grow and augment a wider sense of pleasure and motivation throughout teleworking teams within the organization (Ali et al., 2023; Bartsch et al., 2021). Leadership has a significant effect on the perceptions of individual employees, especially for digital teams and teleworkers interfacing with hybrid or in-office team members, which allows for a leader and their leadership style to drive a higher level of job satisfaction in employees (Bertsch et al., 2022; Gagné et al., 2018). The development of a leadership style that creates a supportive community that can focus on addressing the needs of teleworking employees, like servant leadership, can offer a solution to growing digital teams with the growing trend towards teleworking (Sfetcu, 2021).

Personal Well-Being

The well-being of employees has been a focus of study for long years, though specific research into the well-being, both physical and psychological, for teleworking employees has been lacking (Beckel & Fisher, 2022; de Vincenzi et al., 2022; Jimenez et al., 2022). With recent changes in the number of teleworkers in organizations and the global workforce, partially driven by COVID-19, there is a growing need to have a stronger understanding of how the physical separation from coworkers and support structure effects a teleworker's physical and mental well-being (Beckel & Fisher, 2022; Carnevale & Halak, 2020).

Well-being has been described in many ways including the Total Worker Health® definition created by Chari et al. (2018) as "quality of life with respect to an individual's health and work-related environmental, organizational, and psychosocial factors. Well-being is the experience of positive perceptions and the presence of constructive conditions and work and beyond that enables workers to thrive and achieve their full potential." The well-being of workers is linked to their performance as a failing health, either physical or psychological, as an individual with a low well-being is likely to suffer chronic illnesses such as heart or respiratory concerns, musculoskeletal issues and injuries, pain, insomnia, and other physical conditions as well as or psychological conditions such as anxiety, depression, burnout, failing engagement and motivation, and more (Beckel & Fisher, 2022; Feitosa & Salas, 2020; Teimouri et al., 2018). Well-being includes pleasure and happiness within individuals as well as self-realization, authenticity, and meaningfulness that the individual pursues (Jimenez et al., 2022). An alternative means of well-being measurement includes the PERMA framework suggested by Seligman (2011) offered five dimensions in positive emotions, engagement, positive relationships, meaning, and accomplishment.

Telework is dramatically changing how work for many is understood, is performed, and how it interacts with an individual’s life which also means that how many people react to and cope with their work duties is changing (de Lucas Ancillo et al., 2021). Telework and other flexible working arrangements have been linked to several benefits for personal wellbeing, such as reducing absenteeism, reducing burnout, and increasing job satisfaction (Contreras et al., 2020; Klindžić & Marić, 2019; Pansini et al. 2023). A danger of this flexibility, however, is the blurring of boundaries in the work-life balance of teleworkers, leading to overwork, burnout, and stress (Klindžić & Marić, 2019; Pansini et al., 2023).

Managing the well-being of teleworking employees should be a primary focus of organizations that desire to have employees that engage in telework to improve in-role performance, reduce turnover (and the associated costs of turnover including hiring and training replacement and new employees), and develop strong and capable employees that can manage the demands of their tasks (Contreras et al., 2020; Dewi & Sjabadhyni, 2021; Ferrara et al., 2022). Teleworkers that are engaged, or teleworkers that have a persistent, positive, and affective-emotional state of fulfillment in their role, are more likely to have effective in their role, are less likely to intend to leave their role (reduce turnover), and be more productive (Saari et al., 2018). Leaders of teleworking teams, especially those that can manage the resources of their teams and engage team members, have been positively related to supporting and managing the needs of teleworking employees, especially in situations of change or crisis, to improve organizational performance through creating and encouraging perception of support to employees through clear and authentic communication and interaction. (Bartsch et al., 2021; Cheng et al., 2022; Erickson, 2021; Saari et al., 2018).

Although not a study on teleworkers and their well-being, a recent study in the construction industry by Cheng et al. (2022) investigated the role of ethical leadership and the perception of organizational support from the perspective of the employee. The psychological and physical health of the employee is affected by the perceptions that the individual has concerning how they interact with the world around them, their organization, and the teams within their role (Cheng et al., 2022). When leaders emphasize outcomes over the personal needs of the team members, this can lead to deterioration of the individual's well-being and performance (Cheng et al., 2022). Ethical leadership guides employees and protects their well-being through developing stronger engagement and developing trust within the team (Cheng et al., 2022).

Controlling for gender, age, and work position, perceived organizational support was measured using a 4-item scale developed by Cheng et al. (2003) and ethical leadership was measured through a 10-item scale created by Brown et al. (2005) (Cheng et al., 2022). The hypotheses of ethical leadership has a positive influence on employee well-being, the perception of support has a positive influence on employee wellbeing in the construction industry, ethical leadership has a positive influence on the perception of support in the construction industry, and the perception of support mediates the relationship between ethical leadership and employee well-being in the construction industry were supported through regression analysis (Cheng et al., 2022). Leadership, and the actions they take, develop a culture and perception within their team members that can improve or degrade the well-being and effectiveness of their team. Within the construction industry, the belief held by team members that they can rely upon the ethics of their fellow members and leaders can act as a strong source of organizational support and be a comfort and strength to the individual (Cheng et al., 2022).

A growing number of employees are working in virtual teams via telework, many that have opted into telework and are more likely to be willing and able to manage the demands of telework more effectively and some that are not as well adapted to telework and may have a more difficult experience (Adamovic et al., 2021; Buonomo et al., 2023; Torre & Sarti, 2020). The use of servant leadership in digital teams may have a beneficial effect on the personal well-being of teleworking employees through managing the needs of individuals, creating a community of support and communication that can push back against job stressors and concerns derived from work-life balance, and the perpetuation of a culture of service and self-sacrifice that strengthens the individual (Qiu & Zhang, 2022).

Summary and Conclusions

Telework is growing in both capability and popularity for organizations and industries as recent technologies allow for greater cooperation and communication between individuals around the world (Carnevale & Halak, 2020; Hacker et al., 2019; Laura et al., 2019). Much of the western world has been moving to a greater population of teleworkers as time has gone on, though recent global events with COVID-19 have accelerated the trend towards creating a stronger and more widespread virtual workforce (Carnevale & Halak, 2020; Lucas de Ancillo et al., 2021). The shift towards teleworking does not eliminate the issues experienced by workers but comes with its own benefits and detriments (Heyler & Martin, 2018; Sfetcu, 2021). The benefits of telework include offering employees flexibility in their working schedules, improving the in-role productivity of employees well-suited to digital work, and the opportunity to collaborate with experts and team members around the world (Buonomo et al., 2023; Ferrera et al.., 2022; Park & Cho, 2022).

As these teleworking teams grow in population, leadership needs to adapt to these changing norms to properly serve the needs of digital teams (Contreras et al., 2020; Laura et al., 2019; Liu et al., 2022). Teleworking teams do require adjustment and adaptation from leadership to respond to the individual needs and desires of each individual team member, especially as technology and shifting demands grow (Liu et al., 2022; Torre & Sarti, 2020). Leadership has been positively linked to worker job satisfaction and personal well-being of workers, especially when put at the head of teleworking teams by supporting team members (Han et al., 2019; Inceoglu et al., 2018). Proper creation of a community of support, development of trust and open communication, and managing the needs of teleworking employees can lead to stronger, more productive, more satisfied, and healthier employees in digital teams (Adamovic et al., 2021; Ali et al., 2023; Feitosa & Salas, 2020). The aspects of servant leadership such as community, communication, and service used by leaders of virtual teams create a supportive web of relationships that promote positive relationships that lead to increased task effectiveness, reduced sources of stress, and create team identity among remote working employees (Qiu & Dooley, 2019; Qiu & Zhang, 2022; Siangchokyoo et al., 2020; Sfectu, 2021). Measuring the effects of servant leadership on currently active teleworking teams through survey may indicate the level of success that is possible for the current generation of teleworkers.

Chapter 3: Research Method

This quantitative, non-experimental study examined the relationship between servant leadership and the job satisfaction and personal well-being of teleworking employees. The purpose of this study was to examine to what extent, if any, servant leadership may be an effective and useful leadership style to be used by leaders of virtual teams as teleworking arrangement expand among a growing number of industries and companies. Servant leadership has been shown in other working arrangements to develop webs of relationships and a sense of identity that can be useful to promote task effectiveness, reduce stressors to employees, and create a sense of team identity among physically separated team members. In this chapter, details are provided about how the research purpose is achieved through discussion of the research methodology, design, and rational behind the selection of specific elements. Additionally, this chapter includes information on the study population, sampling procedures, data collection and analysis strategies, instrumentation, operationalization of constructs, identifying threats to internal and external validity, and accommodations that have been made to address ethical issues.

Research Design and Rationale

Variables

The independent variable for the study is servant leadership as measured by the validated servant leadership scale developed by Liden et al. (2008). The dependent variables for the study are job satisfaction as measured by adapting the subscale job satisfaction from the COPSOQ III (Useche et al., 2019) and personal well-being as measured by the Psychological General Well-Being Index--Short Version (Grossi et al.

2006). As physical well-being would require requesting individual medical information from the participants, psychological well-being will be focused on for this study. Job satisfaction and personal well-being will be measured through the respondent's self-reported, and perceived levels of impact and empowerment in their job, perceived sense of community and communication, and workload stressors through multiple regression analysis.

Research Approach

A quantitative research approach was selected for this study as (a) the research questions and hypotheses suggest that a relationship between servant leadership, job satisfaction, and personal well-being exist, (b) the study purpose requires a deductive approach that tests existing theories presented in a unique way without presenting or developing novel theory, and (c) the goal of the study is to numerically quantify a relationship between the variables (Burkholder et al., 2020). The specific research problem of this study is that it is unknown whether servant leadership's aspects of community, communication, and service influence job satisfaction and the personal wellbeing of teleworking employees, this suggests adopting a quantitative, correlational research design. Creating numerical data that allows for measurement without manipulation that can be transformed into usable statistics will allow for understanding of any relationship between servant leadership and either job satisfaction or personal well-being and informs the selection of the research approach (Burkholder et al., 2020).

A qualitative or mixed methods research approach was not selected for this study as the research questions are not focused on how servant leadership interacts with the job satisfaction or personal well-being of teleworking employees nor with the mechanisms that servant leadership can be applied to improve the job satisfaction or personal well-being of teleworking employees. As there is a lack of theory considering much surrounding servant leadership in teleworking arrangements and the specifics of job satisfaction and personal well-being of teleworking employees, the purpose of this study is not to explore the phenomenon nor to explore the personal experiences of the individuals affected by this working arrangement (Ravitch & Carl, 2021). The study was correlational in nature, not exploratory, and does not intend to build a leadership framework with in-depth analysis and understanding of how teleworking employees perceive or develop job satisfaction or personal well-being within their roles. This study's goal was to examine the relationship between servant leadership and the job satisfaction and personal well-being of teleworking employees, which does not align with qualitative research methods. As this study was not a good fit for a qualitative research design, a mixed methods approach is also not appropriate to fully answer the research questions (Barnes, 2019).

Research Design

A non-experimental correlational design was selected for the quantitative study to examine the relationship between servant leadership and the job satisfaction and personal well-being of teleworking employees. The non-experimental design was chosen for the purpose of gathering quantifiable data that examines the nature of the relationship, if there is one, between the variables without controlling or manipulating the data from outside the phenomenon (Burkholder et al., 2020). The specific research problem to examine the influence of servant leadership on the job satisfaction and personal well-being of teleworking employees requires a research design that can generate understanding of the current phenomenon and its status among teleworking employees of various industries and generations without interfering with their experience or evaluate cause and effect relationships experienced by participants. Further study, perhaps performed by other researchers, may seek to understand or determine causal links between the increase or change in job satisfaction or personal well-being among teleworkers based on the application or misapplication of servant leadership from leaders of digital teams, however, the appropriate quantitative research design in that case would be a true experimental or quasi-experimental design based upon the specifics of their study (Burkholder et al., 2020).

The purpose of this study was best served by a non-experimental design that allows for descriptive and correlational understanding of the relationships between variables (Burkholder et al., 2020). This study was focused on developing a correlational understanding of the relationship between the variables of this study to best generate quantifiable data without manipulation or deriving a causal relationship (Burkholder et al., 2020). This study examined the relationship rather than describing the population and will not have an inherent time or resource constraint. This includes benefits for the study such as (a) greater access to a larger population of teleworking employees within various industries, (b) greater anonymity and reduction of bias errors through widespread sampling, and (c) a minimal risk of ethical breaches (Barnes, 2019).

Methodology

The logic used to select participants, the instruments used to collect the study's data, procedures for recruitment of participants, data collection, and data analysis are discussed below.

Population

The study population was the global teleworking workforce or the teleworking workforce within the United States. According to the World Bank Group (2024), the total labor force in the world at the time of the study was approximately 3.63 billion people with the U.S. Bureau of Labor Statistics (2024) listing an approximate 168 million members of the civilian workforce in the United States. These numbers do not directly indicate a teleworking population at either the global workforce or U.S. civilian workforce levels, though the U.S. Bureau of Labor Statistics (2024) does estimate approximately 34,328,000 teleworkers in the United States as of June 2024 (approximately 20.4%).

To facilitate reaching such a large population, SurveyMonkey® offers a service under the name SurveyMonkey Audience that offers access to an audience of hundreds of millions with over 200 demographic targeting options and is trusted by Fortune 500 companies (SurveyMonkey, 2024). The tools offered by SurveyMonkey® allow for the rapid selection of participants, development of a survey, and results can be collected throughout the population of teleworkers (SurveyMonkey, 2024). Using a recruited pool of participants from SurveyMonkey Audience in the employed U.S. workforce will avoid the risk of low participation from direct reach out over other means to reach a statistically significant sample. SurveyMonkey Audience will be contracted through the creation of a profile and study with SurveyMonkey® and discussing the demographic parameters and questions necessary for this study.

Sampling and Sampling Procedures

The sample frame for this study included teleworking adults in hybrid or full-time arrangements located in the United States and other countries. To reach this population, participants will be drawn from the SurveyMonkey Audience panel. Participants drawn from the SurveyMonkey Audience panel are conveniently accessible and easily contactable to participate in the study. Convenience sampling through SurveyMonkey Audience will be used to contact adult teleworking employees that are already associated with the network organized by SurveyMonkey® to participate in various surveys, creating a simple to contact, available, and willing group of participants.

Convenience sampling was selected for this study as a non-probability random sample of the population. First, as the sample population of teleworking employees is large and diverse across national, cultural, and industrial divisions, using the resources offered by SurveyMonkey® to reach a willing group of participants that satisfies the demographic demands of this study will offer rapid responses from an immediately available pool of participants (SurveyMonkey, 2024). SurveyMonkey® has already performed the recruitment of several million participants and will perform their own screening (based on targeting demographic information provided by the researcher) on these participants. The researcher did not select individual participants, only offering demographic information and targeting instructions to SurveyMonkey® to generate a pool of participants and they have done so in a manner that allows for a wide availability of the target population of teleworkers to be a member of the study per a non-probability sampling method (Frankfort-Nachmias et al., 2020). The accessibility and convenience of sampling members of the target population within this group are possible through the efficient recruitment taken by SurveyMonkey® encourage convenience sampling to complete this study within a rapid time frame (Frankfort-Nachmias et al., 2020).

The population size for this study is exceptionally large with teleworking adults inside and outside the United States having a population of several millions of people. The sample size of the study was determined through the statistical power, confidence interval, effect size, and number of predictors (Frankfort-Nachmias et al., 2020). Establishing the statistical power at 0.80 or 80%, a confidence level of 95% which the inverse decimal can also be taken as the alpha level of 0.05. Based on the research questions and study population, a sample size of 114 was calculated by G*Power calculator (version 3.1.9.7). To account for potential attrition within the respondents from incomplete surveys, respondents requesting to withdraw, and other reasons, the sample size for this study will be 150 respondents (a 31.5% increase). The first and second research question are similar in that job satisfaction or personal well-being, respectively for RQ1 and RQ2, are compared to the independent variable of the servant leadership. The most appropriate statistical analysis is a linear multiple regression as the independent variable (servant leadership) are compared to the independent variables (job satisfaction or personal well-being depending on RQ1 or RQ2) (Frankfort-Nachmias et al., 2020).

The sample size of 114 was determined by inputting values of effect size f2 of 0.1 to assume a small effect size, an α of 0.05, Power of 0.8, number of tested predictors (or independent variables) of 3, and lastly a total number of predictors of 3. Inputs to G*Power and the resultant outputs are reflected in Appendix B. As the true population size of the teleworking adults inside and outside the United States is unknown and significantly large, a sample size of this magnitude would be more than sufficient to satisfy the central limit theorem for normal distribution (Frankfort-Nachmias et al., 2020). Requesting information from the SurveyMonkey Audience participation pool for 150 responses offered adequate participants to perform all statistical tests required for this study to allow for potential attrition within the respondent population.

Procedures for Recruitment, Participation, and Data Collection

Study participants were recruited using recruitment to the study via SurveyMonkey Audience system. Recruiting participants requires notifying the study population of the existence and availability of the survey as well as any information necessary to participate. The notification of participants contacted through SurveyMonkey® is managed through the administrators of the SurveyMonkey Audience panels. The SurveyMonkey Audience panel system consists of respondents managed and recruited by SurveyMonkey® that have signed up and agreed to take online surveys in return for donations to charity managed by SurveyMonkey® without input or knowledge of the researcher. Recruitment and compensation for this study was managed by the firm SurveyMonkey® so there was no direct control by the researcher over the reward respondents may or may not have received for participation. Recruitment was performed by SurveyMonkey® based on the defined audience and population as given by the researcher. Based on the target characteristics provided to SurveyMonkey® for the population sample, a sampling methodology that combines quota sampling to reach target groups and random sampling within those groups. Knowing the sample size required for this study must be a minimum of 114, SurveyMonkey Audience was requested to elicit participation from 150 respondents to account for attrition.

Demographic Information

Demographic information gathered during this study included industry sector, age range, gender, educational attainment, total years of experience in teleworking role(s), current role title, total years within current role, and country name. This information will be gathered to determine whether the findings of the study are consistent with the findings of studies on servant leadership, job satisfaction, and personal well-being. This demographic information will be collected to determine whether the findings of the study are consistent and comparable with previous studies into the application of servant leadership in various industries.

Data Collection

The data collection tools used to distribute survey links to the study participants are the online survey tools SurveyMonkey®. The questionnaire began with an eligibility criteria page that included screening questions to either qualify or disqualify an individual respondent from taking the survey, depending upon the answers selected. The use of screening questions contributes to further assurance that the target audience and population is reached, to assist in minimizing or eliminating respondent biases, and improving respondent experience. Following the criteria page, the consent page will be made available to teleworking employees over the age of 18 within a hybrid or full-time teleworking role. Following these questions and responses, demographic questions and questions related to the instruments of the study were presented to eligible participants who agreed to participate in the study. At the end of the questionnaire, additional information could be given by participants that desired to provide it so that they may be contacted with a summary of the results of the study, once that summary had been constructed.

The consent page of the study asks the participants to read, understand, and accept the provisions within the informed consent section before deciding whether to voluntarily participate in the study. The informed consent form contained information such as the name and contact information of the researcher, the purpose of the study, details of the confidential and anonymous nature of the study, and the rights of participants that wished to withdraw from the study at any time during the data collection process. Information and directions on how and where to direct questions or concerns was provided for the participants. By clicking the "YES" button, participants indicated that they had read and understood the information within the consent page of the study and consented to participate within the study.

Instrumentation and Operationalization of Constructs

The instruments used for this study include the following:

- The Servant Leadership Scale Short Version (SLS-7) measuring aspects of servant leadership and their strength (Liden et al., 2015).

- A modified version of the Copenhagen Psychosocial Questionnaire, third version (COPSOQ III) containing a subscale item that measures job satisfaction (Useche et al., 2019).
- Psychological General Well-Being Index--Short Version (PGWB-S) measures psychological personal well-being in modern workers (Grossi et al. 2006).

Servant Leadership Scale Short Version

To measure servant leadership the Servant Leadership Scale Short Version, SLS-7 was selected. Based on the Servant Leadership Scale (a 28-item long instrument and with the moniker "SL-28") developed by Liden et al. (2008) measures the aspects of conceptual skills, a culture of empowerment, assisting subordinates grow and develop, putting others first, communication behaviors, emotional healing, and creating value for the community. The SLS-7 functions similarly to the SL-28 where a participant answers each question by ranking their response via a 1-7 Likert Scale ("1" meaning "Strongly Disagree" with "7" meaning "Strongly Agree") and this measures the perceived strength of their direct supervisor or manager's communication abilities, community-building habits, and culture of service that strives to empower and develop the team which are central to Servant Leaders within working teams; in-person or digital (Eva et al., 2019; Liden et al., 2008; Liden et al., 2015; Sfectu, 2021). The SLS-7 was validated through data collected from undergraduate, graduate, and leader-follower dyads from multiple organizations. Three independent studies with six samples demonstrate that the correlation between the original SL-28 and the shortened SLS-7 range from 0.78 to 0.97, are internally consistent with reliability over 0.8 in all samples, and criterion-related validities are high. Permission to use the SLS-7 is allowed for non-commercial research and educational purposes without seeking written permission through APA PsycTESTS assuming that distribution is controlled to the participants and administrators of the study.

Copenhagen Psychosocial Questionnaire

To measure job satisfaction in modern employees, the COPSOQIII as developed by Useche et al. (2019) as means of psychosocial evaluation, has been proven and improved over time, in multiple languages, and in many countries as a reliable measure for operationalizing job satisfaction through Job Demands-Resources theory (COPSOQ, 2019, Buonomo et al., 2023; Burr et al., 2019; Rahimi et al., 2025). The COPSOQIII contains multiple sub-sections including demands, influence and development, interpersonal relationships and leadership, job insecurity, strain, and job satisfaction (Buonomo et al., 2023; Burr et al., 2019; Rahimi et al., 2025; Useche et al., 2019). The job satisfaction subscale item consists of five questions within the larger COPSOQ instrument (Useche et al., 2019). Permission to use the COPSOQIII is allowed for non-commercial research and educational purposes without seeking written permission through APA PsycTESTS assuming that distribution is controlled to the participants and administrators of the study.

Psychological General Well-Being Index–Short Version

To measure psychological personal well-being of modern employees, the Psychological General Well-Being Index–Short Version (PGWB-S) as developed and validated by Grossi et al. (2006) offered a means of measuring self-perceived psychological well-being. The short version of the Psychological General Well-Being

Index as developed by Grossi et al. (2002) has been validated in cross-cultural groups and on large sample populations prior to a short version developed through five population samples (two general population samples, a student, and two patient samples) (Grossi et al., 2006). With a total population in the validation study of N=1443 respondents, with high internal consistency between the two measures with a Cronbach's alpha coefficient (ranging the samples between 0.80–0.92, approaching the original questionnaire's 0.94), a cross-validation through independent sampling showed greater than 90% variance (95.1% variance in one sample) (Grossi et al., 2006). Permission to use the PGWB-S is allowed for non-commercial research and educational purposes without seeking written permission through APA PsycTESTS assuming that distribution is controlled to the participants and administrators of the study.

Data Analysis Plan

The acceptance or rejection of null hypotheses in this study was based on an alpha level (level of significance) of 0.05, reflecting a 95% confidence interval that the findings reflect parameter of the study (Frankfort-Nachmias et al., 2020). An alpha level of 0.05 is common throughout statistical studies in social sciences. The research questions that guide this study, hypotheses, and their associated null hypotheses for this study are as follows:

RQ1: What is the relationship between servant leadership on the job satisfaction of teleworking employees?

H_o1: There is no correlation between servant leadership and job satisfaction in teleworking employees.

H_a1: There is no correlation between servant leadership and job satisfaction in teleworking employees.

RQ2: What is the relationship between servant leadership and personal well-being in teleworking employees?

H_o2: There is no correlation between servant leadership and personal well-being in teleworking employees.

H_a2: There is no correlation between servant leadership and personal well-being in teleworking employees.

The data collected in this study was analyzed using the IBM Statistical Package for Social Sciences (SPSS) version 29 for descriptive and inferential statistics. The descriptive statistics including frequencies, arithmetic mean, and standard deviations will be used to profile the sample as well as used for sub-sections of the sample so that sub-sections may be compared against each other or more deeply analyzed. Inferential statistics including Pearson correlational analysis and hierarchical linear regression were used to analyze the quantitative data used to answer the research questions of this study.

The Pearson correlation analysis statistical test is a tool used in this study to measure the association between two interval-ratio variables and the relative strength of that relationship (Frankfort-Nachmias et al., 2020). This study uses Pearson bi-variate correlation analyses that were performed to analyze linear relationships between continuous variables evaluated in this study such as job satisfaction and personal well-being. The bi-variate form of the Pearson correlation is well suited to understanding the relative strength of the relationship between multiple pairs of independent variables and their correlational effect on a dependent variable (Frankfort-Nachmias et al., 2020).

Additionally, hierarchical linear regression analysis was used in this study to estimate the effects of multiple independent variables on one dependent variable (Frankfort-Nachmias et al., 2020). Job satisfaction and personal well-being are likely to have multiple relationships with servant leadership, which can be estimated through hierarchical multiple regression analysis. The results of these analyses show the mediating effects of the independent variable on the dependent variables of servant leadership (Frankfort-Nachmias et al., 2020).

Prior to testing, however, the data collected by the surveys will be screened based on several criteria including eligibility, violations of assumptions, missing data, and consistency. The verification of the data allows for assurance that the data meets the statistical assumptions underlying Pearson correlation and hierarchical multiple regression analyses. Any missing data in this study (i.e., intentional or unintentional skipping questions, withdrawal of data, misunderstanding of the question through reading comprehension, shame of answering, etc.) was evaluated to avoid external threats to the validity of the study (Butler et al., 2022; Frankfort-Nachmias et al., 2020).

Threats to Validity

Validity, according to Burkholder et al. (2020), is related to accurately describing or reflecting the phenomenon that is the subject of study in a manner that is true and can be supported by the evidence gathered. A proper research design centered on the proper research question with appropriate measures are essential to the validity of a study including the method of data collection, type of data collected, and the correct sample so that the research question can be answered in a way that the measures are consistent and without vagueness (Burkholder et al., 2020; Frankfort-Nachmias et al., 2020). The selected quantitative, non-experimental correlational design to study the relationship between servant leadership and its influence on job satisfaction and the personal well-being of teleworking employees which can be represented by continuous variables with interval levels of measurement and all instruments are well-established and valid in the literature. The validity related to measurement of the independent and dependent variables is achieved. Threats to external and internal validity are discussed further below.

External Validity

Potential threats to external validity, or the extent to which the findings of this study may hold true across contexts, include (a) previous actions and discussions taken by the participants that may introduce bias into their measurement of servant leadership, job satisfaction, or personal well-being, (b) cultural, industry, or personal differences between participants that may influence their experience of servant leadership and its effects on job satisfaction and/or personal well-being as the sample of the study will be primarily focused within the United States, and (c) the possibility of a low response rate or low population of participants due to the distribution method through online survey tools such as SurveyMonkey® (Adamovic, 2022; Burkholder et al., 2020; Carnevale & Halak, 2020; Gabelica & Popov, 2020). These threats will be managed through various strategies. Though little can be done about managing the previous discussions possibly taken by the participants (threat “a”), snowball sampling and widespread dissemination of this study through survey tools address the generalizability of U.S.-based teleworking employees to other cultures (threat “b”) with the possibility of including as many as possible responses from as many available cultures as possible. To minimize the effect of a low respondent population (threat “c”), a wide range of populations will be reached including the Walden University participant pool, a Qualtrics panel audience, and the reach of online survey tools to assist in increasing response rates of the study.

Internal Validity

Potential threats to the internal validity of the study, or the proposition that a change in the aspects of servant leadership affect the job satisfaction and personal well-being of teleworking employees, includes causal or inaccurate implications from the data (Burkholder et al., 2020). For example, this non-experimental correlational study did not investigate the causal or means by which servant leadership influences job satisfaction and personal well-being for teleworking employees, focusing on the existence of the relationship between these variables. To address this threat to validity, the survey was constructed according to valid tests that have been proven in the literature. Additionally, a threat to internal validity of the study may arise from inaccurate responses from participants, either stemming from self-overestimation, self-underestimation, desires to give socially acceptable answers, or other personal reasons that may make an individual respondent give an inaccurate response to the survey (Al-Edressee, 2021). To address this threat, respondents were introduced the study, an explanation of the survey, and assurances of anonymity in responses will be given to all participants.

Ethical Procedures

This study was reviewed by the Institutional Review Board (IRB) of Walden University (Approval Number: 01-22-25-1135768). This review ensures that the plan, as given, protects the information, rights, and identities of all human participants so that their responses are not traceable to individuals. Informed consent given to each of the participants prior to their viewing and filling out the survey in the form of the researcher's name, mode of selection of the participant(s), purpose of the research, benefits of participation in the study, the level and form of participation required to complete the study, and the predicted risks that may come with being a member of the participant population. The informed consent information also contains a guarantee of confidentiality for the participant that all information shared between the participant and the researcher will only be seen and reviewed by the researcher and his dissertation committee members. Additionally, any shared information may be withdrawn from the study at any time upon request. Lastly, the information reviewed by the participants will include contact information for the researcher that the participant may use if they wish to withdraw or have a question they wish to ask.

Participants will not receive financial compensation for participation in this study, though they will have access to summary results of the survey. SurveyMonkey® allows respondents to provide contact information, such as email, if they desire to be contacted and informed of summary results of the study they participated in. This information, as part of SurveyMonkey® is removed from the data before analyzing summary data.

Confidentiality is protected for the participants through keeping and maintaining summary data, data analysis files, and all other information pertinent to the study containing identifiable information in password-protected files on a password-protected computer. Once the data is fully analyzed and a summary report is generated, the requests from participants that wish to receive that information will be listed and used to contact those participants to deliver upon their request. This contact information list will be deleted following the publication of the summary report.

Summary

Chapter 3 contains an outline of the research approach and design, data analysis plan, foreseen threats to validity including internal and external concerns, the recruitment strategy to be used to gather participants, sampling and data collection strategies from participants, the potential ethical concerns and how the data provided will be protected through the course of this study, and the methodology this study will use. This study uses a quantitative non-experimental correlational research design so to best examine the relationship between servant leadership and its influence on job satisfaction and personal well-being of teleworking employees without modifying or deriving a causal relationship between the variables involved. This study will use a combination of convenience sampling and snowball sampling techniques to generate a statistically significant population with the assistance of SurveyMonkey® to disseminate and return data that can be analyzed from multiple countries around the world, though focused on the United States and English-speaking nations. A sample size of 385 is needed for generalizability across this study. Prior to collecting any data from any participants as part of this study, informed consent, ethical procedures, privacy, and anonymity measures have been reviewed by the IRB of Walden University and have met with their approval. SurveyMonkey® tools including demographic data, the Servant Leadership Scale as developed by Liden et al. (2008), COPSOQ III (Useche et al., 2019), and the Psychological General Well-Being Index--Short Version (Grossi et al. 2006). The data of this study were analyzed through descriptive and inferential statistics such as the Pearson correlational analysis and hierarchical multiple regression to address the research questions of the study. Following this data collection described in Chapter 3, the results of the study are described in Chapter 4.

Chapter 4: Results

This quantitative, non-experimental, and correlational study examined the relationship between servant leadership and its influence on the job satisfaction and personal, mental well-being of teleworking employees through a virtually distributed survey. By focusing on components of servant leadership used with teleworking employees, this study aimed to examine the effect that emphasizing on the development of a community within the working group, encouraging open communication, and focusing on serving the needs of both the business and the individual team members can strengthen the job satisfaction experienced by teleworkers and preserve their mental well-being. The research questions and hypotheses for this study are as follows:

RQ1: What is the relationship between servant leadership on the job satisfaction of teleworking employees?

H_o1: There is no correlation between servant leadership and job satisfaction in teleworking employees.

H_a1: There is no correlation between servant leadership and job satisfaction in teleworking employees.

RQ2: What is the relationship between servant leadership and personal well-being in teleworking employees?

H_o2: There is no correlation between servant leadership and personal well-being in teleworking employees.

H_a2: There is no correlation between servant leadership and personal well-being in teleworking employees.

Chapter 4 shares and discusses the data collection strategy in detail, the data analysis process, descriptive statistics for the results found via the study, testing results for the research questions and their associated hypotheses, and any additional findings from the data. The following sections of Chapter 4 follow this process of reviewing the data collection process, using the data to share the descriptive statistics to characterize the study participants, present the results of the data analysis to specifically address the two research questions and their hypotheses, and conclude with a summary of Chapter 4 and introduction to Chapter 5.

Data Collection

Data for this study was collected from research participants provided through the SurveyMonkey Audience service provided by SurveyMonkey®. A cross-sectional study was developed based on combining the servant leadership-7, the COPSOQ III, and the Psychological General Well-Being Index—Short Version to satisfy the requirements of SurveyMonkey's® SurveyMonkey Audience service and to collect empirical data from teleworking employees within the United States on the independent and dependent variables (Grossi et al., 2006; Liden et al., 2015; Useche et al., 2019). The study with this configuration was approved by the Walden University IRB on February 2, 2025, and then constructed in SurveyMonkey® for distribution. With the assistance of SurveyMonkey® and their pre-screened and selected participant pools, data collection for the study took place over 2 days between February 5 and February 7, 2025. A total of 368 participants responded to the survey invitation shared by SurveyMonkey® to the SurveyMonkey Audience participant pool with 197 participants completing all survey questions.

A required population size of 114 for this study was calculated using G*Power (version 3.1.9.7) based on the statistical power, confidence interval, effect size, and number of predictors (Frankfort-Nachmias et al., 2020). Outputs of G*Power are referenced in Appendix B, included below. With 197 respondents recruited through SurveyMonkey® who left no questions unanswered and satisfied all qualification questions, this satisfied the required population for the study even with potential attrition within the respondent pool. 197 respondents represent a 72.8% increase over the required number of respondents for this pool. With 368 total respondents, this represents a 53.5% rate of respondents qualifying for the study while the remaining 171 (or 46.5% of total) responses failed to qualify for the study and were removed.

The only major deviation from the data collection plan is represented by the excessive sample size taken for this study. Although the original plan required 150 respondents be requested from SurveyMonkey®, 200 were requested due to requirements for SurveyMonkey Audience and simplicity in contracting services of SurveyMonkey® to assist in this survey. This type of deviation is a strength for the study as a larger sample size increases the statistical power and reduces estimation errors, leading to a more accurate representation of the population being studied. SurveyMonkey®, in providing a larger sample population for data analysis offers a stronger likelihood of this study offering representative results for teleworkers in the United States.

Survey Administration

Using the tools that SurveyMonkey® offers through their website for survey creation and analysis, the study's survey was created using the three selected instruments.

Each question was entered into the tools available through the SurveyMonkey® website and loaded into the SurveyMonkey Audience selection process which has requirements for the length of the survey as well as requirements for minimum participation in the survey. Once all requirements are met, the survey can be launched for a specified amount of time and / or until a set number of qualifying (as determined by how questions are set up as "qualifying" questions that must be answered by every respondent in a particular way to continue with the survey) respondents have completed the survey.

The survey was made active between February 5th, 2025, and was disseminated through the SurveyMonkey Audience system until 200 qualifying responses to the study were recorded. The 201st qualifying response was recorded on February 7, 2025 at which point SurveyMonkey Audience closed the survey and began performing initial analysis of the data as well as organizing the data for download. A total number of 368 respondents (201 initially labelled as qualifying, 167 labelled as not qualifying) though further data analysis adjusted the number of qualifying responses to the survey down to 197 after four respondents did not fully complete all questions within the survey.

Once SurveyMonkey® had sent notification that the survey was closed as the targeted number of qualifying respondents had been reached, the data was downloaded from the SurveyMonkey® associated, password-protected profile and onto the password-protected computer to perform specific analysis of the data. The response data was exported into .sav (usable by SPSS) and .xlsx (usable by Microsoft Excel) on a password-protected computer for retention and records. The .sav files were used in SPSS version 29 to perform data analysis for the study including descriptive statistics and computed items such as means, variances, standard deviations, and linear regression analyses for each variable. The .xlsx file was used as both a backup file to guard against mistakes or file corruption during the course of data analysis as well as to quickly calculate total scores for the SL-7, COPSOQ III, and PGWB-S to be used during data analysis.

Results

SPSS (version 3.1.9.7) was used as the sole program to perform analysis of the data produced through SurveyMonkey®. Descriptive statistics, assumption testing, and Pearson correlation and hierarchical linear regression analysis were performed to create the study results. The overall results of the study per the hierarchical multiple regression performed to determine if servant leadership influences the job satisfaction and personal well-being of teleworkers within the United States was statistically significant with $R^2 = 0.52$, $F(2,194) = 105.47$, $p < 0.001$, adjusted $R^2 = 0.52$. The Pearson's correlations run to assess the relationships between servant leadership, job satisfaction, and personal well-being with 197 participants recruited showed a linear relationship in both cases (one case being servant leadership correlated to job satisfaction and the second case being servant leadership correlated to personal well-being) with all variables normally distributed as assessed by Shapiro-Wilk's test ($p < 0.05$) without outliers. There was a statistically significant, strong positive correlation between the presence of servant leadership and the job satisfaction of teleworking employees, $r_{(195)} = 0.72$, $p < 0.05$ with servant leadership explaining 52% of the variation of job satisfaction in teleworking employees. There was a statistically significant, moderate positive correlation between the presence of servant leadership and personal well-being of teleworking employees, $r_{(195)} = 0.38$, $p < 0.05$ with servant leadership explaining 14% of the variation of personal well-being in teleworking employees. There are statistically significant effect between servant leadership, job satisfaction, and personal well-being with a hierarchical linear regression that resulted in an R^2 value of 0.519 for servant leadership compared to job satisfaction and an R^2 value of 0.521 for servant leadership compared to personal well-being. This suggests the trends that the trend accounts for 51.9% and 52.1% of variance in the models, respectively. There is significant and moderate to strong correlation between servant leadership, job satisfaction, and personal well-being for teleworkers in the United States, addressing Research Questions 1 and 2.

Descriptive Statistics

The demographic characteristics of the respondents of this study are detailed below in Table 1 including the gender, age ranges, relative position in the organization, year ranges of experience in all roles, total number of years of telework experience, number of years of experience in their current roles, and number of years of teleworking in their current roles. Of the total 368 respondents to this study, 197 were valid for the study and are reflected below in the various demographic as both frequencies and percentages.

Table 1

Descriptive Statistics Obtained for This Study

Variable	Category	Frequency	Percentage
	Male	72	36.55
Gender	Female	125	63.45
	Total	197	100.00
Age range	18–29 years	39	19.80

	30–44 years	63	31.98
	45–60 years	70	35.53
	60 + years	25	12.69
	Total	197	100.00
Relative position in the organization	Non-management.	85	43.15
	Middle-management / supervisor / team leader / manager	63	31.98
	Senior management	18	9.14
	Top management / director / general manager	12	6.09
	C-chief executive	11	5.58
	Prefer to not answer question	8	4.06
	Total	197	100.00
Years of work experience in all roles	Less than 1 year	8	4.06
	1–5 years	45	22.84
	6–10 years	44	22.34
	11–15 years	28	14.21
	16–20 years	21	10.66
	21–25 years	19	9.64
	26–30 years	11	5.58
	31 years or greater	20	10.15
	Prefer to not answer question	1	0.51
	Total	197	100.00
Years of telework experience in all roles	Less than 1 year	20	10.15
	1–5 years	92	46.70
	6–10 years	40	20.30
	11–15 years	22	11.17
	16–20 years	8	4.06
	21–25 years	5	2.54
	26–30 years	3	1.52
	31 years or greater	4	2.03
	Prefer to not answer question	3	1.52
	Total	197	100.00
Years of experience in current role	Less than 1 year	16	8.12
	1–5 years	80	40.61
	6–10 years	45	22.84
	11–15 years	22	11.17
	16–20 years	16	8.12

	21–25 years	7	3.55
	26–30 years	4	2.03
	31 years or greater	6	3.05
	Prefer to not answer question	1	0.51
	Total	197	100.00
Years of experience of telework in current role	Less than one year	24	12.18
	1–5 years	108	54.82
	6–10 years	30	15.23
	11–15 years	14	7.11
	16–20 years	8	4.06
	21–25 years	4	2.03
	26–30 years	4	2.03
	31 years or greater	2	1.02
	Prefer to not answer question	3	1.52
	Total	197	100.00

For this study's demographic variables, the majority of respondents appear to be female, non-management teleworkers that have begun teleworking within the previous 5 years. In addition, a demographic question that was asked but is not included in Table 1 concerned whether the respondents were full-time or hybrid teleworkers. The reason this demographic was not included in Table 1 above is because 100% of the 197 valid respondents reported that they are full-time teleworkers, which allowed for this study to focus purely on full-time teleworking employees within the United States.

The descriptive statistics for the independent and dependent variables are shared in Table 2 below. Servant leadership, the job satisfaction score, and the personal well-being of all valid respondents, including the minimum and maximum values for the instrument, mean, standard deviation, skewness, and kurtosis are evaluated. The SL-7 is a combined scale score representing servant leadership, job satisfaction is a subscale item of the COPSOQ instrument, and the PGWB-S is a combined scale score representing Personal Well-Being.

Table 2

Descriptive Statistics for the Independent and Dependent Variables

Variable	*N*	Mean	Std. dev.	Skewness		Kurtosis	
	Stat.	Stat	Stat	Stat	Std. err.	Stat	Std. err.
Servant leadership	197	4.78	1.36	-0.43	0.17	-0.19	0.35
Job satisfaction	197	70.27	16.95	-0.30	0-17	-0.08	0.35
Personal well-being	197	17.57	5.23	0.10	0.17	0.22	0.35

The SL-7 is a scale of seven items that can be scored as a mean of each dimension individually, ranging from 1 to 7. The servant leadership score can be understood with a "high" score being represented by a mean of 5.75 to 7, a "moderate" score represented by a mean of 3.5 to 5.5, a "low" score represented by 2 to 3.25, and an "extremely low" score represented by 0 to 1.75 (Liden et al., 2015). The seven questions of the Sl-7 are measured by a 7-point Likert scale (1 to 7) which is then averaged to create a scaled value. Each question of the scale represents a different component of servant leadership including (Question 1) conceptual skills, (Question 2) helping subordinates grow and succeed, (Question 3) emotional healing, (Question 4) creating value for the community, (Question 5) putting subordinates first, (Question 6) empowering, and (Question 7) behaving ethically (Canavesi & Minelli, 2022; Liden et al., 2015). The servant leadership score of the respondents has a mean score of 4.78 with a standard deviation of 1.36 which falls in the "moderate" score zone for servant leadership. This score represents a general tendency for the population to have answered “Somewhat Agree” (represented by a “5” on the survey), representing a moderate value of servant leadership being experienced by the general respondent population.

With the SL-7 created by shortening the larger SL-28 into seven categorical questions, it may be interesting to note the individual responses which is noted below in Table 3 (Liden et al., 2015). The SL-7 considers how the respondent experiences how their leadership interacts with and treats them, this would imply that the general experience of teleworking employees in the United States trend towards not feeling that they are put first by their leadership (mean of 4.36, closest to a “neutral” response). A stronger experience in terms of emotional healing (mean of 4.62, closest to a “somewhat agree” response) with their leadership, experiencing leadership creating value for the community (mean of 4.66, closest to a “somewhat agree” response), leadership helping subordinates grow and succeed (mean of 4.72, closest to a “somewhat agree” response), and the conceptual skills of servant leadership (mean of 4.88, closest to a “somewhat agree” response). The strongest responses are those leadership behaving ethically (mean of 5.08, closest to a “somewhat agree” response) and leadership empowering teleworking employees (mean of 5.11, closest to a “somewhat agree” response). Based on these values, teleworkers likely do not see many servant leadership behaviors and practices from their leadership and management though ethical behaviors and empowering subordinates are more prevalent behaviors.

Table 3

Descriptive Statistics for the SL-7 Subscale Items

Variable	*N*	Mean	Std. dev.	Skewness		Kurtosis	
	Stat.	Stat	Stat	Stat	Std. err.	Stat	Std. err.
Conceptual skills	197	4.88	1.69	-0.66	0.17	-0.41	0.35
Helping subordinates grow and succeed	197	4.72	1.73	-0.42	0.17	-0.72	0.35
Emotional healing	197	4.62	1.85	-0.44	0.17	-0.82	0.35
Creating value for the community	197	4.66	1.74	-0.44	0.17	-0.6	0.35
Putting subordinates first	197	4.36	1.78	-0.18	0.17	-0.74	0.35
Empowering	197	5.11	1.55	-0.86	0.17	0.22	0.35
Behaving ethically	197	5.08	1.62	-0.71	0.17	-0.15	0.35

As a means of evaluating psychosocial risk assessment, the COPSOQ contains several subscales targeted at identifying and evaluating the strength of items such as job demands, influence and development, interpersonal relationships and leadership, job insecurity, strain, and job satisfaction (COPSOQ International Network, 2019; Useche et al., 2019). For the purposes of this study, the COPSOQ was measured on a 7-point Likert scale (1-7) and given values to correspond to a 100-point scale for reach category (Breedt et al., 2023; Jensen & Merle, 2024). Each subscale is measured individually and has its own directionality where “higher” values represent a greater amount of either job demands (a negative scale), influence and development (a positive scale), interpersonal relationships and development (a positive scale), job insecurity (a negative scale), strain (a negative scale), and job satisfaction (Breedt et al., 2023; Hanson & Erikson, Jensen & Merle, Useche et al., 2019). These subscales can be understood as a percentage of the subscale item where a value of 0 to 14 represents “almost never,” a value of 14.1 to 28 represents “rarely,” a value of 28.1 to 42 represents “not very often,” a value of 42.1 to 57 represents a “neutral,” a value of 57.1 to 71 represents “from time to time,” a value of 71.1 to 85 represents “often,” and a value of 85.1 to 100 represents an “almost always” or equivalent responses such to represent frequency and agreement (Useche et al., 2023). (Breedt et al., 2023; Jensen & Merle, 2024; Useche et al. 2019). For job satisfaction, the respondent scores ranged from 14.29 to 100 with a mean of 70.27 and a standard deviation of 16.95. This result indicates that the respondent population has a general trend of being satisfied with their job “from time to time” although it is nearly “often.”

Additional items of the COPSOQ are more deeply investigated below in Table 4. The positive subscale items of influence and development (mean of 74.9, representing a frequency of “often”) and interpersonal relationships and development (mean of 65.5, representing a frequency of “from time to time”) and the negative subscale items of job demands (mean of 61.3, representing a frequency of “from time to time”), job insecurity (mean of 53.75, representing a frequency of “neutral”), and strain (mean of 48.23, representing a frequency of “neutral”) can be used to understand specific items of job satisfaction for teleworkers in the United States. The strongest items are the positive subscales of influence and development and interpersonal relationships and development, which can indicate that teleworkers in the United States are learning and experiencing new things at work, feel that work is important, given good information about their work requirements, and similar items often or from time to time and show a positive job satisfaction. However, the negative subscale items of job demands, job insecurity, and strain show that there are neutral and somewhat common instances where their position requires significant investments of time and effort, lack of connection among their team members, and worries concerning their position being eliminated or changed.

Table 4

Descriptive Statistics for the Subscale Items of COPSOQ

Variable	*N*	Mean	Std. dev.	Skewness		Kurtosis	
	Stat.	Stat	Stat	Stat	Std. err.	Stat	Std. err.
Job demands	197	61.25	16.96	0.24	0.17	-0.38	0.35
Influence and development	197	74.91	17.99	-0.75	0.17	0.43	0.35
Interpersonal relationships and development	197	65.47	14.72	-0.31	0.17	0.16	0.35
Job insecurity	197	53.75	21.52	0.19	0.17	-0.69	0.35
Strain	197	48.23	11.72	0.12	0.17	0.28	0.35

Personal well-being as measured by the PGWB-S score ranged from 3 to 30 with a mean score of 17.57 and a standard deviation of 5.230. The PGWB-S delivers a single score derived by aggregating the response values together with a “good” value (meaning that the respondent is considered to have “good” personal well-being) with a score of 15 or greater while scores 14 and below to be considered “low” personal well-being (Grossi et al., 2006; Mousa & Dardas, 2024). The PGWB-S delivers a single score aggregated by summing the values from the 6-point Likert-scale (0–5) responses of all six questions, asking the respondent to self-report their feelings of personal energy, nerves, emotional stability, and other factors (Grossi et al., 2006). The mean score for the PGWB-S for respondents to this study of 17.57 indicates that the personal well-being is positive for teleworkers in the United States.

Assumptions for Statistical Analyses

This study was a quantitative, non-experimental, and correlational study designed to measure the use of servant leadership within teleworking teams and the effects servant leadership has on the job satisfaction and personal well-being of remote workers. The design of this study was based on a dependent variable (servant leadership) being compared in a hierarchical linear regression to two independent variables (job satisfaction and personal well-being) to develop a Pearson correlation analysis to answer RQ 1 and 2. The hierarchical linear regression allows for predicting the dependent variable’s response to multiple independent variables with considerations for covariates and possible causal effects (Laerd Statistics, 2015). This analysis strategy allows for identifying the amplitude of variation that servant leadership will experience in teleworkers in the United States can be explained by the multiple independent variables of job satisfaction and personal well-being.

Statistical Assumptions for Pearson Correlational Analysis

Pearson correlational analysis has five assumptions that must be considered to meet the demands of the test (Laerd Statistics, 2015). The first two assumptions are specifically concerning the design of the study while the remaining three concern the fit of the data to a Pearson correlational study model. These assumptions are that (1) the variables should be on continuous scales, (2) the variables should be paired, (3) there must be a linear relationship between the two variables, (4) there should be no significant outliers, and (5) the analysis must have normality (Laerd Statistics, 2015).

Assumption 1: Continual Variables. The variables used within the study must be continuous at either the scale or nominal levels (Laerd Statistics, 2015). The variables used for this study include servant leadership, job satisfaction, and personal well-being, which are all measured at the scale level, which does not violate this assumption.

Assumption 2: Paired Variables. The variables used in the study must be paired (or "linked" as there are three variables inherent to this study, not two) so that each respondent or case has multiple values representing the included variables (Laerd Statistics, 2015). For this study, this would mean that each respondent entry will have a value for servant leadership, job satisfaction, and personal well-being. As each respondent entry in this study represents that data gathered through the survey provided to each respondent which has been computed into the variables used for this study. As each respondent has linked variables relating to each respondent's value of servant leadership, job satisfaction, and personal well-being, the assumption was not violated.

Assumption 3: Linearity. A linear relationship must exist between the variables, often validated by a scatter plot and visual inspection (Laerd Statistics, 2015). A "straight line" relationship between the paired relationships of servant leadership vs. job satisfaction and servant leadership vs. personal well-being was found in scatterplot diagrams below in Figures 1 and 2 below, respectively. This assumption was not violated.

Figure 1

Simple Scatterplot of Servant Leadership Versus Job Satisfaction

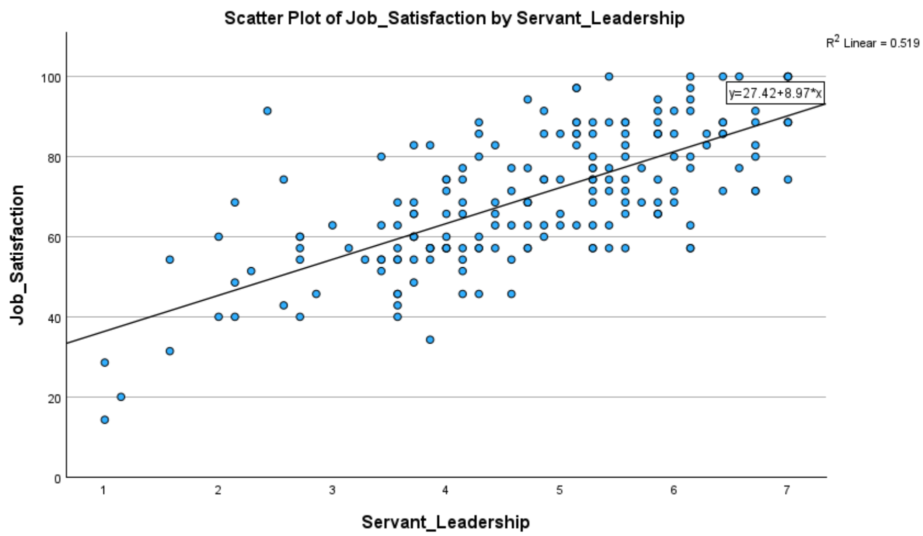
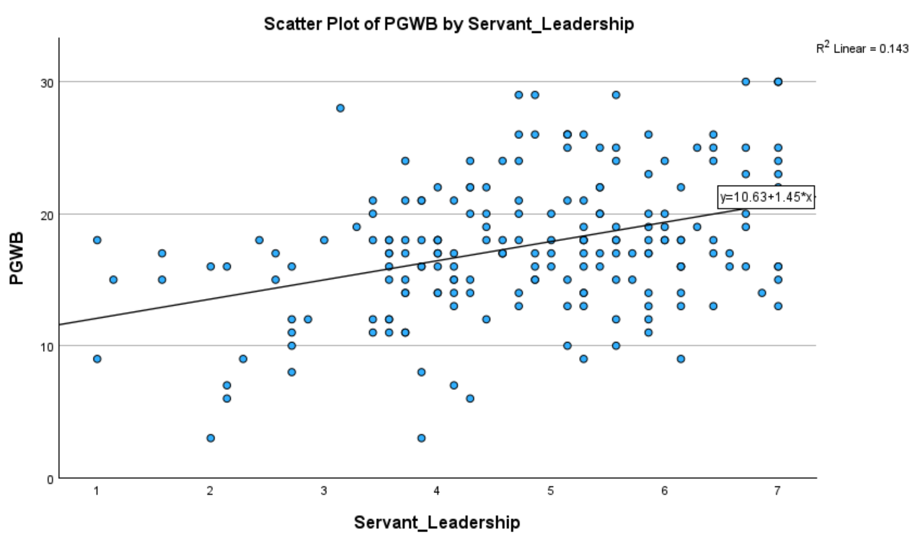


Figure 2

Simple Scatterplot of Servant Leadership Versus Personal Well-Being

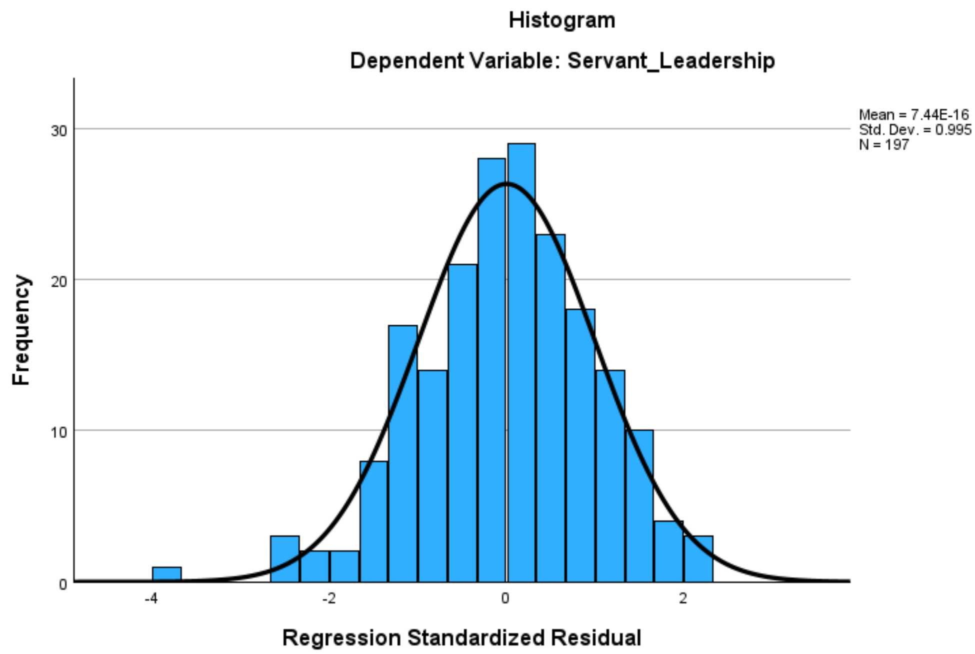


Assumption 4: No significant outliers. There must be no data points that have a residual greater than ±3 standard deviations from trend of the data set (Laerd Statistics, 2015). This was calculated by SPSS as part of the analysis with a single respondent entry being labelled as a possible outlier. This single item has a calculated residual of -3.54, which is outside of normally acceptable bounds and was investigated for possible computation errors or issues derived from misinputs during the survey process. No data entry or computation issues were discovered and as this is the single outlier with the whole data set, this assumption will not be considered as violated.

Assumption 5: Normality. The data set must be normally distributed, which can be investigated through reviewing skewness and kurtosis values within the descriptive statistics for the variables and plotting the data in a histogram with a normal curve (Laerd Statistics, 2015). Both the skewness and kurtosis values in Table 2 are within the ±1 range that likely indicate a normal distribution within the data set. The data for the dependent variable, servant leadership, was plotted onto a histogram, Figure 3 shown below, and the sample appears to be approximately normally distributed. With the data set having acceptable values of skewness and kurtosis as well as the histogram plot showing an approximately normally distributed curve, the assumption about normality will be considered not violated.

Figure 3

Histogram With Normal Curve Plot for Servant Leadership



Statistical Assumptions for Hierarchical Linear Regression

The hierarchical linear regression test has eight assumptions to verify the eligibility of the data for this type of analysis. These assumptions are (1) there is one dependent variable measured at the continuous level, (2) two or more independent variables that are measured at the continuous level, (3) independence of observations, (4) linear relationships between the dependent variable the independent variables separately and collectively, (5) homoscedasticity of residuals, (6) the data does not show multicollinearity, (7) no significant outliers, no high leverage points, or high influence points, and (8) the data is normally distributed (Laerd Statistics, 2015). The initial two assumptions relate to the study design and the nature of the variables being investigated.

These assumptions are related to the assumptions already tested for the Pearson correlation, though they are unique and will be discussed below.

Assumption 1: One continuous and dependent variable measured at the interval or ratio level. The hierarchical linear regression requires that there be a single dependent variable that is important to the study that is continuous and measured at the scale or nominal level to be compared to two or more independent variables in a sequential manner (Laerd Statistics, 2015). The dependent variable for this study is servant leadership as measured by the SL-7 which creates a scale variable, so this assumption will be considered not violated.

Assumption 2: Two (or more) independent variables measured at the scale or nominal level. The independent variables that can be used for a hierarchical linear regression must be scale or nominal variables such as job satisfaction and personal well-being as used as independent variables for this study (Laerd Statistics, 2015). As these independent variables are both scale variables, this assumption will be considered not violated.

Assumption 3: Independence of observations. In a correctly designed hierarchical linear regression, the observations of the data could be related, and this is tested by reviewing the Durbin-Watson values generated during the analysis (Laerd Statistics, 2015). The Model Summary as produced by SPSS during analysis is given below in Table 5 below, where the Durbin-Watson value of 1.921 was calculated. The Durbin-Watson statistic can range from values of 0 to 4 but a model summary is considered to have independent observations when the value is near to 2 which suggests that there is no autocorrelation in the sample of data between residuals (Laerd Statistics, 2015). With a Durbin-Watson result of 1.921 which is close to 2, this assumption will be considered not violated.

Table 5

Model Summary for Hierarchical Linear Regression

Model	*R*	*R* square	Adjusted *R* square	Std. error of the estimates	Durbin-Watson
1	0.72[a]	0.52	0.52	0.95	
2	0.72[b]	0.52	0.52	0.95	1.92

a. Predictors: Job Satisfaction

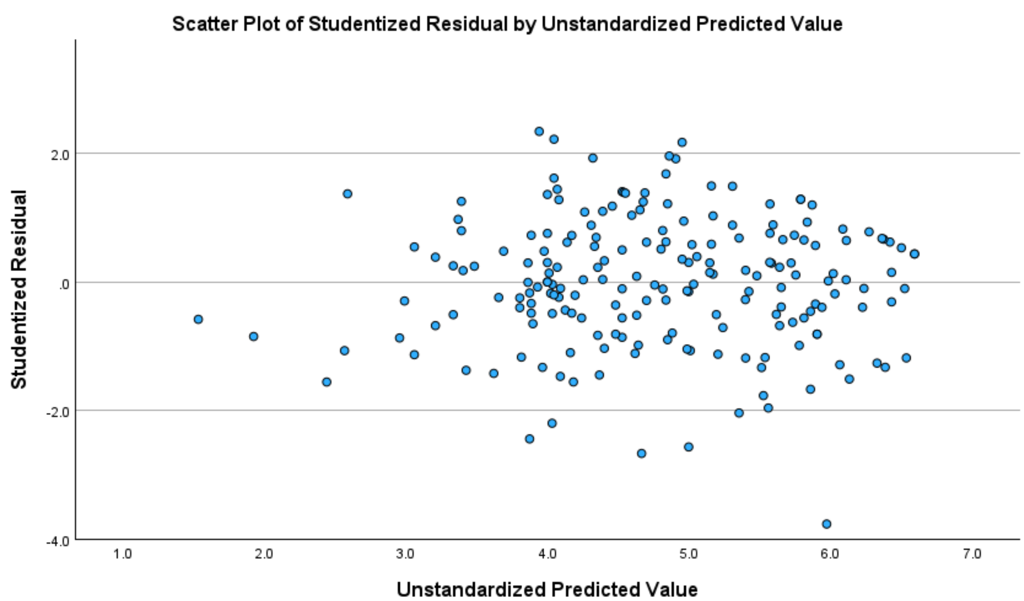
b. Predictors: Job Satisfaction, Personal Well-Being

Assumption 4: Linear relationships between the dependent variable and each of the independent variables separately and collectively. The data considered in a hierarchical linear regression should have a linear relationship (though a linear relationship may be achievable for some data sets through transformation) between the dependent and independent variables to fit the created model (Laerd Statistics, 2015). Scatter plots are created to test for linearity to show a general relationship between the dependent and independent variables, such as those shown above in Figures 1 and 2. Based on the visual inspection of the data, this assumption will be considered not violated.

Assumption 5: Homoscedasticity of residuals. The homoscedasticity of the data set relates to testing for equal variance for all values of the predicted dependent variable, often verified by plotting the studentized residuals against the standardized predicted values and performing a visual inspection of the scatter plot (Laerd Statistics, 2015). The scatter plot of the data is shown below in Figure 4. The shape and visual inspection of the scatter plot shows an approximately “rectangular” shape with no “funnel” or “fan” shapes that would indicate the data lacks homoscedasticity. Based on the visual inspection of the data, this assumption will be considered not violated.

Figure 4

Homoscedasticity Plot of Residuals and Predicted Values



Assumption 6: The data does not show multicollinearity. When independent variables are highly correlated with each other, this results in multicollinearity which can create concerns with isolating the effect and variance that one variable contributes compared to another (Laerd Statistics, 2015). The multicollinearity of the data set is investigated by inspecting the Tolerance/VIF (variance inflation factor) values computed

during analysis and given below in Table 6. The VIF values for all variables are between 1.000 and 1.296, which is well below the commonly accepted value that shows multicollinearity of 10, there is likely no multicollinearity issues within the data set. Based on the coefficients and VIF values calculated in the analysis, this assumption will be considered not violated.

Table 6

Collinearity Coefficients for Hierarchical Linear Regression Analysis

Model		Unstandardized coefficients		Standardized coefficients			95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. error	Beta	*t*	Sig	Lower bound	Upper bound	Tol.	VIF
1	(Constant)	0.71	0.29		2.46	0.015	0.14	1.28		
	Job satisfaction	0.06	0.00	0.72	14.52	<0.001	0.05	0.07	1.00	1.00
2	(Constant)	0.62	0.31		2.03	0.044	0.02	1.23		
	Job satisfaction	0.06	0.01	0.70	12.37	<0.001	0.05	0.07	0.77	1.30
	personal well-being	0.01	0.02	0.04	0.79	0.433	-0.02	0.04	0.77	1.30

Assumption 7: There are no significant outliers, high leverage points, or highly influential points. Outliers are observations that are outside what would be considered expected in terms of having a standardized residual value of less than ±3, high leverage points are observations that have extreme value for at least one independent variable, and high influence points are observations that can significantly affect the slope of the

regression line (Laerd Statistics, 2015). During the analysis, one item was identified as an outlier with a standardized residual of -3.738 (servant leadership value of 2.43, a predicted value of 5.97, with a residual of -3.54). While investigating this value, there is no reason to believe that this observation was input incorrectly into the data set and may indicate that the model does not adequately explain the variance, at least in this respondent's particular case (Laerd Statistics, 2015). For all other observations, there were no other values that had a studentized deleted residual of greater than ±3 and no values that had a leverage value of greater than 0.2 (leverage value for the case in question is 0.00970) nor a Cook's Distance value above 1 (Cook's Distance value for the case in question is 0.07092). Based on these values, there is no cause to further investigate the values as outliers, leverage, or influential points to suggest they have significant undue influence on the model so this assumption will be considered mostly not violated.

Assumption 8: Normality. As a part of performing inferential statistics, the residual values of the data set should be normally distributed which can be verified through plotting the points on a histogram and a superimposed normal curve, a Normal P-P plot using standardized residuals, and a Normal Q-Q plot of the studentized residuals (Laerd Statistics, 2015). As part of the analysis, a histogram was created with is given below in Figure 5, a Normal P-P plot is given below in Figure 6, and a Normal Q-Q Plot is given below in Figure 7. As the distribution of standardized residuals generally fits the superimposed normal curve for the histogram in Figure 5, showing that the data has no significant deviations from normality. This is verified in Figures 6 and 7 where the data points on the graph closely follow the diagonal line with only minor deviations. As a result of these observations, no transformations or adaptations of the data is required and the assumption of normality will be considered not violated.

Figure 5

Frequency Distribution of the Regression Standardized Residual on Servant leadership

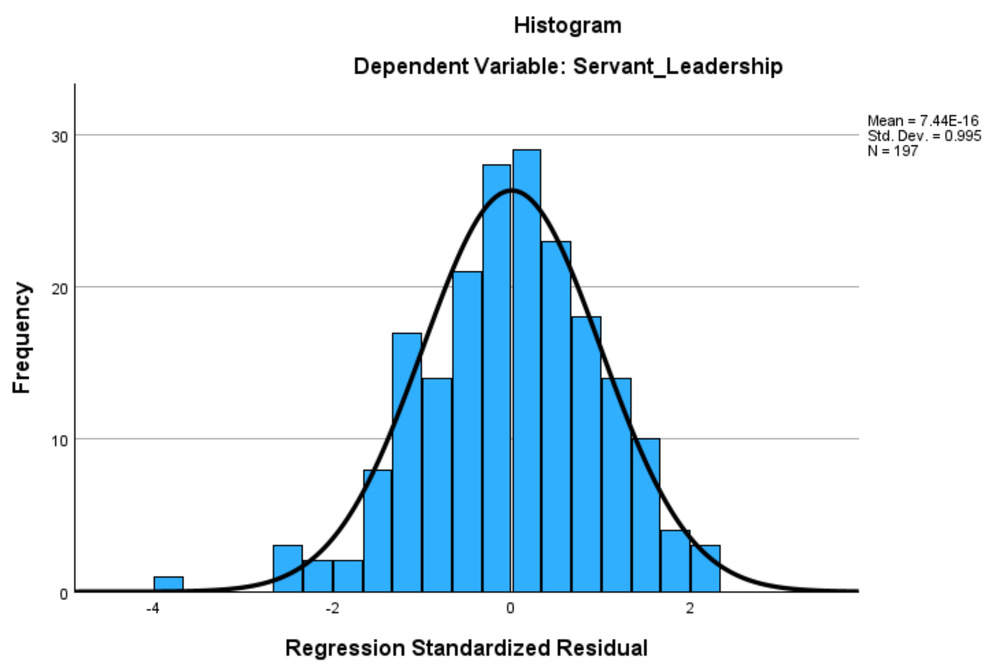


Figure 6

Normal P-P Plot of Servant Leadership

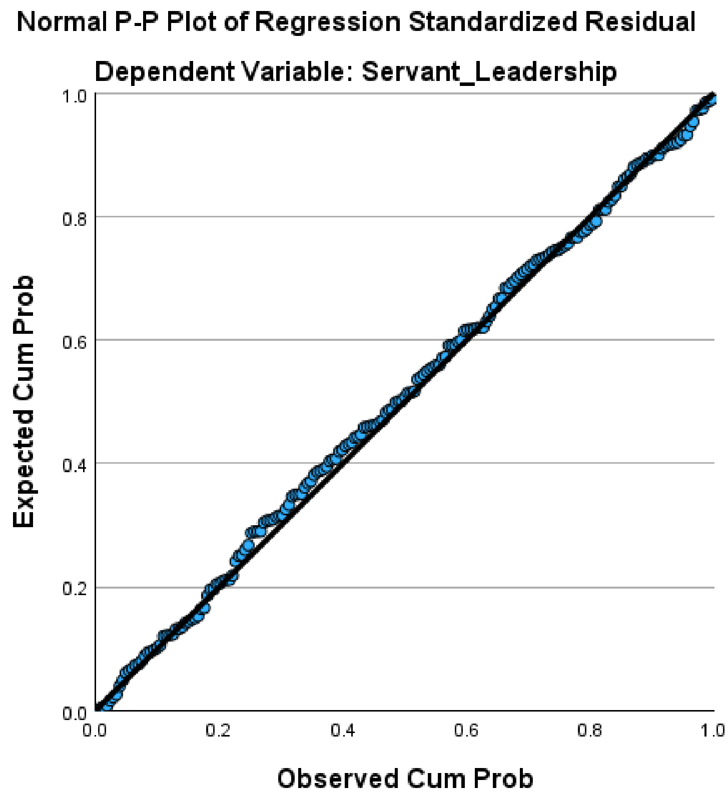
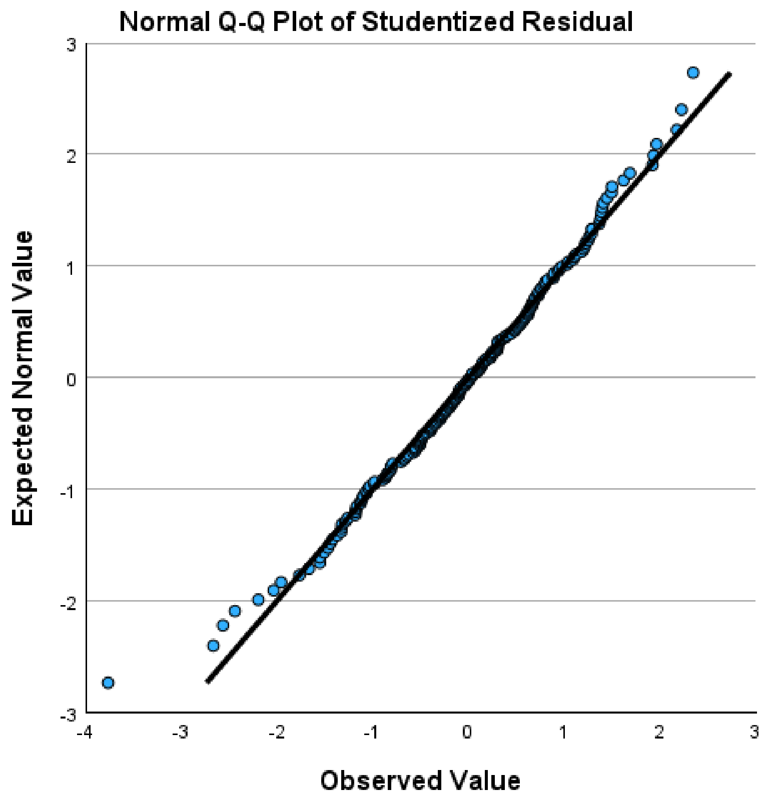


Figure 7

Normal Q-Q Plot of Servant Leadership



Test Results for Hypothesis 1

RQ1: What is the relationship between servant leadership on the job satisfaction of teleworking employees?

H_o1: There is no correlation between servant leadership and job satisfaction in teleworking employees.

H_a1: There is no correlation between servant leadership and job satisfaction in teleworking employees.

Hypothesis 1 in Statistical Terms

H_o1: $r_1 = 0$ where r_1 is the Pearson correlation coefficient concerning the relationship between servant leadership and job satisfaction.

H_a1: $r_1 \neq 0$ where r_1 is the Pearson correlation coefficient concerning the relationship between servant leadership and job satisfaction.

Correlational Analysis for Hypothesis 1

The relationship between servant leadership and job satisfaction was examined by performing a Pearson correlation analysis. The results for the Pearson correlation performed when correlating servant leadership solely to job satisfaction are given below in Table 7 while the results for the Pearson correlation performed when correlating servant leadership to job satisfaction and personal well-being as a hierarchical linear regression are given below in Table 8. When servant leadership is correlated to job satisfaction either alone or as part of a hierarchical linear regression the correlation coefficient is $r_1 = 0.721$ with a significance at the <0.001 level (1-tailed). This indicates that there is strong statistical significance and there is a positive coefficient that shows a strong relationship between servant leadership and job satisfaction, and this is a strong predictor (Laerd, 2015). Given the statistical significance at $\alpha = 0.05$ found when examining the correlation between servant leadership and job satisfaction, the null hypothesis H_01_1 was rejected in favor of the alternative hypothesis H_a1_1.

Table 7

Correlational Analysis Among Servant Leadership and Job Satisfaction

		Servant leadership	Job satisfaction
Pearson correlation	Servant leadership	1.00	0.72
	Job satisfaction	0.72	1.00
Sig. (1-tailed)	Servant leadership		<0.001
	Job satisfaction	<0.001	
N	Servant leadership	197	197
	Job satisfaction	197	197

Table 8

Correlational Analysis Among Servant Leadership, Job Satisfaction, and Personal Well-Being in a Hierarchical Linear Regression

		Servant leadership	Job Satisfaction	Personal Well-Being
Pearson Correlation	Servant leadership	1.00	0.72	0.38
	Job Satisfaction	0.72	1.00	0.48
	Personal Well-Being	0.38	0.48	1.00
Sig. (1-tailed)	Servant leadership		<0.001	<0.001
	Job Satisfaction	<0.001		<0.001
	Personal Well-Being	<0.001	<0.001	
N	Servant leadership	197	197	197
	Job Satisfaction	197	197	197

Personal Well-Being	197	197	197

Test Results for Hypothesis 2

RQ2: What is the relationship between servant leadership and personal well-being in teleworking employees?

H_o2: There is no correlation between servant leadership and personal well-being in teleworking employees.

H_a2: There is no correlation between servant leadership and personal well-being in teleworking employees.

Hypothesis 2 in Statistical Terms

H_o2: $r_2 = 0$ where r_2 is the Pearson correlation coefficient concerning the relationship between servant leadership and personal well-being.

H_a2: $r_2 \neq 0$ where r_2 is the Pearson correlation coefficient concerning the relationship between servant leadership and personal well-being.

Correlational Analysis for Hypothesis 2

The relationship between servant leadership and personal well-being was also examined through performing a Pearson correlational analysis and the results for the correlation between servant leadership solely to personal well-being are given below in Table 9 (results for the correlation between servant leadership and personal well-being as a hierarchical linear regression are given above in Table 8 alongside job satisfaction). When servant leadership is correlated to personal well-being either alone or as part of the hierarchical linear regression, the correlation coefficient was $r_2 = 0.379$ with a significance at the <0.001 level (1-tailed). This does indicate a weaker, though still positive and moderately strong relationship in a positive direction between servant leadership and personal well-being. This indicates that there is strong statistical significance and there is a positive coefficient that shows a moderate relationship between servant leadership and personal well-being as a predictor (Laerd, 2015). Given the statistical significance at $\alpha = 0.05$ found when examining the correlation between servant leadership and personal well-being, the null hypothesis H_02_1 was rejected in favor of the alternative hypothesis H_a2_1.

Table 9

Correlational Analysis Among Servant Leadership and Personal Well-Being

		Servant leadership	Personal Well-Being
Pearson Correlation	Servant leadership	1.00	0.38
	Personal Well-Being	0.38	1.00
Sig. (1-tailed)	Servant leadership		<0.001
	Personal Well-Being	<0.001	
N	Servant leadership	197	197
	Personal Well-Being	197	197

Additional Findings

In addition to the hierarchical linear regression and Pearson correlations performed during this study, an ANOVA was performed. ANOVA testing can be used to determine if there are statistically significant differences between data sets, such as if there is a statistically significant relationship servant leadership, job satisfaction, and personal well-being (Laerd, 2015). The results of the ANOVA are given below in Table 10 and show that the regression was significant at the $\alpha = 0.05$ level for both the regression for job satisfaction alone ($F = 210.735$) and job satisfaction and personal well-being together ($F = 105.471$). In addition to the Model Summary presented in Table 5 where the $R^2 = 0.517$ when job satisfaction is considered alone and $R^2 = 0.516$ when job satisfaction and personal well-being are considered together, these results reveal that the relationship between servant leadership, job satisfaction, and personal well-being for teleworkers in the United States. This would suggest that approximately 48.3% - 48.4% (respectfully) of change is due to variability not explained in this study.

Table 10

ANOVA Results

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	188.83	1	188.83	210.74	<0.001
	Residual	174.73	195	0.90		
	Total	363.56	196			
2	Regression	189.39	2	94.69	105.47	<0.001

Residual	174.18	194	0.90
Total	363.56	196	

Summary

In this chapter, the data collection, analysis of data, and results of the quantitative, non-experimental, and correlational study were examined and reviewed including verifying underlying statistical assumptions for the Pearson correlations, hierarchical linear regression, and ANOVA performed for this study. The relationship between servant leadership and its influence on the job satisfaction and personal well-being of teleworking employees in the United States was determined using a virtually distributed survey. This data gathered was analyzed using SPSS (version 3.1.9.7) to perform the statistical tests necessary to test the following Research Questions.

RQ1: What is the relationship between servant leadership on the job satisfaction of teleworking employees?

H_o1: There is no correlation between servant leadership and job satisfaction in teleworking employees.

H_a1: There is no correlation between servant leadership and job satisfaction in teleworking employees.

RQ2: What is the relationship between servant leadership and personal well-being in teleworking employees?

H_o2: There is no correlation between servant leadership and personal well-being in teleworking employees.

*H*a2: There is no correlation between servant leadership and personal well-being in teleworking employees.

Based on the results of this study, the null hypotheses for RQ1 and RQ2 were rejected based on the positive and non-zero Pearson correlation values for both job satisfaction and personal well-being when correlated to the dependent variable of servant leadership when compared both individually and together. Although the model summary suggests that there are other factors that would explain the variability in the model, approximately 51.6% - 51.7% of the variance in this model is explained by the job satisfaction and personal well-being of teleworkers in this study. This would suggest that developing a community within the working group, encouraging open communication, and creating a culture of service per the components of servant leadership can be effective in fostering stronger job satisfaction and personal well-being in teleworkers within the United States.

The following Chapter 5 will conclude this study through discussion and interpretation of the results in terms of how they apply to the current situations for teleworkers, current theory concerning servant leadership and teleworking, and recommendations for further research based upon this study. Additionally, the limitations and implications for this study, especially the implications of how the information and results of this study can contribute to a positive social change, are offered in the following Chapter 5.

Chapter 5: Discussion, Conclusions, and Recommendations

This quantitative, non-experimental, and correlational study set out to examine the relationship between servant leadership on the job satisfaction and personal well-being of teleworkers in the United States. Specifically, to determine the strength and relationship of any correlation between servant leadership and job satisfaction or personal well-being to attempt to explain possible predictions that further and deeper use of servant leadership in the teleworking working environment within the United States could benefit remote workers. The effects of servant leadership, such as the development of a web of relationships spread between team members to create a community that encourages open communication and promote a culture of service, can increase team task effectiveness, reduce stressors to employees, and create a sense of team identity even among team members that are physically scattered (Qiu & Dooley, 2019; Qiu & Zhang, 2022; Sfectu, 2021; Siangchokyoo et al., 2020). To address the research questions concerning the relationship(s) between servant leadership, job satisfaction, and personal well-being that exist, a quantitative, correlational, and non-experimental study design was adapted to measure and compute information gathered through a digitally distributed survey with validated instruments to gather information on the effects servant leadership has on the job satisfaction and personal well-being of teleworkers.

Through this study, both alternate hypotheses were accepted over the null hypotheses as all Pearson correlations returned values that were $r_1 \neq 0$ or $r_2 \neq 0$. The relationship between servant leadership and job satisfaction was positive and strong ($r_1 = 0.721$), the relationship between servant leadership and personal well-being was positive and moderate ($r_2 = 0.379$), and the relationship between servant leadership, job satisfaction, and personal well-being as a hierarchical linear regression was positive and moderate ($r_{1 \& 2} = 0.721; 0.379$) which rejects the null hypotheses for both research questions. The following chapter will discuss these findings further in terms of interpretating the findings in terms of effect on currently understood theory and the framework of this study, the limitations this study has in design and application, recommendations that these findings suggest for use and application in current or future research, the implications these findings have on studies, theory, and positive social change, and a conclusion for this study.

Interpretation of the Findings

Two research questions were examined in this study focused on the relationship between servant leadership on job satisfaction and personal well-being. The results confirmed that there were statistically significant correlational relationships between the dependent variable of servant leadership and both independent variables of job satisfaction and personal well-being as well as both independent variables together in a hierarchical linear regression. This answers both research questions and allows for the null hypotheses for both research questions to be rejected in favor of the alternate hypotheses in both cases.

Relationship Between Servant Leadership and Job Satisfaction of Teleworking Employees

The first research question was focused on the correlational relationship between servant leadership and the job satisfaction of teleworking employees in the United States.

The results of the Pearson correlation and linear hierarchical regression performed during this study show a statistically significant and strongly positive correlational relationship ($\alpha = 0.05$, $r_1 = 0.721$) between servant leadership and job satisfaction of teleworkers. As servant leadership is a follower-centered style of leadership that includes components such as the development of a community within the team, encouraging open and common communication between team members, and exemplifying a culture of service that meets the needs of the team members, a positive link between servant leadership and the job satisfaction of team members is likely (Berman et al., 2020; Greenleaf, 1970; Sfetcu, 2021;). A servant leader in a position of leadership over a team of teleworkers that appropriately focuses on the development, empowerment, and management of their team members are likely to improve areas such as in-role performance, self-efficacy, service behaviors, and (importantly) job satisfaction of team members (Avolio et al., 2000; Dewi & Sjabadhyni, 2021; Qiu & Dooley, 2019; Sfectu, 2021). A concern that many teleworkers face is the social isolation that can be experienced by physically separated team members, which can be reduced through application of Servant leadership (Adamovic, 2022; Camp et al., 2022; Kashive et al., 2022). The results of this study support that servant leadership has a positive and strong relationship with improving the job satisfaction of teleworking employees in the United States, which is consistent with research concerning servant leadership, such as that performed in other industries and in other national/cultural contexts.

Relationship Between Servant Leadership and Personal Well-Being of Teleworking Employees

The second research question was focused on the correlational relationship between servant leadership and the personal well-being of teleworking employees in the United States. The results of the Pearson correlation and linear hierarchical regression performed during this study show a statistically significant and moderately positive correlational relationship ($\alpha = 0.05$, $r_2 = 0.0.379$) between servant leadership and personal well-being of teleworkers. Servant leadership focuses on the individual team members within the team and managing the wants and needs of each individual to better improve their in-role performance, empower them in an individual capacity, and encourage serving behaviors to perpetuate a service mindset, which can be used to improve the personal well-being of those team members (Liden et al., 2014; Sfectu, 2021). Teleworkers specifically do have access to certain strategies that may improve their personal well-being (such as a flexible working environment and schedules) but also are more prone to psychological stressors that can create physiological symptoms (such as loss of sleep) that must be managed by their team leadership (Beckel & Fisher, 2022; Feitosa & Salas, 2020; Teimouri et al., 2018). Servant leadership, with its ability to emphasize the importance of creating a community, fostering open and regular communication between team members, and a culture of service that seeks to prioritize managing the needs and empowerment of team members can focus on reducing or eliminating the stressors experienced by teleworkers (Eva et al., 2019; Qiu & Zhang, 2022).The results of this study support that servant leadership has a positive and moderate relationship with improving the personal well-being of teleworkers in the United States, which is consistent with other research into servant leadership and the physical and mental well-being of various working teams in other industries and national and cultural contexts.

Limitations of the Study

This study had several limitations that can affect the generalizability and validity of the findings of this study. Firstly, the data used in the execution of this study were gathered through convenience sampling strategies using SurveyMonkey™ and their SurveyMonkey Audience Service which may not be perfectly representative of the United States teleworking population. The sample population did tend to skew towards females ($N_{Female} = 125$, $N_{Male} = 72$, $N_{Total} = 197$) and towards teleworkers that were relatively new to teleworking with approximately 46.7% of respondents indicating that they have between 1-5 years of teleworking experience. However, the sample size for the study far surpassed the minimum required for this study, which strengthened confidence in potential representativeness of the given population and the validity of this study's findings. Additionally, the SurveyMonkey Audience population is controlled by SurveyMonkey™ which uses their own sampling methodology to reach target groups and respondent populations.

Secondly, the population that was reached through SurveyMonkey™ and their SurveyMonkey Audience Service offered self-reported values based on their perceptions of experienced servant leadership, job satisfaction, and personal well-being. Although efforts were made through the course of this study to anonymize results to protect identities and identifying information (as performed primarily by SurveyMonkey™), as the respondents must self-report their own perceptions of the variables studied within the developed study there is a possibility that false or misleading information may be offered due to shame, guilt, lack of knowledge, or other factors (Butler et al., 2022). It is possible that employes may over- or under-estimate their own job satisfaction or personal well-being.

Thirdly, during the data acquisition part of this study the questions of the survey taken from the COPSOQ were measured with a 7-point Likert Scale rather than a 5-point Likert Scale. According to instructions given by the COPSOQ International Network website (2019) and their guidelines for the study, the COPSOQ should be administered based on a positive scale (consisting of "To a very large extent (100)," "To a large extent (75)," "Somewhat (50)," "To a small extent (25)," or "To a very small extent (0),"), the reverse scale, a positive time-related scale (consisting of "Never (0), "Seldom (25)," "Sometimes (50)," "Often (75)," or "Always (100)"), the reverse time-related scale, a positive qualifying scale (consisting of "Excellent (100)," "Very good (75)," "Good (50)," "Fair (25)," or "Poor (0)"), or the reverse qualifying scale. Regardless of the specific scale, each scale consists of five items relating to a 100-point scale that is averaged to represent a total value for the scale item for each respondent. The COPSOQ-related portion of the survey was performed with a 7-point Likert Scale that was similarly scaled to a 100-point value, though using approximately 16.7 points per response level, though averaged across the scale component as per the COPSOQ's instructions.

Lastly, correlational research is focused on detecting and measuring the strengths of relationships between variables rather than investigating and determining causal relationships. The theoretical framework of this study concerns examining the relationship between servant leadership and the job satisfaction or personal well-being of teleworking employees in the United States and potential predictive relationships can be inferred, though this study is unable to determine if there is a causal relationship between implementing servant leadership and the job satisfaction and personal well-being of teleworking employees in the United States.

Recommendations

Recommendations Based on Findings

The findings of this study can recommend further research into this topic as it established that there are positive relationships between servant leadership and the two variables of job satisfaction and personal well-being. For instance, further research focusing on specific industries, experience with teleworking, or other factors that would influence or be influenced by servant leadership that teleworkers may experience are areas that could benefit from future study. Additionally, causal relationships, such as investigating a specific team or set of teams before implementing servant leadership and re-investigating the team or set of teams after implementing servant leadership should be areas of further study.

Verification and validation of this study can also be a focus for future study. To address the limitations of this study a similar or duplicate study can verify the COPSOQ values given by this study, increase the respondent population to generalize the results (for example, across genders), or the study's focus could be shifted to another national or cultural population outside of the United States. Keeping a similar research design but targeting different employee outcomes such as motivation, performance, and/or other aspects are salient research questions to investigate in future studies.

Recommendations Based on Theory

Servant leadership and job-demands resource theory have been primarily studied outside of the teleworking context, and both can benefit from further study into teleworking teams. The application of these theories in the growing space of teleworking employees, working teams, national/cultural aspects, and other demographic divisions will improve and refine the use of these theories in future studies, especially studies targeting teleworking teams, especially as many teleworking teams begin to be cross-functional across national and cultural boundaries which will require a deep understanding of the theory within all applicable contexts. The additional findings offered by further and more in-depth studies into the teleworking contexts and applications of servant leadership and job-demands resource theory in the teleworking context will allow the theory to grow and evolve to encompass the growing world of virtual teams.

Recommendations Based on Method

Finding means of measuring servant leadership, job satisfaction, and personal well-being in a manner that does not rely on the self-reporting by respondents would allow for the increased validity and generalization of further studies. Self-reporting values do have limitations in creating accurate and repeatable data for studies due to personal biases and misrepresentation (Butler et al., 2022). Future studies that are able determine, validate, and take advantage of observational data or other markers that can be accurately and significantly related to the variables of interest will offer a stronger, unbiased means of measurement and validation that can improve generalizability among populations as well as begin relating the findings across studies looking into more specific populations. Especially when specifically investigating unique industries, genders, experience levels, or other demographic divisions that may be of use or interest in future studies. Alternatively, different scales or means of determining similar employee outcomes (such as job satisfaction other than the COPSOQ sub-scale or personal well-being via the PGWB-S) can be investigated for validity of this study and determination of differences of response within teleworking employees.

Concerning the sampling technique used for this study, as it was a non-probability sampling technique using SurveyMonkey™ and the SurveyMonkey Audience feature for convenience sampling, the overall sample was not a random, perfectly generalizable sample. Given this form of selection bias may impact the strength of the relationships tested during this study, alternative sampling methods can and should be used in future studies to attempt to capture a more robust, random, and generalizable population to reflect teleworkers within the United States.

Implications

Implications Relating to Existing Studies

Servant leadership, although a well understood and tested form of leadership that has been positively linked to both job satisfaction and personal well-being, as it applies to telework and physically separate team members is a gap in the literature (Adamovic, 2022; Camp et al., 2022; Eva et al., 2021; Heyler & Martin, 2018; Popovici & Popovici, 2020). This study addresses that gap in the applicable literature by establishing that there is a similar and statistically significant correlation between the use of Servant leadership by managers and the job satisfaction and personal well-being experienced for teleworkers within the United States. The results of this research can be useful to future researchers to more fully understand the effects of servant leadership and their impact employee outcomes across multiple industries within the United States, especially if teleworking continues to follow the trend it has shown historically of growing in both total number of participants and what industries, teams, and individuals take part in this employment strategy (Adamovic, 2022; Camp et al., 2022; Kashive et al., 2022). This research functions as an extension to current servant leadership research that seeks to identify, investigate, and quantify the effects of servant leadership on various industry members, cultural or national members, or other demographic groups. In accordance with that function, this study offers necessary, empirical data that provides insight into the space of teleworking teams.

Implications Relating to Empirical Theory

The purpose of this study was to examine the relationship between servant leadership and the job satisfaction and personal well-being of teleworking employees within the United States. Specifically, this study sought to quantify statistically significant relationships between servant leadership, job satisfaction, and personal well-being when considered together or separately to address the gap in the research concerning servant leadership's impact on virtual teams that are physically separated from each other and may benefit from the creation of a community between team members, the encouragement of open and common communication, and the development of a culture of service that seeks to respond directly to the needs and empowerment of individual team members (Ali et al., 2023; Eva et al., 2021; Tuzovic & Kabadayi, 2021; Siangchokyoo et al, 2020; Sfetcu, 2021). This study addresses that gap by offering empirical data and results that indicate there is a strong and positive relationship between servant leadership and job satisfaction as well as a moderate and positive relationship between servant leadership and personal well-being. These findings are a contribution to the knowledge available for servant leadership, teleworking group management, and studies focusing on maximizing desirable (or minimizing undesirable) employee outcomes.

Implications for Methodology

This study followed and was successful at a theory-testing approach that sought to apply verified instruments to gather and analyze data in pursuit of understanding the effects of a particular form of leadership in an understudied population. This offers support for researchers developing a well-grounded theoretical framework concerning their subject of interest and research questions, developing or adapting the theory, and executing on a data acquisition and analysis plan. This approach is likely to be more successful than developing a theoretical framework without grounded theory.

Implications for Practice

This study and its findings have the capacity to encourage and spread further research and scientific thought on purposefully adopting servant leadership tendencies within teleworking teams for the purpose of both empowering the team while simultaneously reinforcing the team against common drawbacks of the telework organizational strategy. Specifically, this can drive management of various industries and organizations within the United States to consider and implement training for their leadership members throughout the organization to adopt servant leadership ideals and practices to better develop a community within their virtual teams, create higher quality and more frequent communication, and foster a common culture of service that strengthens the team against the social isolation, psychological stressors, and burnout that is observed among some teleworkers (Beckel & Fisher, 2022; Sfetcu, 2021; Soni & Agarwal, 2018).

Although this study does not compare servant leadership to other forms of leadership that may be less, similarly, or more effective with teleworking members based on their specific industry, team function, generational cohort, or other demographic division that may be appropriate, the results of this study can serve as an initial insight into policy guidance of improving the working conditions and in-role effectiveness of teleworkers within the United States. Including or incorporating this study in whole or in part in future leadership training can assist in the development of more robust directives and use of appropriate leadership styles for teleworkers in the United States and those that work with them. Understanding that the job satisfaction and personal well-being of employees at the leadership or senior management levels of an organization are linked both to employee outcomes (such as retention, in-role effectiveness, mental health, and a team identity) as well as the effect and form of leadership (such as servant leadership and its components useful in augmenting the individual members of a team) can lead organizations towards a stronger, healthier, and more self-reliant employee population (Ali et al., 2023; Beckel & Fisher, 2022; Ćulibrk et al., 2018; Ferrara et al., 2022).

Positive Social Change Implications

The findings of this study have a strong potential for positive social change, especially in terms of the work experience of teleworkers within the United States. The findings of this study show that there is a strong and positive relationship between servant leadership and job satisfaction as well as a moderate and positive relationship between servant leadership and personal well-being. This supports the idea that servant leadership, when applied in remote working environments across the United States, can result in positive shifts of the job satisfaction and personal well-being of teleworking employees. An increase in job satisfaction among this population is likely to increase performance, motivation, and engagement (Ali et al., 2023; Bartsch et al., 2021; Jensen et al., 2020). Simultaneously, an increase in personal well-being among this population can result in a reduction of psychological stressors, psychosomatic injuries, and mental illness (Beckel & Fisher, 2022; Carnevale & Halak, 2020). The use of servant leadership (which has the direct capability to reduce specific stressors from teleworking such as feelings of social isolation, anxiety concerning the usefulness and importance of job functions, and failures in communication) within these groups can manage the drawbacks, reinforce the strengths of virtual teams, and empower both the individual and the team as a whole to great effect (Ali et al., 2023; Beckel & Fisher, 2022; Carnevale & Halak, 2020; Eva et al., 2021). In this way, the findings of this study can be used to encourage the widespread use of servant leadership among teleworking team members to take advantage of the possible benefits that are offered while also reducing detriments that are inherent within virtual team strategies.

This study can inspire or direct current leaders of virtual teams to revise their leadership strategies and curriculum to include a greater emphasis on the follower-centric aspects of servant leadership. Although this study is focused on members of teams based and operating within the United States, further research may be encouraged by this study to seek similar data to quantify the relationships of servant leadership to employee outcomes in other national or cultural regions to further spread the positive social change opportunity beyond the United States. This study should not only be considered as a suggestion for the small subset of the United States population that teleworks, but should also promote further study, encourage decision-makers within organizations, and inspire individuals to employ servant leadership and its components in greater and greater interpersonal interactions so that the sense of community, communication, and culture of service may spread.

Conclusion

The purpose of this quantitative, non-experimental, and correlational study was to examine the relationship between servant leadership and the job satisfaction and personal well-being of teleworking employees within the United States. With the development and growing use of teleworking within and between businesses throughout the world, it has created new challenges for both management and employees of the teams that engage with teleworking (Adamovic, 2022; Camp et al., 2022; Kashive et al., 2022). This study was developed with a theoretical framework based on servant leadership and its usefulness in the workplace by Greenleaf (1970) and others to collect data using a digital survey offered to teleworkers within the United States to report their perceived and experienced use of servant leadership in the workplace, their job satisfaction, and their personal well-being. The data collected from this survey was analyzed to answer two research questions concerning if there were relationships between servant leadership, job satisfaction, and personal well-being for teleworking employees in the United States and showed that there are positive relationships in all cases. Recommendations based on the findings of this research highlight the need for further investigation and examination of how servant leadership can impact the employee outcomes of teleworkers as well as what, if any, adjustments to servant leadership theory need to be made to accommodate the unique working environment that teleworkers experience.

This study, the data gathered and analyzed, and the findings presented should serve as a baseline and inspiration point for further and greater research into the application of servant leadership in new areas, what relates to or can drive desirable (or how to avoid undesirable) employee outcomes for teleworkers, and employee empowerment in the future. Current and future decision-makers within organizations, human resource departments, and individual leaders can include this study as a whole or in part as a component of their leadership education resources to better apply the components of servant leadership in their interpersonal interactions. The many components of servant leadership can demonstrate their use and quality in encouraging a leader to first serve others to augment and empower the team built around that leader, even when they are not physically present.

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Appendix A: Survey Questions

Section 1: Informed Consent Page

You are invited to complete an anonymous survey through SurveyMonkey® by a Walden University student working toward a doctoral degree.

Study Title: Servant leadership's Influence on Job Satisfaction and Personal Well-being of Teleworking Employees.

Doctoral Student Name: Michael Cottam

Doctoral Student Email: (email redacted)

Number of Volunteers Needed: 150 participants

Approximate number of minutes to complete the survey: ~30-60 minutes

Volunteers must satisfy the following criteria to be part of the survey:

- Currently employed full time or part time.
- Working remotely either full time or part time.
- Working for a United States-based company.

Your role in this survey can end any time you wish, involves no more risk than daily life, and involves no payment.

Background Information:

The purpose of this study is to examine the relationship between servant leadership's aspects of community, communication, and culture of service influence on job satisfaction and personal well-being of teleworking employees. The aim of this study is to examine to what extent, if any, servant leadership and its components create a web of relationships that promote task effectiveness, reduce stressors to employees, and create a sense of team identity among virtual teams.

Risks and Benefits of Being in the Study:

This study does involve some minor discomforts that may be encountered. Fatigue and stress from taking this study may be experienced. If you feel tired, become anxious, or require rest for any reason, you are encouraged to take a short break before continuing to answer the survey. Being in this study would not otherwise pose risk to your safety or well-being.

It is suggested that this survey be conducted on equipment not associated with your company or role. This survey will request information concerning your relationship with your manager and your role within the company, so to avoid it is suggested to use a personal or private computer to complete this survey to avoid any potential monitoring of responses.

This study does have an indirect benefit to you as a participant. This study may be used for future improvements in the managing of virtual teams with a focus on improving the job satisfaction and personal psychological well-being of teleworking employees.

Privacy: To protect your privacy, the doctoral student will not collect, track, or store your identify or contact information.

In place of a consent signature, pressing “Continue” below and your completion of the survey would indicate that you consent to your responses being analyzed in the study.

Data will be kept secure by using password-protected devices and platforms. Data will be kept for a period of at least 5 years, as required by the university.

Use of your responses:

Your survey responses will be used for academic research purposes only. Once the doctoral student graduates, the study's results will be posted online in ScholarWorks (a searchable publication of Walden University research). No compensation will be given for participation in this survey.

Protecting You

If you want to talk privately about your rights as a participant or any negative parts of the study, you can call Walden University's Research Participant Advocate at 612-312-1210 or email IRB@mail.waldenu.edu. Walden University's approval number for this study is 01-22-25-1135768 and it expires on January 21, 2026.

You might wish to retain this consent form for your records. You may ask the doctoral student or Walden University for a copy at any time using the contact info above.

Section 2: Eligibility Criteria Page for Survey Participants

Are you currently employed?

- Yes
- No

Do you work remotely either full time or part time?

- Yes
- No

Section 3: Demographic Questions

1. What is your gender?
    a. Male.
    b. Female.
    c. Prefer not to answer question.
2. What is your age range?
    a. 18-30 years of age.
    b. 31-40 years of age.
    c. 41-50 years of age.
    d. 51-60 years of age.
    e. 61 years of age or older.
3. What is the highest level of education you have completed?
    a. Did not complete High School.
    b. High School or GED equivalent.
    c. Some college or university.
    d. Professional Training Certificates.
    e. Associate's Degree.
    f. Bachelor's Degree.
    g. Master's Degree.
    h. Doctoral Degree.
    i. Prefer not to answer question.

4. Which of the following best describes the industry sector of the organization in which you work in?
    a. Federal Government.
    b. State or Local Government.
    c. Construction.
    d. Manufacturing.
    e. Technical Services.
    f. Information Technology.
    g. Utilities.
    h. Retail.
    i. Transportation and Warehousing.
    j. Financial.
    k. Education.
    l. Health Care and Social Assistance.
    m. Hospitality or Tourism.
    n. Other Services.
    o. Prefer not to answer question.
5. What is your relative position within your current organization?
    a. Non-management.
    b. Middle-Management / Supervisor / Team Leader / Manager
    c. Senior Management.
    d. Top Management / Director / General Manager.

e. C-Chief Executive.

f. Prefer to not answer question.

6. What is your total number of years of work experience in both non-management and management roles (if applicable) in all roles you have had?

    a. Less than one year.

    b. 1-5 years.

    c. 6-10 years.

    d. 11-15 years.

    e. 16-20 years.

    f. 21-25 years.

    g. 26-30 years.

    h. 31 years or greater.

    i. Prefer to not answer question.

7. What is your total number of years of telework experience in both non-management and management roles (if applicable) in all roles you have had?

    a. Less than one year.

    b. 1-5 years.

    c. 6-10 years.

    d. 11-15 years.

    e. 16-20 years.

f. 21-25 years.
g. 26-30 years.
h. 31 years or greater.
i. Prefer to not answer question.

8. What is your total number of years of work experience in your current role?
    a. Less than one year.
    b. 1-5 years.
    c. 6-10 years.
    d. 11-15 years.
    e. 16-20 years.
    f. 21-25 years.
    g. 26-30 years.
    h. 31 years or greater.
    i. Prefer to not answer question.
9. What is your total number of years of telework experience in your current role?
    a. Less than one year.
    b. 1-5 years.
    c. 6-10 years.
    d. 11-15 years.
    e. 16-20 years.

f. 21-25 years.

g. 26-30 years.

h. 31 years or greater.

i. Prefer to not answer question.

10. What is the name of the country in which you work?

Section 4: Servant Leadership Scale

11. Answer the following questions as the statement pertains to your manager or immediate supervisor. Please evaluate each statement and indicate the extent to which you agree or disagree with that statement based on your opinion of your immediate supervisor.

Table 11

Servant Leadership Questions

	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
My manager can tell if something is going wrong.							
My manager gives me the responsibility to make important decisions about my job.							
My manager makes my career development a priority.							
My manager seems to care more about my success than his or her own.							
My manager holds high ethical standards.							
I would seek help from my manager if I had a personal problem.							
My manager emphasizes the importance of giving back to the community.							

My manager is able to effectively think through complex problems.							
My manager encourages me to handle important work decisions on my own.							
My manager is interested in making sure that I achieve my career goals.							
My manager puts my best interests ahead of his or her own.							
My manager is always honest.							
My manager cares about my personal well-being.							
My manager is always interested in helping people in our community.							
My manager has a thorough understanding of our organization and its goals.							
My manager gives me the freedom to handle difficult situations in the way that I feel is best.							
My manager provides me with work experiences that enable me to develop new skills.							
My manager sacrifices his or her own interests to meet my needs.							
My manager would not compromise ethical principles in order to achieve success.							
My manager takes time to talk to me on a personal level.							
My manager is involved in community activities.							
My manager can solve work problems with new or creative ideas.							
When I have to make an important decision at work, I do not have to consult my manager first.							
My manager wants to know about my career goals.							
My manager does whatever he or she can do to make my job easier.							
My manager values honesty more than profits.							
My manager can recognize when I'm down without asking me.							
I am encouraged by my manager to volunteer in the community.							

Section 5: COPSOQ III

12. On a scale of 0 to 10 with 0 being the worst state and ten being the best state, how would you rate your present health?

13. Answer the following questions as the statement pertains to your level of agreement. Please evaluate each statement and indicate the extent to which you agree or disagree with that statement based on your opinion.

Table 12

COPSOQ III Scaled Questions

	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
You have to work very fast.							
You work at a high pace throughout the day.							
The demands of my work interfere with my home and family life.							
The amount of time my job takes up makes it difficult to fulfill my family responsibilities.							
My work drains so much of my energy that it has a negative effect on my private life.							
My work takes so much of my time that it has a negative effect on my private life.							
It happens that I should be at home and at work at the same time.							
I take care of work-related tasks outside of my working time as well.							
I am available in my free time for people with whom I deal professionally.							
At my work, I am full of energy.							
I am enthusiastic about my work.							

14. Answer the following questions as the statement pertains to how frequently you experience the statement. Please evaluate each statement

and indicate the frequency with which you experience the statement in your opinion.

Table 13

COPSOQ III Frequency Questions

	Almost Never	Rarely	Not Very Often	Neutral	From Time to Time	Often	Almost Always
How often do you not have time to complete all your work tasks?							
Do you have to do overtime / extra work?							
Do you have to deal with other people's personal problems as part of your work?							
Do you have the possibility of learning new things through your work?							
Can you use your skills or expertise in your work?							
Is your work meaningful?							
Do you feel that the work you do is important?							
Are you proud to be part of the company?							
Do you enjoy telling others about your place of work?							
At your place of work, are you informed well in advance concerning, for example, important decisions, changes, or plans for the future?							
Do you receive all the information you need in order to do your work well?							
Are contradictory demands placed on you at work?							
Do you sometimes have to do things which ought to have been done in a different way?							
Do you sometimes have to do things which seem to you to be unnecessary?							
Do your immediate superiors make sure that the individual member of staff has good development opportunities.							
Do you immediate superiors give high priority to job							

satisfaction?							
Are your immediate superiors good at work planning?							
Are your immediate superiors good at solving conflicts?							
How often do you get help and support from your nearest superior?							
How often is your immediate superior willing to listen to your work-related problems?							
How often do you talk with your superior about how well you carry out your work?							
Is there good co-operation between your colleagues at work?							
How often have you thought about giving up your profession?							
How often have you thought about changing your job?							
How often do you feel physically exhausted?							
How often do you feel emotionally exhausted?							
How often did you feel worn out?							
How pleased are you with your work prospects?							
How pleased are you with the people you work with?							
How pleased are you with the physical working conditions?							
How pleased are you with the way your group is run?							
How pleased are you with the way your abilities are used?							
How pleased are you with your salary?							
How pleased are you with your job as a whole, everything taken into consideration?							
Are you worried about becoming unemployed?							
Are you worried about new technology making you or your work redundant?							
Are you worried about it being difficult for you to find another job if you became unemployed?							
Are you worried about being transferred to another job against your will?							
Are you worried about the timetable being changed (shift, weekdays, time to enter and leave, etc.) against your will?							
Are you worried about a decrease in your salary?							

Section 6: General Well-Being Index

15. Answer the following questions as the statement pertains to your level of agreement. Please evaluate each statement and indicate the extent to which you agree or disagree with that statement based on your opinion.

Table 14

General Well-Being Index Questions

	Very Low	Low	Neutral	Good	Very Good
How have you been feeling in general?					
Have you been bothered by your nerves?					
Have you felt in firm control of your actions, thoughts, or feelings?					
Have you felt sad, discouraged, or hopeless so much that you wondered if life was worthwhile?					
Have you been under any stress or pressure?					
How happy, pleased, or satisfied have you been with your personal life?					
Have you seriously thought you might be losing control over your thoughts and actions?					
Have you been anxious, worried, or upset?					
Have you been waking up feeling fresh and rested?					
Have you been bothered by any illness, pains, or fears about your health?					
Has your daily life been filled with things that interest you?					
Have you felt disheartened and sad?					
Have you felt stable and sure of yourself?					
Have you felt tired, worn out or exhausted?					
Did you feel depressed?					
How tense have you been?					
Did you feel well enough to do the things you like to do or had to do?					

How much energy or vitality did you have?					
Have you had any worries or fear about your health?					
How active and vigorous have you felt?					
How cheerful have you been?					
How relaxed have you felt?					

Appendix B: G*Power Outputs for Sample Size; X-Y Plot for Range of Values

Figure 8

*G*Power Outputs for Sample Size*

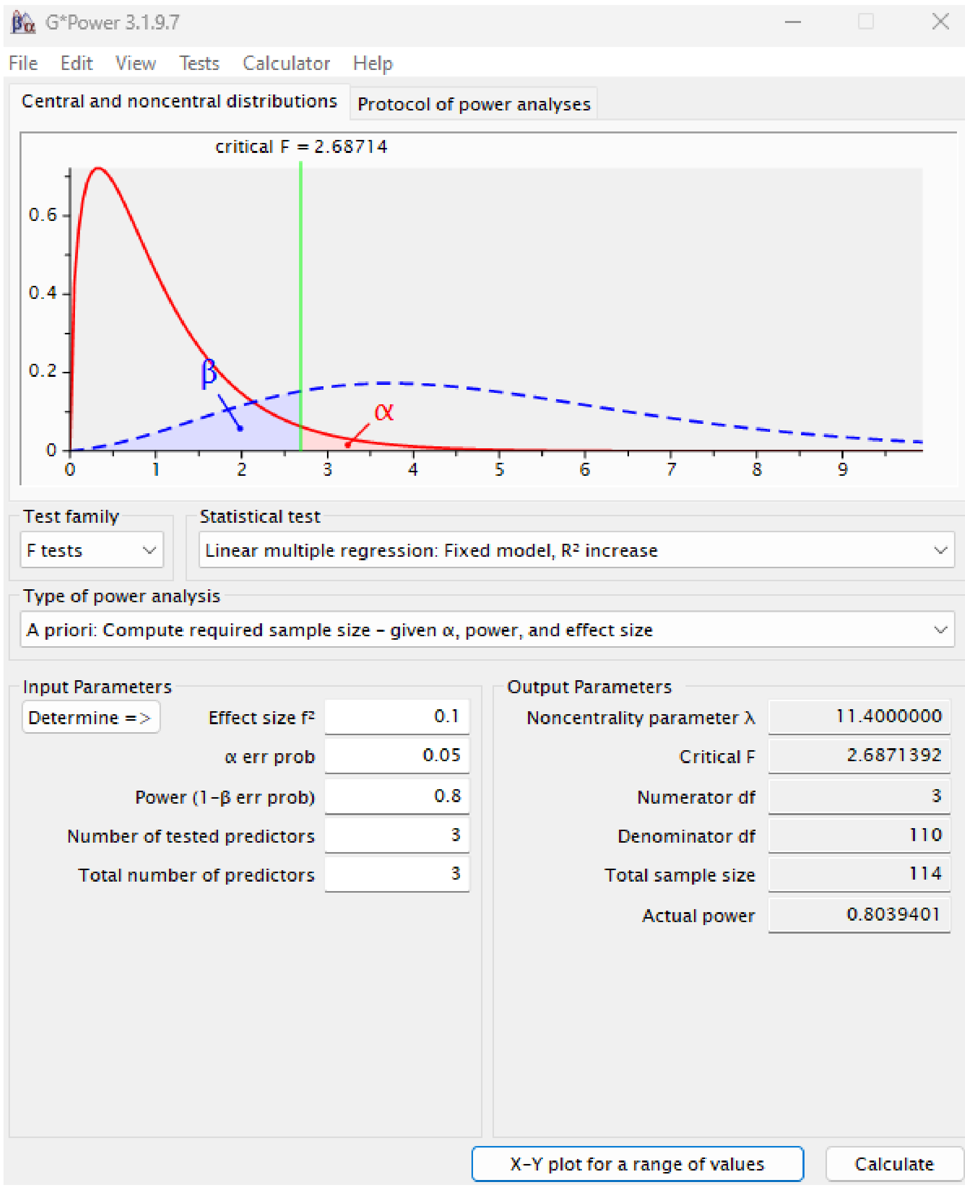

Figure 9

*G*Power X-Y Plot for a Range of Values*