TEACHERS' USE OF BOUNDARY MANAGEMENT TACTICS TO MAINTAIN WORK-LIFE BALANCE

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DISSERTATION

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DEDICATION

To teachers everywhere, especially those who have taught me, those who have inspired me, and those I am blessed to count among my friends. Your work is who you are, but it is not all that you are.

ABSTRACT

The teaching profession has a well-documented history of low work-life balance. This study explored the boundary management tactics of teachers before and during the first year of the COVID-19 pandemic to determine tactics used by teachers with high work-life balance satisfaction, with the aim to provide information on managing boundaries that can assist teachers with work-life balance beyond the years of the pandemic. The mixed methods approach used quantitative data to measure the work-life balance satisfaction of teachers and frequency of boundary tactics, while the qualitative responses allowed for teachers to expand upon the quantitative options and share their voices and stories in their efforts to maintain balance between work and nonwork lives. Participants were recruited using large teacher groups on social media, requests for participation from the researchers known teacher contacts, and snowball sampling. Responses were collected via a survey that contained Likert scale, multiple response, and open-ended questions. The quantitative data showed changes in teacher work-life balance satisfaction over time and that teachers used a variety of boundary management strategies to attempt work-life balance. Qualitative data showed that teachers based their disengagement from work around three common themes: activities, people, and time. Of teachers who reported the highest satisfaction with work-life balance, it became clear that while some boundary management tactics were common, the most important factor was that teachers had established boundaries to manage their work-life balance and they themselves respected those boundaries. In the face of The Great Resignation and high rates of teacher burnout, educational systems must consider the work-life balance of their teachers and train them with the skills to set boundaries that foster a satisfactory balance between work and nonwork domains.

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Introduction

Imagine being an educator lying in bed late at night and receiving a phone notification containing a message from a student asking for help with an assignment. Some would not hesitate to answer right away, while others might wait until morning. Now, imagine this scenario while also serving as the spouse to the Vice President or President of the United States of America. Dr. Jill Biden related just such a scenario in her speech at the Stanford University Graduate School of Education's Centennial Year Cubberley Lecture. In her address, Dr. Biden shared her experiences balancing her roles as a teacher and Second Lady of the United States (at the time of the speech), asserting that, "Teaching is not a job. It's a lifestyle. It permeates your whole life" (Racker, 2018, p.3). Dr. Biden's statement likely rings true with educators around the world. Education, as a caring profession, is a job in which people are generally very committed and expend great amounts of energy and effort towards caring for others (Edwards & Talbot, 1999). Teaching is a demanding job both in the work and non-work domains, as teachers often conduct work or are still emotionally engaged long after the workday has ended (Adams, 2013; Akar, 2018; Lawrence et al., 2019; Pozo-Rico, 2020). The COVID-19 pandemic has exacerbated existing challenges teachers face with balancing their work and non-work lives that could have lasting negative effects on the profession and society.

Teachers, especially experienced teachers, play a vital role in schools and are often cited as a key factor in student success (Carver-Thomas & Darling-Hammond, 2017; Chetty et al., 2014; Dicke et al., 2020; Little et al., 2009; Sammons et al., 2007). Despite their importance, there is a retention problem in the field of education which is partially tied to factors related to work-life balance (Carver-Thomas & Darling-Hammond, 2017; Lawrence et al., 2019; Skaalvik

& Skaalvik, 2018; Yadav & Dabhade, 2014). Work-life balance, the degree to which one feels their work and nonwork lives are at a suitable balance, is not a set measurement and is perceived differently by each individual (Adams, 2013; Cohen et al., 2009; Kalliath & Brough, 2008; Pichler et al., 2009; Valcour, 2007; Yadav & Dabhade, 2014). Studies have overwhelmingly shown that teachers struggle with attaining work-life balance (Bauwens et al., 2020; Borah & Bagla, 2016; Ching & Seok, 2018; da Silva & Fischer, 2020a, 2020b; Schleicher, 2020).

One aspect of work-life balance is boundary management, as individuals work to set and maintain their level of integration and segmentation between their work and non-work lives (Allen et al., 2014; Ashforth et al., 2000; Kreiner et al., 2009; Nippert-Eng, 1996). Boundary management (also called boundary work) consists of the strategies individuals use to attain and/or maintain their desired level of connection between work and non-work life (Allen et al., 2014; Ashforth et al., 2000; Kreiner et al., 2009; Nippert-Eng, 1996). The theories of work-life balance and boundary management form the theoretical framework of this study on how teachers used boundary management strategies to attain or maintain work-life balance. Although there is currently no known research on teachers' boundary management practices, the literature shows many of the demands of teaching make enacting boundaries difficult. Issues like workload, administrative (nonteaching) responsibilities, work-related technology and communications, and time pressure encroach on teachers' non-work time (Adams, 2013; Bauwens et al., 2020; da Silva & Fischer, 2020a, 2020b; Lawrence et al., 2019; Madipelli et al., 2013; Nilsson et al., 2017; Skaalvik & Skaalvik, 2018).

With the onset of the COVID-19 pandemic in the spring of 2020, most teachers around the world began teaching from home (United Nations, 2020; UNICEF, 2020; Vegas, 2020), a change that placed prior physical boundaries to the wayside. The sudden changes in teachers'

existing boundaries, paired with tremendously increased demands on teachers (Darling-Hammond et al., 2020; UNESCO, 2020) lead to severe increases in issues pertaining to work-life balance (Hamilton et al., 2020a; Kaufman et al., 2020; Kluger, 2020; Kurtz, 2020a; Steiner & Woo, 2021). In response, there have been calls for teachers to start managing their stress, work/non-work boundaries and work-life balance (Beames et al., 2021; Gewertz, 2020; Kurtz et al., 2020). Over the course of the pandemic, teachers faced new challenges with the different ways schools chose to handle education, from fully in-person to fully online or various hybrid options, as the pandemic moved through school year 2020-2021 and beyond (Schwartz et al., 2021; Steiner & Woo, 2021).

Statement of the Problem

Balancing work and personal life is a challenge in the modern world, especially as technology makes work accessible from virtually anywhere (Allen et al., 2014; Boswell et al., 2016; Currie & Eveline, 2011; da Silva & Fischer, 2020b; Duxbury et al., 2014; Froese-Germain, 2014; Towers et al., 2006). A substantial amount of research over the last two decades has shown work-life imbalance is linked to increasing problems including stress and burnout, as work life permeates private lives (Adams, 2013; Borah & Bagla, 2016; da Silva & Fischer, 2020b; Edge et al., 2016; Froese-Germain, 2014; Hafeez & Akbar, 2015; Johari et al., 2018; Lawrence et al., 2019; Madipelli et al., 2013; Mercado, 2019; Miryala & Chiluka, 2012). Work-life imbalance is a common antecedent to teachers leaving the career, and prior to the pandemic teachers were already having difficulty maintaining work-life balance (Adams, 2013; Bauwens et al., 2020; Butt & Lance, 2005; Ching & Seok, 2018; da Silva & Fischer, 2020a, 2020b; Day, 2012; Edge et al., 2016; Edwards & Oteng, 2019; Froese-Germain, 2014; Gu & Day, 2007; Hafeez & Akbar, 2015; Johari et al., 2018; Madipelli et al., 2013; Mercado, 2019; Miryala & Chiluka, 2012;

Nilsson et al., 2017; Quintana et al., 2019; Soni & Bakhru, 2019; Sorensen & McKim, 2014; Whitehead, 2013). As COVID-19 spread globally, teachers' workspaces and personal spaces combined full-time, further blurring the lines between work and home as schools around the world began distance and online learning models (UNESCO, 2020; United Nations, 2020). Throughout the first year of the pandemic, schools in the United States found even more teachers leaving the profession and a decrease in new teacher and substitute teacher applications (Kurtz, 2020a; Smith 2020).

From the outset of schools' physical closures, researchers began studying the impacts of pandemic education on students and the ways in which educators were utilizing resources to continue to teach (Hamilton et al., 2020a, 2020b; Harris et al., 2020; Stiltano, 2020; UNICEF, 2020; United Nations, 2020; Vegas, 2020); and while there is a mounting body of research on the negative effects of pandemic education on educators, there is no known research on the boundary management tactics of teachers, and especially not those who were able to find satisfaction with their work life balance during this time. A series of studies conducted in the United States monitored teacher morale (Gewertz, 2020; Kurtz, 2020a, 2020b; Kurtz et al., 2020; Steiner & Woo, 2021), though the specifics of work-life balance, boundary management, or even the source of low morale (other than pandemic education) were not investigated. By building knowledge of teachers' successful boundary tactics, administrators, professional development trainers, and human resources professionals may be better able to assist teachers with tools to attain and/or maintain work-life balance, as studies have shown education on mindfulness and segmentation practices have improved individuals' work-life balance (Michel et al., 2014; Pozo-Rico et al., 2020; Rexroth et al., 2017).

The United Nations (2020) and UNESCO (2020) specifically recommended

policymakers and educational institutions ensure they address the psychological well-being of educators throughout the pandemic recovery process to avoid teacher burnout and attrition, both of which would compound the negative effects of COVID-19 on education. Similar recommendations were made in Australia adding that creating professional development to address teacher mental health is a necessary response to the exacerbated stress and challenges of teaching during the COVID-19 pandemic (Beames et al., 2021). The research and findings in the present study will help to fulfill that need, as it explores how teachers with high perceptions of work-life balance managed their boundaries over time.

The purpose of this study was to explore the boundary management tactics teachers used to attain or maintain work-life balance over the course of shifting educational realities before and during the first year of the COVID-19 pandemic. The aim was to identify boundary management tactics used by teachers to add to the knowledge regarding teacher work-life balance and with the goal to clearly identify tactics teachers can use during and beyond the era of the pandemic.

Although research on the work-life balance of teachers is not new, many researchers recommend further study into this area (da Silva & Fischer, 2020b; Edge et al., 2016; Johari et al., 2018; Nilsson et al., 2017). Add to that the shift in instruction due to COVID-19, and a new need arises to determine not only the immediate effects of the pandemic on educators' work-life balance, but also to understand how teachers responded to shifting boundaries in order to maintain a healthy work-life balance. While there are recommendations for teachers to set boundaries for maintaining work-life balance (Gewertz, 2020; Hansen & Gray, 2018), there are no shown methods or known studies that describe how teachers effectively use specific boundary tactics. A study in Canada, which happened to have a large population of teachers though they were not the only or even the target population, focused on segmentation preferences and

integration strategies but not on the specific boundary tactics (Leduc et al., 2014). Two studies in Germany conducted targeted training to help workers learn about segmentation practices which resulted in higher work-life satisfaction (Michel et al., 2014; Rexroth et al., 2017). Another study directed in Spain during the COVID-19 pandemic found that trainings which included stress management and burnout prevention had significant positive effects (Pozo-Rico et al., 2020).

The current literature and research on work-life balance does not yet fully encapsulate the effects of the COVID-19 pandemic on teacher work-life balance or how teachers changed (or did not change) their boundary work tactics. Because research shows teachers are one of the most important factors in student learning (Chetty et al., 2014; Little et al., 2009), understanding the impacts of COVID-19 on teachers is a vital piece in understanding the impacts of the pandemic. In fact, the United Nations (2020) lists psychological supports for educators among its top recommendations in pandemic and post-pandemic education. Without psychological support for teachers, the risk of burnout and attrition could be high, thus compounding the problems created by the pandemic as experienced educators leave the field. These effects were seen into the year 2022, as the United Stated Department of Education showed teacher shortages in all states and territories and further predicted increased shortages into the coming school year (Boren, 2021; United States Department of Education, 2022; Zinkand, 2021).

Background

During the COVID-19 pandemic, people around the globe experienced a shift in their work and home lives. By early April 2020, nearly every country in the world had responded to the pandemic, with the vast majority requiring, among many other changes, school closures (Hale et al., 2020; Hamilton et al., 2020a, 2020b; United Nations, 2020; UNICEF, 2020; Vegas, 2020). As their living rooms became their classrooms and the physical divide between the home

place and work space was erased, educators, in particular, experienced a major shift in their already precarious work-life balance (Adams, 2013; Butt & Lance, 2005; Ching & Seok, 2018; da Silva & Fischer, 2020b; Edwards & Oteng, 2019; Froese-Germain, 2014; Gu & Day, 2007; Hafeez & Akbar, 2015; Hamilton et al., 2020b; Madipelli et al., 2013; Mercado, 2019; Miryala & Chiluka, 2012).

By early April 2020, over 91% of students worldwide were affected by COVID-19's disruption of their traditional learning environment as governments responded to the pandemic (Hale, 2020; UNESCO, 2020; UNESCO, 2021; United Nations, 2020). The rapid spread of COVID-19, which caused global school closures, is considered "the largest disruption of education systems in history" (United Nations, 2020, p.2). In response to this disruption, teachers around the globe rallied to continue reaching and teaching students using whatever methods would serve their students, including printed paper-packets, televised instruction, and fully online synchronous or asynchronous virtual classes (Hamilton et al., 2020a, 2020b; Harris et al., 2020; Stiltano, 2020; UNICEF, 2020; United Nations, 2020; Vegas, 2020). Teachers' homes became their classrooms and workspaces, creating a new and unprecedented shift in how and where teachers teach.

In school year 2020-2021, schools around the world were responding differently with various levels of reopening, and school systems within the same region or state may have had vastly different forms of instruction based on local COVID case numbers and locality, particularly urban or rural (Schwartz et al., 2021; UNESCO, 2021). The effects of COVID-19 on education and the tenuous nature of schooling were not over at the end of the first full year of pandemic education. By the closing of school year 2020-2021, 26% of districts surveyed in the American School District Panel intended to offer a virtual school option the following year

(Diliberti & Schwartz, 2021), and many schools around the world were still at varying levels of school closure and modes of instruction (UNESCO, 2021).

Current research on teleworking and working-at-home suggests positive effects on various areas that comprise work-life balance, such as role conflicts, individual control, and reduction of time pressure (Duxbury & Halinski, 2014; Golden et al., 2006; Nilsson et al., 2017). However, other studies show there are important boundary management tactics that must be used to mediate home-to-work conflict and work-to-home conflict (Basile & Beauregard, 2016; Delanoeije et al., 2019; Hansen & Gray, 2018; Matthews et al., 2014). For educators around the world who found themselves suddenly, without choice or preemptive training, thrust into the role of tele-teacher, it appears that the positive effects of telework were not present for many teachers' work-life balance during the COVID-19 pandemic, as research showed that increases in job stress caused nearly 25% of educators in the United State to report they were likely to leave their jobs (Steiner & Woo, 2021). While the world is experiencing teacher shortages and calls are being made to address them (Boren, 2021; UNESCO, 2015; UNESCO Institute for Statistics, 2016; United States Department of Education, 2022; Zinkand, 2021), the steps taken thus far do not appear to be enough to address the mounting shortages.

As the months went on and a new school year began, educators faced never-before-seen challenges ranging from teaching new groups of students from a distance, enacting hybrid models with varying levels of in-person and digital instruction, to fully in-person instruction (United Nations, 2020; UNICEF, 2020), which required new management strategies in ensuring social distancing and wearing masks for all in attendance. In a profession where work-life balance could be tenuous in the pre-pandemic world, the rapid and dramatic shift to teaching in quarantine and to myriad methods of returning to school in different and changing circumstance

(Schwartz et al., 2021; UNESCO, 2021; United Nations, 2020; UNICEF, 2020) posed new and continuously changing challenges for educators around the globe.

While the pandemic may have created some new challenges, it also highlighted some of the problems teachers faced which were not new, especially in relation to work-life balance. Changes and innovations in technology had already caused work to encroach on home life for those who use work-related technology at home, including teachers (Bauwens et al., 2020; Boswell et al., 2016; Currie & Eveline, 2011; da Silva & Fischer, 2020b; Duxbury et al., 2014; Froese-Germain, 2014). Globally, teachers' work-life balance was already a largely-recognized and long-studied problem (Adams, 2013; Bauwens et al., 2020; Bumhira et al., 2017; Butt & Lance, 2005; Ching & Seok, 2018; da Silva & Fischer, 2020a, 2020b; Edge et al., 2016; Edwards & Oteng, 2019; Froese-Germain, 2014; Hafeez & Akbar, 2015; Johari et al., 2018; Madipelli et al., 2013; Mercado, 2019; Miryala & Chiluka, 2012; Nilsson et al., 2017; Quintana et al., 2019; Soni & Bakhru, 2019; Sorensen & McKim, 2014; Whitehead, 2013).

One area of application to maintaining work-life balance is boundary management. Boundary management encompasses the actions people take to integrate or segment their roles in life by managing their various boundaries (Ashforth et al., 2000; Nippert-Eng, 1996). Studies have shown targeted professional training on segmentation techniques can improve employees' work-life balance by increasing detachment from work and decreasing work-life conflict and emotional exhaustion (Michel et al., 2014; Rexroth et al., 2017).

Teachers faced drastic changes to the boundaries of their work and non-work lives as the results of the pandemic-induced environment (Bubb & Jones, 2020; Reimers & Schleicher, 2020; Stiltano et al., 2020; UNESCO, 2020). The purpose of this study, to explore the boundary management tactics teachers used to attain or maintain work-life balance over the course of

shifting educational realities before and during the COVID-19 pandemic, lead to the following research questions as guides for exploration.

Research Questions

Three research questions guide this study in its aims to determine teacher satisfaction with their work-life balance and their boundary work tactics before and during the COVID-19 pandemic.

1. What were teachers' perceptions of their work-life balance for three specific timeframes:
    - before the onset of the COVID-19 pandemic
    - during the spring of 2020 from the beginning of the pandemic's effects on their school through the end of school year 2019-2020
    - during school year 2020-2021?
2. What were teachers' boundary management tactics during these times?
3. Were there similarities in boundary work tactics for teachers who reported higher perceptions of work-life balance?

Description of Terms

Some terms are used repeatedly throughout this study, may need clarification, or may be unfamiliar. Additionally, some terms have interchangeable counterparts, directionality, or have evolved as research has expanded the understanding of the concepts. The following definitions are based in the literature referenced.

Boundary management. Boundary management (or boundary work) relates to the actions people take to separate or incorporate their various life roles (Nippert-Eng, 1996;

Kreiner et al., 2009; Rothbard & Ollier-Malaterre, 2016). The focus of roles for this research are the purposefully broad work and non-work (life) roles.

Time pressure. The perception of the amount of time people have in order to accomplish necessary or desired tasks which can relate to the feeling of stress or urgency in which tasks need to be accomplished (Rose, 2015; Rose et al., 2013).

Work interference with life/ Life interference with work. An individual's "difficulty participating in non-work domains by virtue of participation in the work domain" (Keeney et al., 2013, p. 222). The converse side of this, life interference with work is the same principle in reverse. Interferences create disruptions in work-life balance.

Work-life balance. The perceived satisfactory balance of time and activities in the domains of work and non-work at any given point in time. This perception is not fixed, and changes based upon demands and salience in either domain or changes in one's own priorities (Adams, 2006; Cohen et al., 2009; Kalliath & Brough, 2008; Kreiner et al., 2009; Nippert-Eng, 2006; Pichler et al., 2009; Valcour, 2007). This term is frequently used to replace the older, less inclusive term work-family balance.

Work-life conflict/Life-work conflict. Both work-life conflict and life-work conflict occur when demands from one role interfere with participation in the other (Adams, 2013; Golden et al., 2006; Kenney et at., 2013; Kreiner et al., 2009; Matthews et al., 2014; McCloskey, 2016; Towers et al., 2006) Work-life conflict occurs when work demands seep into one's personal time and life, and life-work conflict occurs when one's personal life infringes upon.

Significance of the Study

This study will add to the body of knowledge on teacher work-life balance, boundary management, and educating during educational changes which will benefit teachers and

administrators as they learn specific ways teachers can improve their work-life balance. It will expand upon earlier research into teachers' work-life balance by specifically exploring teachers' satisfaction with work-life balance before and during the COVID-19 pandemic and will be among the first to study the specific boundary management tactics of teachers.

Although the pandemic focus may seem irrelevant over time, disasters cannot be viewed or studied as standalone problems that end once the crisis itself ends, as they have long-term effects on people's mental health (Makwana, 2019). In an early study on educator morale during the pandemic, the EdWeek Research Center noted "morale is not something that necessarily recovers overnight" (Kurtz et al., 2020, p. 4), nor is a long-standing problem like work-life balance. The findings of this study noting the changes in boundary work tactics of teachers will give insight into educator responses on managing their boundaries (and by extension their work-life balance) both inside and outside the classroom. The three timeframes measured will also show possible changes in work-life balance and boundary tactics of teachers during the educational shifts of the pandemic.

By studying the work-life balance and boundary work tactics of teachers during this timeframe, one can view some effects of educational change on teachers. While extreme in the early stages, over time changes came with more planning and time for preparation and reflection on the effects of earlier work-life balance and boundary tactics. Several studies have made recommendations for further research into the work-life balance of teachers or of boundary management tactics in general (Allen et al., 2014; Cohen et al., 2009; da Silva, 2020b; Edge et al., 2016; Nilsson et al., 2017; Rose et al., 2013; Sayah, 2013). A study published in late 2020, with data collected prior to the pandemic and the massive adoption of online learning, called for the consideration of teacher well-being with the proliferation of digital learning environments

(Bauwens et al., 2020). In addition, early pandemic literature called for further investigation into how people manage their boundaries, the effects of the pandemic on teachers' work-nonwork balance, and for evidence-based research that can guide training for educator mental health (Beames, 2021; Cho, 2020; Syrek et al., 2021).

Teachers, administrators, educational leaders, and policymakers will benefit from the findings on the effects of shifts in education on teachers' work-life balance which can affect teacher retention (Skaalvik & Skaalvik, 2018; Yadav & Dabhade, 2014). With respect to policymakers and administrators, both the United Nations (2020) and UNESCO (2020) in separate reports highlight the importance of teacher social-emotional and psychological well-being among top priorities in establishing effective pandemic and post-pandemic educational practices.

Furthermore, in an analysis of the opportunities presented by the COVID-19 pandemic, Zhao (2020) poses the idea that the temporary changes of educational environment and methods should be catalyst for change and used as a time to rethink and reshape. Although Zhao's analysis and recommendation were not directed at teachers' well-being, in the scheme of reshaping education, educators would most certainly be impacted. Later research showed that workers themselves changed priorities in response to the pandemic, placing their nonwork lives and work-life balance ahead of their careers and financial benefits (Schwedel et al., 2022; Van Kessel & Silver, 2021). Thus, teacher work-life balance should be considered in the research and changes made moving forward, as the well-being of educators is a crucial factor in keeping experienced educators in the classroom, which is a vital component of student achievement (Chetty et al., 2014; Day et al., 2006; Dicke et al., 2020; Lawrence et al., 2019).

Overview of Research Methods

The purpose of this mixed-methods study was to explore teacher's boundary management tactics to attain or maintain work-life balance over the course of shifting educational realities before and during school years 2019-2020 and 2020-2021. Qualitative and quantitative data were gathered from participants recruited through researcher-known teacher contacts, posts via Facebook to teacher groups, and snowball sampling from participants as a means to reach a large, diverse, and experienced group of people (Browne, 2005; Creswell & Guetterman, 2019; Gelinas et al., 2017; Hough & Flood-Grady, 2020; Marshall & Rossman, 2016; Ramo & Kaur, 2020). This method of recruiting participants was purposeful in seeking to gather experiences from teachers in as wide a variety of places as possible.

Responses were analyzed using both qualitative and quantitative methods which allows for deeper understanding as the qualitative data gives explanation and voice to the measured perceptions of the quantitative data (Creswell & Guetterman, 2019; Hoy & Adams, 2016). Teachers' work-life balance was assessed quantitatively to give a consistent scale of understanding for their perceptions. Boundary management tactics were collected quantitatively and qualitatively to give participants full ability to describe their tactics without being forced into preconceived ideas of what tactics they may use, while also being cognizant of teachers' time constraints. Qualitative data was coded to determine additional tactics, reinforce or explain the existing known tactics, and determine factors that teachers consider when disengaging from work. Finally, scores and coded qualitative data were compared to determine if there were similarities among teachers with high work-life balance perceptions.

Chapter II

Review of Literature

Introduction

Maintaining work-life balance is an important facet in the lives of working individuals. Without it, there are increasingly negative consequences, including:

- mental and physical health problems (da Silva & Fischer 2020a; Quintana et al., 2019)
- burnout (Lawrence et al., 2019; Quintana et al., 2019)
- leaving jobs or changing careers (Conley & Jenkins, 2011; Edge et al., 2016; Hafeez & Akbar, 2015; Johari et al., 2018; Kreiner et al., 2009).

There are many negative effects of work-life imbalance that are common across careers, with some specifically more severe for teachers. Teachers have multiple sources of work-based stress that can create conflict in work life balance, such as high workloads, time pressure, and difficulty in disconnecting from work (Adams, 2013; Borah & Bagla, 2016; Ching & Seok, 2018; da Silva & Fischer, 2020a, 2020b; Edwards & Oteng, 2019; Froese-Germain, 2014; Hafeez & Akbar, 2015; Nilsson et al., 2017; Quintana et al., 2019; Skaalvik & Skaalvik, 2018; Sorensen & McKim, 2014; Whitehead, 2013). The struggle with such stressors and maintaining work-life balance can lead to similar negative effects as seen in other careers to include burnout and leaving the profession (Butt & Lance, 2005; Conley & Jenkins, 2011; Edge et al., 2016; Hafeez & Akbar, 2015; Johari et al., 2018; Kreiner et al., 2009; Lawrence et al., 2019; Quintana et al., 2019). Teacher attrition rates increased during the COVID-19 pandemic (Kurtz 2020b; Kurtz et al., 2020; Steiner & Woo, 2021) which is detrimental to education because experienced educators are generally more effective educators (Carver-Thomas & Darling-Hammond, 2017; Day et al., 2006).

In order to attain and maintain work-life balance, people use different strategies or tactics to manage the various aspects and roles within their lives (Allen et al., 2014; Ashforth et al., 2000; Nippert-Eng, 1996). These strategies, as illuminated by Christena Nippert-Eng (1996), are called boundary work or boundary management tactics. Boundary work is a key aspect of boundary theory and how individuals choose to create and maintain (or integrate) the boundaries between their roles in life, especially between work and personal life (Ashforth et al., 2000; Nippert-Eng, 1996).

Of increasing importance in the research on work-life balance and boundary work is the role of technology. As technology changes and becomes ever more present in our lives, work-related technology use at home has become a necessary focus of boundary work for teachers who are affected by the impacts of work technology on their non-work lives (Boswell et al., 2016; Currie & Eveline, 2011; da Silva & Fischer, 2020b; Duxbury et al., 2014; Froese-Germain, 2014). While work-related technology use at home was already being explored for its possible benefits and detriments to work-life balance, the COVID-19 pandemic shifted many workers, and virtually all teachers around the world, to incorporate work-related technology use into their home to work through online and remote learning platforms (UNESCO, 2020; United Nation, 2020).

Theoretical Framework

Two important theories create the structure and support for the research in this study, both of which are explored at length in this chapter. First, work-life balance theory guides the focus and provides the basis for determining teachers' perceived satisfaction with the amount of time and mental space work and nonwork domains take within their lives. The second theory, boundary theory, forms the framework for researching and understanding the actions teachers

take to strike balance between their work and nonwork lives.

Although research on work-life balance (often labeled work-family balance, especially in the early literature) has been ongoing in the previous few decades, there is no singularly agreed upon definition. However, most definitions incorporate the idea that there is a compatible, minimally conflicting balance between individual's work and non-work life (Kallith & Brough, 2008). Wayne et al. (2017) pose that there are four categories of work-life balance, each focusing on various aspects: additive spillover, multiplicative spillover, balance satisfaction, and balance effectiveness. To answer the research questions posed here, balance satisfaction based on Valcour's (2007) work, is most appropriate as this approach recognizes the individual perceptions of and satisfaction with their work-life balance (Wayne et al., 2017).

Seminal research on boundary work conducted by Nippert-Eng (1996) established groundwork for how people use different strategies for integrating or segregating their work and non-work lives. Based upon those findings and work from Ashforth et al. (2000), Kreiner et al. (2009) classified these boundary work tactics into four separate categories based upon qualitative research with priests whose work lives are quite demanding and can pose challenges to their non-work lives. Kreiner et al.'s (2009) categories – behavioral, communicative, physical, and temporal – create the basic framework for the organization and questions in the boundary management section of the survey used in this study.

The theories of work-life balance and boundary management are inextricably linked and woven throughout all elements of this study. The research questions were designed around these two theories and guided the creation of the survey questions posed to participants. Additionally, the first two sections of the literature review explore these theories and their importance for educators.

Narrowing the Definition of Work-life Balance

Because there is no singularly agreed upon definition for work-life balance (Wayne et al., 2017), many researchers have defined work-life balance in similar yet semantically different ways. Thus, it becomes necessary to clearly define and support the choices for the work-life balance definition used in this study.

Work-life balance, as defined here, is the perceived satisfactory balance of time and activities in the domains of work and non-work (also referred to as life) at any given point in time (Adams, 2006; Cohen et al., 2009; Kalliath & Brough, 2008; Kreiner et al., 2009; Nippert-Eng, 2006; Pichler et al., 2009; Valcour, 2007; Yadav & Dabhade, 2014). Balance does not denote equity of time or energy, but instead refers to acceptable limits and agreeable amounts of each work and life (Clark, 2000; Yadav & Dabhade, 2014) with a minimal amount of conflict between the roles in work and personal life (Nilsson et al., 2017). This balance is perceived because it is highly subjective and will vary between individuals (Adams, 2006; Cohen et al., 2009; Kalliath & Brough, 2008; Pichler et al., 2009; Valcour, 2007) based upon their own personalities, life circumstances, and role preference on the continuum of role integrator or segmentor at any given point in time (Ashforth et al., 2000; Cohen et al., 2009; Kreiner et al., 2009; Nippert-Eng, 2006). The salience in either domain of work or life can also change, and therefore, the efforts and strategies to create balance between domains can be different as people's lives change (Cohen et al., 2009; Nippert-Eng, 1996). Balance, because it is different for each individual and therefore highly subjective, is the acceptable space and time each role (work and life) takes up for an individual (Greenhaus & Singh, 2003; Pichler, 2009; Ren & Caudle, 2016; Valcour, 2007).

Much of the literature on work-life balance asserts the roles of work and non-work life

are not in opposition, but instead are complimentary aspects of an individual's life (Cohen et al., 2009; Kalliath & Brough, 2008; Nilsson et al., 2017). This concept is valid as many individuals find their work is an important part of their identity; however, conflict between roles occurs when one role infringes upon the other, be it in the time or specific demands required (Adams, 2013; Pichler, 2009; Yadav & Dabhade, 2014).

Work-life balance, for the purposes of this research, will separate "work" into paid activities for which one earns his or her primary income (in this case the career of being a teacher), and "life" which encompasses one's non-work time and non-work activities. Although much of the early literature on work-life balance focuses on work-family or work-home, the phrase work-life has come into use to incorporate the experiences of people outside the "traditional" family structure (Nilsson et al., 2017; Nitzsche et al., 2014; Rothbard & Ollier-Malaterre, 2016). As the experiences of all teachers (regardless of their lifestyle, marital, or parental status) are equally important, the choice to focus upon "life" balance, as opposed to family, is intentional as not to eliminate teachers based upon their personal constructs of having, or not having, children or spouses (Nilsson et al., 2017; Nitzsche et al., 2014). Similarly, the broader concept of life allows for a comparison to be made for people in different cultural contexts (Pichler et al., 2009).

The ideas of home and family are based upon social constructs and cultural understandings of these terms (Nippert-Eng, 1996), although home and family may look different for individuals. Hence, work-life balance incorporates the activities of people regardless their personal situations or views on home and family and how those may or may not fit into current cultural understandings thereof. Since the specifics of life domains (for example family, spouse, parent, caretaking, leisure) cannot be determined for all, the broader term of life is

relevant across cultures and the various life domains that are relevant to them (Kenney et al., 2013; Nilsson et al., 2017; Ren & Caudle, 2016). Furthermore, statistical data on "family" may leave out a large group of people whose experiences are no less valuable than those in "traditional" families (Greenhaus & Powell, 2017). Many statistics leave out same-sex couples, couples who cohabitate but are not married, couples who may live separately, multigenerational families, or other non-traditional but equally important lives of individuals (Greenhaus & Powell, 2017).

The term life is more appropriate than family, as it is defined here in broad terms that can be interpreted by people around the globe to fit within their context (Ching & Seok, 2018; Pichler, 2009; Ren & Caudle, 2016). Since the participant groups were purposefully broad to include teachers from around the world (just as the pandemic affected teachers around the world), that equivalence of experience is important to keeping the results valid.

The Importance of Work-Life Balance

Work-life balance is an important aspect of an individual's overall well-being, both as an individual and as an educator (Adams, 2013; Gu & Day, 2007; Madipelli et al., 2013; Sorensen & McKim, 2014)**.** When work and personal life are out of balance, individuals may feel stress as they strive to establish a comfortable balance between the demands of their different roles in life (Adams, 2013). In a study on the factors affecting teacher job performance, it was found work-life balance has a significant impact on job performance among teachers, as teachers who have positive work-life balance and manage the different realms of their life can better concentrate on their work and have a more positive attitude towards work (Johari et al., 2018). Additionally, work-life balance aids teachers in their abilities to "remain resilient despite difficult work conditions" (Nilsson et al., 2017, p. 599). Work-life balance is important for the mental and

physical health of wageworkers and has a significant impact on worker retention (Edge, 2016; Froese-Germain, 2014; Hafeez & Akbar, 2015; Johari et al., 2018; Yadav & Dabhade, 2014). Numerous studies' findings make clear the need for additional research and policy that can combat the work-life imbalance of teachers to prevent the loss of teachers from the profession (Conley & Jenkins, 2011; Edwards & Oteng, 2019; Gu & Day, 2007).

Work-life Balance and Gender

The literature shows women throughout the world have a more difficult time in maintaining work-life balance because of the disproportionate responsibilities of domestic activities, which cause additional and more compelling constraints for women when making decisions that affect their work-life balance (Borah & Bagla, 2016; Brue, 2018; Conley & Jenkins, 2011; Currie & Eveline, 2011; Drago, 2001; Edwards & Oteng, 2019; Froese-Germain, 2014; Greenhaus & Powell, 2017; Gu et al., 2020; Madipelli et al., 2013; Mercado, 2019; Pichler, 2009; Whitehead, 2013; Yadav & Dabhade, 2014). This gendered effect of work-life balance for women is noteworthy not only because it is recorded in studies around the world, but also because of the recency in these findings as well. Women, though they have increased workforce participation and equity, still bear more responsibilities within domestic home activities, thus creating a different weight and salience of non-work life for women. Interestingly, however, women do not seem to find their family/home life interferes with their work to the extent that work interferes with their family/home life (Brue, 2018).

Considering the high percentages of female teachers worldwide, work-life balance is a critical issue in education (Borah & Bagla, 2016; Clement, 2017; Conley & Jenkins, 2011; Drago, 2001; Sorensen & McKim, 2014). According to the Organisation for Economic Co-operation and Development (OECD)'s most recent datasets collected in 2018, women comprise

over 50% of educators at the primary and secondary grade level in every OECD country with the exception of Japan, where women comprise 36.8% of educators at the secondary level and 64.4% of educators at the primary level (OECD, 2020). Of the 35 countries with data, all but four report that at least 70% of primary grade educators are female, with the majority ranges at over 80%, and at the secondary level every country except Japan reports over 50% female educators, with the vast majority of countries reporting greater than 60% of its secondary educator workforce as female (OECD, 2020). In the United States, women account for 62.6% of teachers at the secondary level and 87.1% of educators at the primary level (OECD, 2020).

Traditional Causes and Effects of Teacher Stress and Work-life Imbalance

Teaching is an incredibly stressful profession (da Silva & Fischer, 2020a; Hafeez & Akbar, 2015; Skaalvik & Skaalvik, 2018). Some causes of that stress are long work hours and increasing demands (Conley & Jenkins, 2011; da Silva & Fischer, 2020b; Drago, 2001; Froese-Germain, 2014; Kauffman et al., 2020; Nilsson et al., 2017; Whitehead, 2013). According to the 2018 Teaching and Learning International Survey (TALIS), every OECD member country – 48 in total – reported workplace well-being and stress had significant negative relationships with job satisfaction (Schleicher, 2020). Because of teaching's demanding nature, educators need time and methods to combat stress (Austin et al., 2005; Sonnentag et al., 2016). Work overload and work-related stress, often connected to time-pressure, are also significant causes of stress for teachers (Austin et al., 2005; Lawrence et al., 2019; Skaalvik & Skaalvik, 2017, 2018).

Causes

Work-life Conflict and Life-work Conflict.

While both directions of conflict, work-to-life (work causing conflict with non-work life) and life-to-work (non-work life causing conflict with work life), are important in work-life

balance, studies show work-life conflict has a negative impact on work-life balance (Borah & Bagla, 2016; Brue, 2018) more than life-work conflict does (Brue, 2018; McCloskey, 2016). This finding is supported further in research that shows work-life conflict has a large impact on the decision to leave a career, though life-work conflict does not (Greenhaus et al., 2001; Laurijssen & Glorieux, 2013). It may be worth noting the negative effects of work-life conflict appear to be more significant to work-life balance and retention than life-work conflict; however, work-life balance seeks to find a satisfactory level of time and expectations between both roles and therefore, each area must be managed (Yadav & Dabhade, 2014).

Work-life conflict does not affect all groups equally. Women face more work-life conflict than men because of the continued gendered nature of family care roles (Conley & Jenkins, 2011; Edwards & Oteng, 2019). A study of female teachers in Ghana showed women's domestic expectations did not change simply because they were teachers, which can cause conflict between the expectations of their two roles (Edwards & Oteng, 2019). Similarly, a study of preschool teachers in China also found female teachers experience conflict because of their domestic expectations (Gu et al., 2020). Research conducted in India and the Netherlands during the COVID-19 pandemic also showed that female employees suffered a more significant decrease in work-life balance because of their multiple roles and demands (Dogra & Kaushal, 2022; Syrek et al., 2021).

Work-life conflict can stem from many causes, however, work-related technology use at home is a significant factor (Butts et al., 2015; McCloskey, 2016; Sonnentag et al., 2016). One study found work completed on a computer at home, but not a smart phone, impacted work-life conflict. Although not specifically studied, the researchers posit the duration of time for computer use versus phone use is greater, and therefore, a greater source of conflict (Gadeyne et

al., 2018). However, other studies show the more individuals transition between their work and non-work roles, the greater the work-life conflict (Matthews et al., 2014). Specifically, studies on those who work from home caution that inter-role transitions can increase domain conflicts (Matthews et al., 2014; Delanoeije et al., 2019). Conflicts in either direction are not a given, however, and can be mitigated with boundary work tactics (Nippert-Eng, 1996; Kreiner et al., 2009; Sayah, 2013).

Workload.

There is a significant amount of data which shows teachers' workload requires an abundance of non-work hours (Adams, 2013; Borah & Bagla, 2016; Ching & Seok, 2018; Conley & Jenkins, 2011; Froese-Germain, 2014; Lawrence et al., 2019; Nilsson et al., 2017). For many other professions, work ends when the workday is done. Teachers, however, overwhelmingly bring work home. In the scope of the COVID-19 pandemic, many studies showed a further increase in workload for teachers because of the rapid changes in education over the course of the pandemic (Beames et al., 2021; Dogra & Kaushal, 2022; Syrek et al., 2021; UNESCO, 2020).

Many studies show the majority of teachers work from home on evenings and weekends, and in fact, some believe this to be a "given" part of the profession (Butt & Lance, 2005; Conley & Jenkins, 2011; Froese-Germain, 2014; Gu & Day, 2007). These findings are confirmed by different studies over time, showing the trend in increased teacher workload is not changing. In a survey of teachers by Austin et al. (2005), 40% of teachers reported serious stress related to their amount of workload. In a study that same year conducted in the United Kingdom, over 90% of educators reported working weekends, and 96% of teachers reported working into the evenings on workdays (Butt & Lance, 2005). These findings were reaffirmed by a qualitative study which

elaborated on the workload causes which include lesson preparation, grading, non-teaching administrative work, and time needed to contact parents (Conley & Jenkins, 2011). In a report for the Canadian Teacher's Federation, it was found that not only is workload a problem for teachers within Canada, but also a problem for educators around the world according to information supplied by teachers' unions (Froese-Germain, 2014). A study of Australian teachers showed non-teaching related workload and workload intensification is a considerable cause of dissatisfaction (Lawrence et al., 2019). A Norwegian pair of researchers conducted two studies on the effects of various stressors on aspects of teachers' well-being. Both studies showed workload (one study with workload as a specific measure and the other measuring time-pressure, workload being a facet thereof) had significant negative effects on teachers' well-being, to include burnout and teacher retention problems (Skaalvik & Skaalvik, 2017, 2018). Many of these studies have found non-teaching workloads are increasing and a source of stress and work-life imbalance for teachers, and a study conducted for the National Education Association showed that 90% of teachers support a reduction in paperwork requirements as a method of combatting teacher burnout (Jotkoff, 2022). Perhaps this is because teachers find the meaningfulness of their work in their experiences with their students (Nilsson et al., 2017) not in doing paperwork. Additional demands in non-teaching, non-student-centered work, therefore, have a negative effect on teacher well-being.

While teacher work overload is not new, it is also not improving. In a comparative study from documentation on teaching in Australia in 1911 and teaching experiences in modern day, Whitehead (2013) found many of the problems that existed over a century ago mirror those experienced today, to include an abundance of non-teaching tasks and the necessity of completing work during off-duty hours because of excessive demands. According to results from

the 2018 TALIS conducted by the OECD, most teachers find the abundance of non-teaching administrative work causes more stress than teaching itself (Schleicher, 2020).

Many teachers state the amount of non-teaching demands, such as administrative tasks, accountability paperwork, and meetings contribute to their daily workload and the amount of work they must take home in order to complete their teaching duties (Borah & Bagla, 2016; Butt & Lance, 2005; Ching & Seok, 2018; Conley & Jenkins, 201; Froese-Germain, 2014; Schleicher, 2020). This affects teachers' work-life balance in that they must find time outside their workday to complete work tasks (often related to actual teaching such as lesson planning and grading), thus encroaching on their non-work lives (Adams 2013; Austin et al., 2005; Butt & Lance, 2005; da Silva & Fischer, 2020a; Froese-Germain, 2014). High workloads can also keep people from mentally disengaging from work, as they continue to think about upcoming tasks or things yet to be done (Syrek & Antoni, 2014). In addition, substantial amounts of work are among the highest predictors of emotional exhaustion and insufficient work recovery (Kinnunen et al., 2011; Skaalvik & Skaalvik, 2017).

The ability to work from home (or anywhere) via technology has created increased workload, as employees are expected to or feel expected to contribute to their work while outside its physical and temporal ranges (Bauwens et al., 2020; Currie & Eveline, 2011; Park et al., 2019; Towers et al., 2006). Often, teachers are engaged in work-technology use at home because their school culture and social norms of colleagues influence them to do so (Bauwens et al., 2020; Conley & Jenkins, 2011). Such influence may have an exacerbated effect on work-life balance because not only does after-hours use of work-related technology (even in moderate amounts) have a negative effect on work-life balance for teachers (Bauwens et al., 2020), but also because when messages show up on a smartphone after hours, many employees feel

obligated to respond to the message (Greenhaus & Powell, 2017; Park et al., 2019; Towers et al., 2006). In their analysis of work extending technology, Towers et al. (2006) noted that technology has changed the rules for when and where work is completed. Technology has turned work into something that can eliminate temporal and spatial boundaries, making workers available anytime, anywhere. Work no longer ends when an employee leaves the office, thus meaning anything undone when contract hours are over is expected to be completed during off-the-clock personal hours which also leads to increased workload expectations (Towers et al., 2006). This adaptation could be even more severe for teachers, as they already had extensive workloads prior to the prolific use of work-related technologies and digital learning environments (Bauwens et al., 2020).

The demands of being a teacher beyond simply teaching content can often be vast and heavy. Teachers are expected to teach more than simply academic content and to maintain behaviors in the classroom as well (Schleicher, 2020). The current trending focus on trauma-informed teaching and socio-emotional learning for students makes clear many of the responsibilities teachers have in addition to imparting content-area learning, such as being aware of socio-emotional learning needs, creating a caring and trusting classroom environment, fostering relationships, role modeling positive and appropriate behaviors, knowing available resources to help students and families and refer students to those resources, and having time to reflect and self-assess (Schleicher, 2020; Venet, 2019). While many of these requirements of trauma-informed teaching are processes teachers do already, when they are laid bare, it shows the extent to which teachers' time and mental resources are strained (McCuaig et al., 2019).

Time Pressure.

The significant workload of teachers creates an increase of time-pressure which also

contributes to work-life conflict and work-life imbalance (Adams, 2013; Ching & Seok, 2018; Froese-Germain, 2014; Nilsson et al., 2017; Rose et al., 2013; Whitehead, 2013). Time pressure is the perception of the amount of time people have to accomplish necessary or desired tasks and can also relate to the feeling of stress or urgency in which tasks need to be accomplished (Rose, 2015; Rose et al., 2013), along with the pressures from multiple roles and the necessity to make choices on how and in which roles to use that time (Strazdins et al., 2011). When time is spent in one domain, such as work, that takes time from other domains, such as one's personal life, meaning conflict and imbalance can occur (Adams, 2013).

Time pressure is directly related to mental and physical health (Rose, 2015; Strazdins et al., 2011). Not having enough time is a key reason given for unhealthy eating and lack of exercise (Rose, 2015; Strazdins et al., 2011). Time, a finite resource, is required for exercising, having hobbies, building and maintaining friendships, and taking general self-care, all of which are important for mental health (Adams, 2013, Sonnentag et al., 2016). Time pressure itself makes participation in recovery activities and psychological detachment from work more difficult to attain (Sonnentag et al., 2016), thereby decreasing one's ability to recover from stresses caused by work, to include time pressure.

Several studies have shown conflicts in work-life balance caused by time-pressure can be alleviated with a reduction in working hours (Laurijssen & Glorieux, 2013; Rose et al., 2013). These findings beg the question, especially for teachers, if a reduction in work demands would have similar benefits by necessarily decreasing the hours spent on work, as other studies on work demands for teachers connect workload to time pressure stresses (Skaalvik & Skaalvik, 2017, 2018). This conclusion is supported by research on stress and female teachers that asserts a lack of time to meet the demands of work and needs of family is a strong factor in work-life

imbalance (Clement, 2017; Froese-Germain, 2014).

Overload of tasks paired with insufficient time in which to complete those tasks is a significant cause of stress and of decreased well-being for teachers (Adams, 2013; Austin et al., 2005; da Silva & Fischer, 2020a; Nilsson et al., 2017; Skaalvik & Skaalvik, 2018): a scenario which forces teachers to choose between infringing upon their off-duty time or neglecting their work. It is common for teachers to make the choice to prioritize their work obligations at the expense of their personal life, which can further degrade work-life balance (Froese-Germain, 2014; Quintana et al., 2019). When time-pressure demands are mitigated, as they are in Sweden where teachers have 10 discretionary hours per week to work (many choose to do this at home), there is a noticeable positive impact on work-life balance (Nilsson et al., 2017). The finding that flexible work time and telework options improve aspects of work-life balance is supported in the research from multiple countries around the world (Basile & Beauregard, 2016; Duxbury & Halinski, 2014). Duxbury and Halinski (2014) found while telework did not decrease work demands, it did mitigate feelings of being overwhelmed at home for parents when compared to parents who did not have the option to telework. Similarly, the ability to have control over the option to work from home and manage one's own work and non-work demands had a positive effect on work-life balance (Basile & Beauregard, 2016; Duxbury & Halinski, 2014; Nilsson et al., 2017; Rose, 2015).

With respect to women specifically, time pressure exudes a greater amount of stress and has a greater negative effect on work-life balance (Borah & Bagla, 2016; Conley & Jenkins, 2011; Froese-Germain, 2014; Madipelli et al., 2013; Mercado, 2019; Strazdins et al., 2011). For women, paid work hours, domestic work, and care for their children all contribute to time pressure demands (Rose, 2015, Rose et al., 2013). Mothers, in particular, may face additional

challenges with time-pressure, as they tend to structure their time around the needs of their children and spouse, though this is not the case for fathers (Strazdins et al., 2011). Yet, it would be neglectful to say time pressure does not affect men's work-life balance. Men's long work hours are the greatest predictor of their time pressure, and this pressure is greater for fathers of young children who want to spend time with their children (Rose, 2015, Rose et al., 2013). The additional time pressure demands placed on teachers, regardless of gender, create a significant need to understand their work-life balance management.

Rose (2015) argues time pressure may be an effective and tangible way to measure work-life balance in that, while tied to perception, it is less subjective than the broad and individualized ideal of work-life balance and is more easily quantifiable. Given that time pressure is a significant factor of work-life balance (Rose et al., 2013), this rationale bears consideration. Also, given that teachers face strong time pressure demands with too much work and too little time (Conley & Jenkins, 2011; da Silva & Fischer, 2020a; Skaalvik & Skaalvik, 2018), it is possible that teachers' work-life balance and boundary work tactics need to include the temporal realm to mitigate the negative effects of time pressure. In their analysis on time-pressure and women, Rose et al. (2013) call for the need of study on "strategies that can ease time-pressure and assist work-family balance" (p. 55). This research on boundary management tactics gives information on how teachers use temporal boundary tactics to mitigate time-pressure and improve their work-life balance.

Effects

Stress and work-life imbalance have many effects not only on teachers' personal lives but also on their work lives and the students they teach (Borah & Bagla, 2016; Ching & Seok, 2018; Dicke et al., 2020; Johari et al., 2018). While individual well-being should be a top concern for

employers, employee efficacy is also important, especially in education. In determining how teachers effectively manage aspects of their work life balance, employers can support strategies to improve employee well-being and improve education (Lawrence et al., 2019; Skaalvik & Skaalvik, 2018).

Health.

Work-life imbalance has a negative effect on both mental and physical health (Greenhaus & Powell, 2017; Quintana et al., 2019). Work life imbalance has shown to decrease psychological well-being (Greenhaus & Powell, 2017; Quintana et al., 2019), and in some instances can lead to psychological problems, including mental and behavioral disorders (da Silva & Fischer, 2020a; Greenhaus & Powell, 2017). Time pressure demands, closely associated with causes of stress for teachers, also have negative impacts on mental health (Strazdins et al., 2011). More commonly, people with an excess of stress or work-life imbalance may use sick leave time when not sick (Madipelli et al., 2013), which workers sometimes refer to as mental-health days, to take a break although they are not physically ill. This choice to take a day off is an important step towards managing work-life balance. However, during the pandemic, teacher and substitute shortages may have made taking such days more difficult or stressful (Jotkoff, 2022; Kurtz 2020a; Smith 2020).

While some may need to take time off to get relief from job stress, time-pressure can also have the opposite effect where workers feel such pressure from the demands of their job that they go to work even when they should be at home recovering from illness (Strazdins et al., 2011). Teachers, who when absent must write lesson plans and prepare for work even if they are not going to be present, may fall into this category.

Work-life balance is important in the mental recovery and resilience of teachers (Nilsson

et al., 2017) who are participants in high-stress, high expectation jobs (da Silva & Fischer, 2020a; Gu & Day, 2007; Hafeez & Akbar, 2015; Skaalvik & Skaalvik, 2018). Recovery involves positive experiences from one domain offsetting or helping to alleviate the stress of negative experiences in another; similarly, spillover is the reverse when negative experiences affect experiences or feelings in another domain (Sonnentag et al., 2016). Employees can recover from the strain of work by unwinding and disengaging from work during their non-work time, and this recovery period is necessary to prevent decline of individual well-being (Sonnentag, 2003, Sonnentag et al., 2016). Recovery activities facilitate the connection between boundary enactment (keeping boundaries between different life domains) and well-being (Wepfer et al., 2018). Mental health is not only important for teachers themselves but also for their effectiveness in the classroom (Singh, 2016). Teacher efficacy is tied to their own mental health, levels of stress, work-life balance, and physical health.

Work-life imbalance can also have negative physical effects on teachers (Borah & Bagla, 2016; da Silva & Fischer, 2020a; Greenhaus & Powell, 2017; Quintana et al., 2019). Physical issues associated with factors of work-life imbalance for teachers include cardiovascular problems and disorders linked to the musculoskeletal system (da Silva & Fischer, 2020a). Such physical problems could lead to teachers needing more time off to rest and treat their physical ailments.

Teacher Efficacy.

In general, people are more effective at work when they have time to recover from work each day (Sonnentag et al., 2016). Studies have shown a strong connection between job-satisfaction, work-life balance and job performance (Borah & Bagla, 2016; Bumhira et al., 2017; Ching & Seok, 2018; Dicke et al., 2020; Johari et al., 2018; Sammons et al., 2007). Greenhaus

and Powell (2017) note work-life balance can create more effective employees, which benefits not only individuals but also employers and society, especially considering the important role teachers play in student success (Carver-Thomas & Darling-Hammond, 2017; Chetty et al., 2014; Day et al., 2006; Little et al., 2009; Sammons et al., 2007).

In studies of teachers in Malaysia, researchers found work-life balance has a significant relationship with teachers' overall job performance (Ching & Seok, 2018; Johari et al., 2018), as did another study in the Philippines (Quintana et al., 2019). A study of teachers in Zimbabwe concluded that higher work-life balance creates teachers who are more satisfied with their jobs, while those with low work-life balance will be less satisfied and less effective (Bumhira et al., 2017). A longitudinal study on the effects of teachers' lives and their effects on students found that teacher well-being and resilience are each, separately, major factors in teacher efficacy and student success (Sammons et al., 2007). Teachers who find their efficacy to be declining cite several causes, including the massive workload that encroaches on teachers' non-work time, problems with classroom management and student behaviors, and unsupportive leadership (Day, 2012).

One study of the role of resilience on teachers' self-efficacy determined that to ensure quality continuation of educators in the profession, teachers need support from their school in a variety of ways to include the ability to promote their own self-efficacy through growth opportunities or a degree of autonomy, which may manifest differently for each individual (Gu & Day, 2007). Another study found teacher autonomy had a positive effect on teacher performance, as teachers are professionals who know what their students need to learn and what strategies to use to most effectively reach their students (Johari et al., 2018).

Job Satisfaction and Burnout.

Teacher job satisfaction has a positive correlation with student achievement (Ching & Seok, 2018; Dicke et al., 2020). Based on data from the 2012 PISA scores and 2013 TALIS study conducted by the OECD, Dicke et al. (2020), found work-environment job satisfaction, was tied to student achievement. Jobs satisfaction can be broken down into multiple dimensions of satisfaction, such as satisfaction with the profession itself and satisfaction with the place in which one works (Dicke et al., 2020). Their findings, derived from populations in a variety of countries and cultural settings, show satisfaction with the current workplace environment had a strong relationship with student achievement (Dicke et al., 2020).

In a study focused on agriculture teachers in Louisiana, Blackburn et al. (2017) found job satisfaction is a part of healthy work-life balance for those in the sample, and the reverse was also shown in a study of teachers in Zimbabwe where it was found increased work-life balance also showed an increase in job satisfaction (Bumhira et al., 2017). Similarly, a study of teachers in India (Padma & Reddy, 2014) found work-life balance is a strong predictor of job satisfaction. These samples from differing cultures and countries show consistent data on the relationship between work-life balance and job satisfaction.

One hindrance to job satisfaction for teachers are the long work hours associated with teaching (Gu & Day, 2007; Hafeez & Akbar, 2015). The workload for teachers, which is the major cause of long work hours, was broken into different levels of measurement in relation to job satisfaction in a study conducted in 2019. This study found teacher satisfaction with non-teaching workload significantly predicted all measured factors of burnout, while satisfaction of teaching workload only effected one factor of burnout: emotional exhaustion (Lawrence et al., 2019). This left the researchers with the conclusion that teacher job satisfaction is

multidimensional and partially contradictory, as their satisfaction with nonteaching tasks were low but satisfaction with teaching workload was moderate (Lawrence et al., 2019).

In many ways, teachers, are expected to care for their students in an almost parental manner, especially female teachers (Conley & Jenkins, 2011; Drago, 2001). Teachers do not only prepare lessons and grade papers, but also care for students, are responsible for student welfare and teaching, monitoring, and correcting student behaviors in addition to teaching academic concepts (Conley & Jenkins, 2011; Venet, 2019; Whitehead, 2013). Teachers are also mandatory reporters in instances of suspected child abuse or neglect, which can take an emotional toll (Hupe & Stevenson, 2019).

Aside from bringing home physical work like grading and planning, teachers, along with others in caring professions, often bring their work home mentally and emotionally (Adams, 2013; Butt & Lance, 2005; da Silva & Fischer, 2020a; Froese-Germain, 2014; Nilsson et al., 2017). Emotional exhaustion, which is a major factor in burnout for teachers, occurs when people experience high emotional demands over an extended period and feel emotionally drained (da Silva & Fischer, 2020a; Quintana et al., 2019; Richter et al., 2015; Skaalvik & Skaalvik, 2018; Xie et al., 2018). Emotional exhaustion can be caused by excessive job demands, workload (Skaalvik & Skaalvik, 2018), and can be enhanced by work-related technology use at home for work after hours (Xie et al., 2018). Recovery activities, such as physical or relaxation activities and psychological detachment from work, are important to mitigating the stressors from work (Sonnentag et al., 2016; Sonnentag & Fritz, 2015; Türktorun et al., 2020). Psychological detachment, leaving work behind mentally, is important for recovery and work-life balance (Allen et al., 2014; Sonnentag et al., 2016; Sonnentag & Fritz, 2105; Türktorun et al., 2020).

Teachers who experience burnout are less effective as they cannot fully commit to work

and feel less commitment to their job and workplace (Akar, 2018). The change in satisfaction and commitment can lead further to teachers choosing to leave the profession altogether (Skaalvik & Skaalvik, 2018). Organizational support is an important component in helping teachers to keep their passion for teaching in a demanding job (Day, 2012).

Teacher Retention.

Work-life balance is strongly related to retention and attrition across careers (Conley & Jenkins, 2011; Edge et al., 2016; Hafeez & Akbar, 2015; Johari et al., 2018; Kreiner et al., 2009; Yadav & Dabhade, 2014). In breaking down issues of work-life balance, it is specifically confirmed that work-life conflict is strongly tied to issues of retention and attrition (Conley & Jenkins, 2011; Kreiner et al., 2009; Laurijssen & Glorieux, 2013). When work conflicts too strongly with one's non-work life, people often find themselves needing to make difficult choices to restore balance. Because issues tied to work-life imbalance are highly indicative of teacher attrition (Skaalvik & Skaalvik, 2018), it is important that the effective strategies teachers use to attain and maintain balance are discovered and promoted to help ease the problems with teacher retention. Recent studies have shown teacher attrition rates of 8-14% each year and about two-thirds of those are teachers who leave are leaving the profession, not simply retiring (Garcia & Weiss, 2019; University of Massachusetts Global, 2020), at a time when teacher shortages exist in the United States and worldwide (UNESCO Institute for Statistics, 2016; United States Department of Education, 2022). Additionally, emotional exhaustion and burnout are key factors in teacher attrition rates (Skaalvik & Skaalvik, 2018). By early 2022, a study conducted for the National Education Association reported 90% of teachers felt that burnout was a serious problem (Jotkoff, 2022).

Teacher retention and attrition is a larger issue than simply increasing new teacher recruitment as many teachers leave the profession before retirement (Butt & Lance, 2005; Garcia & Weiss, 2019; University of Massachusetts Global, 2020) and is a problem in many countries around the world (da Silva & Fischer, 2020a; Schleicher, 2020; Skaalvik & Skaalvik, 2018). If teachers are leaving the profession because of work-life imbalance, filling vacancies with new teachers without addressing the issues causing attrition will not solve the problem but only perpetuate it (Butt & Lance, 2005). With up to two-thirds of existing teacher vacancies open due to teachers leaving the profession before retirement (Carver-Thomas & Darling-Hammond, 2017), new teacher training and recruitment are not enough.

The cycle of rehiring teachers is very costly. In a report on teacher turnover, The Learning Policy Institute estimated that it costs nearly $20,000 USD to replace a teacher (Carver-Thomas & Darling-Hammond, 2017). Aside from the problems with a perpetual cycle of attrition or maintaining numbers in the teaching force, attrition rates are not only concerning because the vacancies leave positions that must be filled with qualified educators, but also because experienced teachers are more effective (Blackburn et al., 2017; Day et al., 2006). Each year, schools around the world spend time and money on professional development for existing teachers to hone their skills and continue to grow as professionals. Among OECD countries, 76% of teachers attended some form of in-person professional development and countries generally held between two and six separate professional development events per year (Schleicher, 2020). In 2018, teachers reported that professional development had a positive impact on their teaching practice and self-efficacy (Schleicher, 2020). These trainings are an investment wasted when teachers choose to leave the career field, as the knowledge and training is no longer of benefit to the schools (Lawrence et al., 2019).

Keeping qualified, effective teachers in the classroom is important for student achievement (Carver-Thomas & Darling-Hammond, 2017; Chetty et al., 2014; Little et al., 2009; Sammons et al., 2007). There is a direct relationship between experienced teachers and student achievement, and conversely inexperienced or underqualified teachers not only fail to help students achieve but can have a negative effect on student learning (Carver-Thomas & Darling-Hammond, 2017). Additionally, it was found that in California, areas with higher turnover rates were often in areas with low-income families (Carver-Thomas et al., 2020), thus increasing the damaging effects on students already in disadvantaged settings.

Boundary Theory

Boundary theory is based on the principle that individuals categorize and create mental boundaries around different aspects of the world around them (Ashforth et al., 2000; Clark, 2000; Kreiner et al., 2009; Nippert-Eng, 1996; Zerubavel, 1991). The boundaries separate different domains, which Clark (2000) defines as "worlds that people have associated with different rules, thought patterns and behavior" (p.753). Each domain has its own boundaries with borders which are the points (physical, temporal, or psychological) where domains begin or end (Clark, 2000; Kreiner et al., 2009; Nippert-Eng, 1996). Though many of the boundaries are culturally constructed and agreed upon (i.e., work is one's paid employment, home is where one lives, and family generally consists of relatives), boundaries are different for individuals and across some cultures (Kreiner et al., 2009; Nippert-Eng, 1996). It is important to note boundaries can be fluid and change, though preferences tend to stay relatively stable over time (Hecht & Allen, 2009; Nippert-Eng, 1996; Rothbard & Ollier-Malaterre, 2016). Clark's (2000) work/family border theory states that people cross between the borders of work and non-work life daily. Although two terms exist, boundary theory and border theory, they are virtually the

same in their fundamental principles, with the origin and initial purpose for development being the major distinction (Allen et al., 2014). The term boundary will be used for the purposes of this literature review and study.

Within an individual's domains, a person experiences different roles. Outside of work, each individual faces many other roles, also dependent upon individual context (Ashforth et al., 2000; Nippert-Eng, 1996). Instead of focusing on those myriad roles, they are combined into the larger role category of life (or non-work life) in order to better understand teachers' boundary work tactics and work-life balance. Researchers have begun to focus on the roles of boundary management at the organizational and individual level because technology has made the boundaries between work and home blurrier and more permeable (Allen et al., 2014; Rothbard & Ollier-Malaterre, 2016).

Roles, Conflict, and Overload

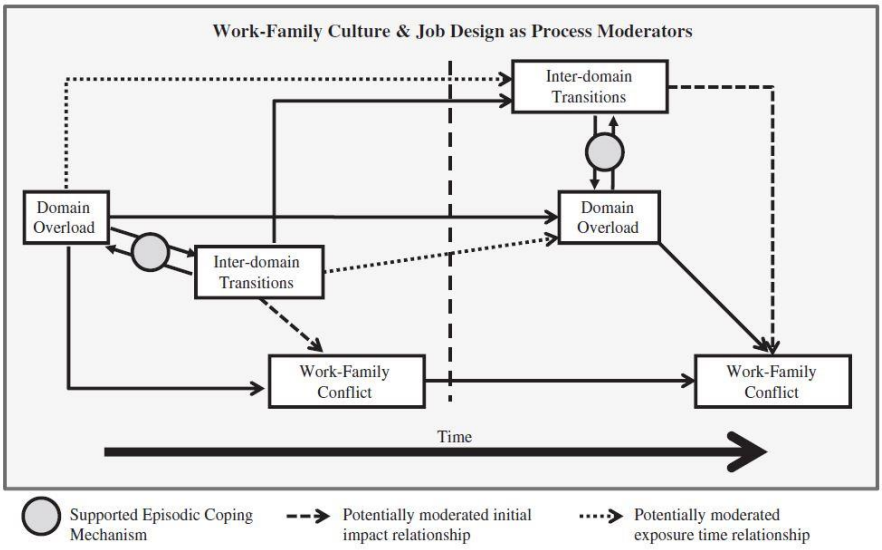
Roles are the recurring activities one undertakes within any social system (work, family, school, or other groups) that yield an output for that system (Allen et al., 2014). People have multiple roles in their lives, and boundaries help individuals manage their multiple roles (Allen et al., 2014).

Role conflict occurs because people occupy multiple roles in their lives, with each role demanding time and energy of which there is limited supply (Brue, 2018; Clark, 2000). There are frequent contrasts between the cultures of work, home, and other roles with each domain providing for different yet important needs (Clark, 2000). The more roles one occupies, the higher the chances of stress due to the demands of multiple roles (Towers et al., 2006). Minimizing role conflict is a facet in maintaining work-life balance (Nilsson et al., 2017), as conflict will create imbalance. Matthews et al. (2014) expounded upon the concept of role

conflict by further determining that beyond role conflict, when resources from one role are not sufficient to meet the demands of that role, role overload occurs. In response to role overload people will reallocate resources (generally their attention and time) from another domain to fill the resource gap. Because resources (such as time and energy) are finite, when one role overtakes resources, the other role suffers (Golden et al., 2006). Furthermore, role overload and the attempt to rebalance the demands requires a large increase in interdomain transitions (switching between roles) which in turn increases work-life conflict (Matthews et al., 2014).

Figure 1

Conceptual Model Work-Family Culture & Job Design as Process Moderators



Note. From "A longitudinal examination of role overload and work-family conflict: The mediating role of interdomain transitions," by R. A. Matthews, D. E. Winkel, and J. H. Wayne, 2014, *Journal of Organizational Behavior, 35*(1). (https://doi.org/10.1002/job.1855). Reused with permission (Appendix A).

Although women tend to have greater work-life conflict than men, women have a lesser extent of role conflict than men (ten Brummelhuis & Greenhaus, 2018). Women tend to juggle

their multiple roles in such a way that they bring positive supports from one role to another while also minimizing negative impacts from conflicting characteristics of their multiple roles (ten Brummelhuis & Greenhaus, 2018).

Boundaries: Permeability, Flexibility, and Strength

Boundaries can be characterized by their permeability, flexibility, and strength. Permeable boundaries allow crossover from one life area to another and allow participation in one domain while physically located in another (Allen et al., 2014; McCloskey, 2018, Olson-Buchanan & Boswell, 2006), for example when a teacher is at their own child's sporting event but is also grading papers. Impermeable boundaries are those where participation from one role is not allowed within another (Allen et al., 2014; Nippert-Eng, 1996). Permeability is not necessarily equal for all boundaries, as some may be more permeable than others based on necessity or individual choice (Kossek et al., 2012; Rothbard & Ollier-Malaterre, 2016).

Boundary flexibility relates to the ability for an activity to occur in different physical or temporal ranges (Allen et al., 2014). For example, many educators have flexible boundaries in their ability to take home student work to grade or to plan lessons during whatever non-work time they choose; however, synchronous teaching (whether in-person or virtual) must take place at specific times and locations, be it a classroom, a dedicated school website, or video conferencing website.

Borders have different strengths which may allow for different degrees of permeability and flexibility, though the strengths of borders may not be equivalent in all directions (Allen et al., 2014; Clark, 2000). For example, an individual who works with protected information may have a high degree of work boundary strength and impermeability but a low degree of home permeability and strength as he or she accepts work calls during non-work time. It has also been

shown non-work boundaries tend to be more permeable than work boundaries, as work-life conflict is much more prevalent than life-work conflict (Allen et al., 2014; Olson-Buchanan & Boswell, 2006; McCloskey, 2016)

While individuals have some degree of control over their boundaries' permeability and flexibility, organizations have a large degree of control over them as well, meaning individuals have to negotiate within their own boundary preferences and those imposed by their organization (Allen et al., 2014; Olson-Buchanan & Boswell, 2006; Rothbard & Ollier-Malaterre, 2016). People who can establish and maintain boundaries between their work and personal life are able to reduce work-life and life-work conflict (Hecht & Allen, 2009; McCloskey, 2018). Indeed, recommendations have been made for educators to be granted reasonable workloads to assist in their abilities to create and maintain healthy work-non-work boundaries (Matthews, 2020; Nilsson et al., 2017; Skaalvik & Skaalvik, 2017).

Integrators and Segmentors

According to Nippert-Eng's (1996) groundbreaking research on work and home boundaries, people fall somewhere along a continuum of complete integration of home and work and complete segmentation of home and work. Complete integration is characterized by highly permeable and flexible boundaries and the individual sees no distinction in the boundaries and roles between work and non-work life (Allen et al., 2014; Nippert-Eng, 1996; Rankin & Gulley, 2018). By contrast, complete segmentation has highly impermeable and inflexible boundaries with complete separation between work and non-work life (Allen et al., 2014; Nippert-Eng, 1996; Rankin & Gulley, 2018). Integrators move freely between domains discussing or participating in work and non-work while in either domain, as segmentors keep strict boundaries between work and non-work lives with little to no carryover to include pictures, objects, or

discussions of a domain other than the one they are currently in (Nippert-Eng, 1996). Few people are complete integrators or segmentors, with most people falling somewhere along the continuum. People are categorized as integrator or segmentor based on their tendency towards one end or the other (Kreiner et al., 2009; Nippert-Eng, 1996) It is important to note people are not stagnant on this continuum but can move freely as they respond to demands in their work and non-work lives (Kossek & Lautsch, 2012; Nippert-Eng, 1996). Just as people are not stagnant in their preferences for integration and segmentation, people may have different preferences dependent upon the directionality (work-life or life-work) than they do in the other direction (Ashforth et al., 2000; Hecht & Allen, 2009; Olson-Buchannan & Boswell, 2006; Rothbard & Ollier-Malaterre, 2016). For example, people may segment more with discussions about work while in their life domains but integrate discussions about their life more when in the work domain, or vice versa. Additionally, people's acts of integrating and segmenting change in response to their needs and efforts to create their own sense of order and preference within the facets of their lives (Cohen et al., 2009).

There are benefits and drawbacks to each proclivity. For integrators, transitions and boundary management and maintenance are easier (Allen et al., 2014; Ashforth et al., 2000). People with high work-life integration may have fewer recovery activities and poorer work-life balance and exhaustion compared to segmentors because they have less time to take on recovery activities, which has a negative impact on work-life balance (Sonnentag et al., 2016; Wepfer et al., 2018). Some research recommends taking care when integrating because it can lead to feelings of wasted time as tasks in either realm do not get accomplished well, which can lead to frustration with both domains (Cohen et al., 2009).

Segmentors have more difficulty with interruptions, transitions, and must work harder to maintain boundaries (Allen et al., 2014; Nippert-Eng, 1996). Segmentors also deny themselves the benefits of positive spillover and enhancement from their other roles (Allen et al., 2014; Powell & Greenhaus, 2010; Kossek et al., 2012) However, segmentors report more relaxation, recovery, and psychological separation from work than integrators (Allen et al., 2014; Kinnunen et al., 2016; Sonnentag et al., 2016; Wepfer et al., 2018, Xie et al., 2018). While segmentation is better for recovery and work-life balance, bi-directional integration (instead of work-to-life integration only) is beneficial to people's work-life balance (Kinnunen et al., 2016).

Though people may have preferences in their boundary integrations, their abilities to act on these preferences (their boundary management behaviors) may be different based upon their ability to enact their preferences due to work or life constraints (Allen et al., 2014; Olson-Buchanan & Boswell, 2006; Rothbard & Ollier-Malaterre, 2016), further complicating the abilities of individuals to manage their boundaries. Expectations or work-culture norms that require integration or technology use at home make psychological detachment from work more difficult, thus making recovery from work more difficult (Sonnentag et al., 2016). Additionally, boundary management preferences do not necessarily mean that people only desire integration or segmentation. People may still use segmentation strategies while choosing to enhance their lives through their multiple domains of work and non-work life (Rothbard & Ollier-Malaterre, 2016).

Boundary Work/Management

Christena Nippert-Eng (1996), a pivotal researcher in boundary theory and management, defines boundary work as:

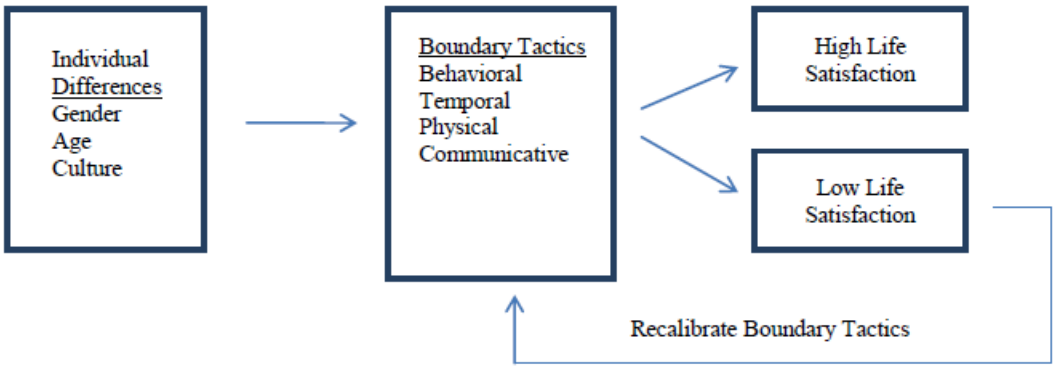
> the key process that reflects and helps determine how much we integrate/segment home and work. It is what ultimately allows each of us to repeatedly define and refine the

> essence of and relationship between our home and work realms — what is unique to each place and what is shared between them. (p. 8)

Essentially, this never-ending and ever-changing process allows individuals to integrate and segment their roles by manipulating boundaries and what takes place within or between them to maintain or attain work-life balance (Rothbard & Ollier-Malaterre, 2016). Just as one's integration and segmentation preferences and sense of work-life balance are highly individualized, so are one's boundary work tactics (Cannilla & Jones, 2011; Kossek et al., 2005; Rothbard & Ollier-Malaterre, 2016; Trefalt, 2013). It is important for individuals to reconsider their boundary management tactics when they find their work-life satisfaction to be lower than desired (See Figure 2. Cannilla & Jones, 2011), which is a part of the recursive and reflective nature of boundary management. Boundary work is critical to the management of individual's multiple life roles (Rothbard & Ollier-Malaterre, 2016).

Figure 2

Boundary Management Tactics Impacts on Life Satisfaction



Note. From "Understanding how individuals use boundary management tactics to manage work-life interference," by L. Cannilla and G. E. Jones, 2011, *Competition Forum, 9*(2). Reused with permission (Appendix B).

People's roles influence one another in a bidirectional nature (Clark, 2000), meaning the different areas of a person's life will have an impact on the other areas, which will necessarily influence how people choose to manage their boundaries. Separate from boundary preferences and work, boundary enactment is the "degree of integration or segmentation individuals establish in their lives in order to reconcile work and non-work role demands, taking their personal preferences and environmental conditions into account" (Wepfer et al., 2018, p.729). Clark (2000) found most people are proactive or enactive in terms of their role and boundary management, and far less reactive which shows the active and preparatory nature of boundary work.

Boundary Work Categories

Building upon Nippert-Eng's (1996) work, Kreiner et al. (2009) classified boundary work into four distinct categories, each with their own management tactics: physical boundaries, temporal boundaries, behavioral boundaries, and communicative boundaries.

Physical Tactics.

Physical or spatial boundaries are the tangible boundaries people set to keep work physically separated from non-work lives; they are the where of an activity's occurrence (Allen et al., 2014; Kreiner et al., 2009). This physical, and therefore visual, separation between work and private life is important for establishing or maintaining work-life balance (Adams, 2013; Rankin & Gulley, 2018), although it may look different for individuals based upon their integration or segmentation preferences (Nippert-Eng, 1996).

Physical boundary work includes the adaptation of physical boundaries, where people create or remove actual tangible barriers between the physical space of work and home (Kreiner

et al., 2009). Additionally, people manipulate space by managing actual physical distance between home and work (Kreiner et al., 2009). People also manage physical artifacts by allowing or disallowing the use or placement of objects from one domain to exist within the physical realm of the other domain (Kreiner et al., 2009; Nippert-Eng, 1996). This can include any items that "belong" to one realm or another such as keeping home and work keys on the same or separate rings or allowing photos from one domain to be displayed in the other (Nippert-Eng, 1996).

In a study of boundary work tactics and family/work integration and segmentation preferences, Carlson and fellow researchers (2016) found physical tactics were used significantly under all measured preference styles. Because the COVID-19 pandemic removed many of the traditional physical boundaries between home and work, this type of boundary work is of particular interest to the current study.

Temporal Tactics.

The boundaries one places on his or her time, the "when" of work and non-work, is especially important in the world where work and work-related technology use at home is becoming not only common but often expected (Adams, 2013; Allen et al., 2014; Bauwens et al., 2020; Kreiner et al., 2009). The first type of temporal tactic is controlling one's work and non-work time by manipulating their plans through setting specific times on when to do work or non-work activities -to include intra-role activities- or saving time in one domain to be used later (Kreiner et al., 2009). For teachers this could mean setting specific times during their non-work time to complete lesson planning or grading. Setting clear work and non-work times are beneficial for segmentors and help individuals remain within their current role (Carlson et al., 2016). The second temporal tactic is making time to find respite by creating dedicated time to

leave the demands of a specific domain and disengage (Kreiner et al., 2009). This tactic of disengagement, both physical and mentally, is important for recovery from stresses found within a particular role and can make employees more effective (Kinnunen et al., 2016; Sonnentag et al., 2016).

Behavioral Tactics.

Behavioral tactics are social practices people undertake in which they make choices to decrease disagreeing aspects between work and home (Kreiner et al., 2009). These tactics include utilizing outside tools and setting priorities. The first tactic of utilizing other people to assist in helping to maintain boundaries is consistent with previous research that engage other people to act as border-keepers to help individuals maintain their boundaries between domains (Clark, 2000; Kreiner et al., 2009).

The second behavioral boundary tactic is leveraging technology use to assist with boundary management (Kreiner et al., 2009). The availability of technology for work use after hours is omnipresent in most workplaces today (da Silva & Fischer, 2020b; Park et al., 2019; Rothbard & Ollier-Malaterre; 2016). With the prevalence of communication technologies and its availability at all hours in virtually all locations, this behavioral tactic is becoming increasing salient, as an abundance of research shows (da Silva & Fischer, 2020b; Richardson & Benbunan-Fich, 2011; Park et al., 2019; Rothbard & Ollier-Malaterre; 2016; Sonnentag et al., 2016).

Kreiner et al. (2009) determined invoking triage, or the management of multiple demands from each domain by prioritizing which takes precedence, is another behavioral tactic used to manage potential conflict between work and non-work lives. One effective way priests in the study bolstered their efficacy at invoking triage was by having an already established ideas of

priorities to make decisions quickly in determining which role would be most salient in situations (Kreiner et al., 2009).

Similarly, the final behavioral tactic of choosing different levels of permeability between boundaries or certain aspects of the work or non-work boundary (Kreiner et al., 2009) must be determined by each person based upon their roles. This is a nuanced view of permeability which furthers the idea that boundaries and boundary work are highly individualized and goes beyond the idea of someone as an integrator or segmentor but allows for both integration and segmentation for different aspects of work and non-work life (Kreiner et al., 2009).

Communicative Tactics.

Communicative tactics are how individuals share their boundary expectations and respond when those boundaries are crossed (Kreiner et al., 2009). Because these tactics explicitly require the communication of boundaries with others, they are used to attempt to avoid or correct boundary violations between domains (Carlson et al., 2016). The first communicative tactic is setting boundary expectations by letting people know, in advance, what one's boundaries are (Kreiner et al., 2009).

Although people communicate their boundaries, it does not mean others will always respect those boundaries. Confronting those who violate the boundary expectations is the second communicative tactic posed by Kreiner et al. (2009). This tactic occurs during or following a boundary violation and is how people respond to and remind the violator of the boundary (Kreiner et al., 2009).

Boundary Violations

In a study on home and work boundaries, McCloskey (2018) noted some professions like teaching have relatively inflexible spatial and temporal work boundaries for their role of teaching

students; however, this statement did not consider the amount of work teachers must do after hours. Much of teachers' work prior to COVID-19 was done in the spatial and temporal confines of the school building and day. Work which needed to be accomplished beyond those hours gave teachers some flexibility both temporally and spatially, as teachers could choose to stay at work later or take work home. During some timeframes of the pandemic, teachers' boundaries were required to change and removed many of the preexisting physical and temporal boundaries, thus opening up opportunities for different boundary violations.

When domain boundaries are violated (crossed without the person's consent), there is an increase in conflict, the salience of which increases with subsequent violations (Kreiner et al., 2009). People actively manage their boundaries to match their preference and take proactive measures to avoid problems and interference (Methot & LePine, 2016).

As is typical with work-family conflict and family-work conflict, work permeating the personal life boundary causes strain/conflict, while personal life permeating the work world tends to cause little or no strain (McCloskey, 2016). Permeations can be perceived as negative or welcome interruptions based upon a person's individual priorities and boundary preferences (Clark, 2000). While much of the research shows permeable non-work boundaries can increase work-life conflict (Hecht & Allen, 2009), some research also shows a permeable work boundary can have a positive impact on work-life conflict (McCloskey, 2018).

Interruptions and Transitions

Interruptions occur when one domain intrudes upon another domain and can lead to conflict in the disturbed domain (Allen et al., 2014; Kossek et al., 2012). For example, receiving emails or phone calls from work while outside its temporal or physical boundaries is an interruption, just as receiving non-work phone calls or emails while at work is an interruption.

Studies suggest work-life interruptions are perceived more negatively and have greater influence on work-life and life-work conflict than life-work interruptions (Kossek et al., 2012; Olson-Buchanan & Boswell, 2006). That is not to say that life-work interruptions or conflict are less important, but the conflict appears to have less negative impact on people's work-life balance perceptions.

Interdomain transitions, also called role transitions, are the actions of shifting time or attention from one domain or role to another (Ashforth et al., 2000; Matthews et al., 2014). These transitions occur when scheduled to shift from one role to the other (leaving home for work or leaving work for home at the end of the workday) or when one role interrupts another unscheduled, thus causing unplanned transitions (Ashforth et al., 2000; Nippert-Eng, 1996). Increased transitions can increase work-life and life-work conflict (Ashforth et al., 2000; Hecht & Allen, 2014; Matthews et al., 2014).

Boundaries When Home is the Workplace.

Regardless of one's preference as an integrator or segmentor, creating and maintaining boundaries when the home is the workplace can be more difficult as work is always present, can impede into unscheduled work time, and creates a blurring of boundaries across boundary types (Basile & Beauregard, 2016; Rankin & Gulley, 2018). This is also true in reverse: non-work life then has a greater opportunity to impede into scheduled work time and non-work life is also omnipresent. In a study of boundary management tactics, Carlson et al. (2016) found the two boundaries most indicative of dissatisfaction or loss of role engagement were physical and temporal boundaries, as people use these boundaries to clearly separate their work and non-work roles. As noted in Rothbard and Eby's (2016) chapter on boundary management in *The Oxford Handbook of Work and Family,* a study published by Hecht and Cluley (2014) showed all

parents within their study had more positive affects when their work boundaries were less permeable.

Additionally, Kossek et al. (2005) maintain boundary management is not only individualized but is also shaped by one's job. Similarly, boundary management and job fit also encompass the boundary and role needs of the career, meaning people tend to work within jobs that, to some extent, match their segmentation or work/life protection preferences (Methot & LePine, 2016). The implications of this may be unclear for teachers whose workplaces and timeframes exist within school buildings and during the school day yet work in a career field where job demands often require work to be taken home. In a study conducted prior to the effects of COVID-19 on teaching, researchers found that it "is inconceivable for teachers to create a strict boundary between work and non-work when they use their home as a part of their workplace" (Türktorun et al., 2020, p. 14).

Technology and its Impacts on Boundaries and Work-life Balance

In *The Oxford Handbook of Work and Family*, Rothbard and Ollier-Malaterre (2016) recognize the roles technology and globalization have played in shifting the expectations of workers to be more integrating in their boundary work preferences and to allow for work to integrate into people's non-work lives. With this acknowledgement, they also call for a reconsideration of this growing expectation and reexamination of the role and value of segmentation practices (Rothbard & Ollier-Malaterre, 2016). Indeed, work-related technology use at home affects individuals' boundaries and the tactics they must use to maintain their work-life balance.

Work-related Technology Use at Home

Technology has made it possible for individuals to access (and be accessed by) work

anytime, anywhere thereby creating the power to erase the previous temporal and spatial boundaries between work and personal life (Boswell et al., 2016; McCloskey, 2018). The removal of these boundaries can also blur the boundaries between roles (Greenhaus & Powell, 2017; McCloskey, 2018) like that of teacher and spouse or teacher and parent. A significant amount of research from around the world shows there can be negative impacts to work-related technology use at home (Boswell et al., 2016; Butts et al., 2015; Currie & Eveline, 2011; da Silva & Fischer, 2020b; Duxbury et al., 2014; Duxbury & Halinski, 2014; Froese-Germain, 2014; Gadeyne et al., 2018; Park et al., 2019; Sayah, 2013; Towers et al., 2006; Xie et al., 2018).

There are several negative factors associated with using technology for work at home. Burnout is a significant effect caused by work-related technology use at home because workers perceive the use and interruptions, especially via smartphone, as an extension of their work (Park et al., 2019) Work-life balance can be negatively impacted as people's personal time is interrupted for work (Park et al., 2019). Additionally, technology can pose a challenge to boundary management, as messages can arrive at any time and often make people feel an expectation to respond immediately (Greenhaus & Powell, 2017; Park et al., 2019; Towers, 2006). Work-related technology use at home also interrupts individuals' abilities to participate in recovery experiences by denying the opportunity to detach, disengage, and emotionally recover from work (Sonnentag et al., 2016; Xie et al., 2018), as they can be reached whenever and wherever hampering the ability to fully detach from work (Boswell et al., 2016; Froese-Germain, 2014).

Much of the research on technology focuses on the negative aspects and consequences of work-related technology use at home. However, it is important to note there are benefits for people, especially those who are integrators or whose work-life balance preference incorporates

work as a salient aspect of their balance. Conflict due to work-related technology use at home is not a given (Sayah, 2013). Boundary work tactics and integration/segmentation preferences play a role in how people experience (or choose not to experiences via strong segmentation) work-related technology use at home (Sayah, 2013; Siegert & Löwstedt, 2019). People's acceptance and responses of work-related technology use from home will vary based upon the individual's preferences as an integrator or segmentor (Derks et al., 2016; Richardson & Benbunan-Fich, 2011; Wepfer et al., 2018). Additionally, people with high work-life centrality (the specific term in the study is work-family centrality), those who believe their work role takes a greater role than family, found technologies to have a positive effect for their work-life balance (Shi et al., 2018). Similarly, a study on smartphone use and segmentation preference showed work-related smartphone use improved work-life conflict for integrators and yet did not negatively impact segmentors, perhaps because segmentors use boundary management tactics, such as the tactic of turning off their work phones at home (Derks et al., 2016).

Bauwens et al. (2020) conducted a targeted study on teachers' after work hours use of technology and found regardless of their integration or segmentation practices, teachers experienced negative impacts on their work-life balance, even with moderate use. The same study also found teachers give in to peer pressure and cultural expectation to engage in work-related technology use at home (Bauwens et al., 2020). The work culture expectation of work-related technology use at home decreases people's ability to psychologically detach from work, which is a key aspect in recovery time (Sonnentag, 2016). This reality starkly contrasts researcher recommendations, and messages sent from leadership, for teachers to practice self-care and manage a positive work-life balance (Gewertz, 2020; Kurtz et al., 2020; UNESCO, 2020; United Nations, 2020).

Tech Encroachment

While technology can assist teachers by giving them more flexibility in when and where they accomplish some of their work, it can also cause encroachment into one's non-work life. Many studies show technology has encroached upon the home life by bringing work into the physical and temporal spaces of the non-work domain (Currie & Eveline, 2011; McCloskey, 2016; Towers et al., 2006). Seeping, as defined by Cohen et al. (2009), occurs when boundaries become blurred and invading is when "activities from one realm involuntarily enter another," (p. 235) thus compromising the invaded role or identity.

Technology has changed the landscape of work-family conflict and family-work conflict (Duxbury et al., 2014; Duxbury & Halinski, 2014; Towers et al., 2006) in that it has allowed for the access of work and personal life aspects while physically and temporally within the other domain (McCloskey, 2018). This ease of accessibility virtually any time anywhere has also increased workloads (Currie & Eveline, 2011; Tower et al., 2006). With the vast amount of workload teachers already face, technology has allowed work-life conflict to increase.

While the literature shows technology can have both positive and negative impacts on workers, research on afterhours work connectivity poses an important question: Where is the boundary, even for extreme integrations and those with high work-life centrality, between integration and intrusion (Richardson & Benbunan-Fich, 2011)? Research on work-life balance and integration/segmentation preferences recognize that boundaries and balance are highly individual (Hunter et al., 2019; Kallith & Brough, 2008; Methot & LePine, 2016; Nippert-Eng, 1996), and some of the research that specifically examines how people manage technology in teleworking environments where work and non-work life occur within the same place.

Teleworking

It is important to note, telework is not the same as take-home work (or supplemental work), which is done during off-work time by employees who have regular workdays and times in their place of employment; telework is completed during the scheduled workday from an alternate location, usually the home (Towers et al., 2006). However, during the COVID-19 pandemic, most teachers around the world became teleworkers for some period of time. Thus, the exploration of telework becomes relevant to the situation in which teachers found themselves. Telework is often lauded for its benefits and flexibility, however, it does have some challenges for workers as well. Greenhaus and Powell (2017) noted:

> Telecommuters report working at home increases their productivity by reducing interruptions and distractions and enhancing their concentration Their increased presences at home also enables them to better fulfill their child care and household responsibilities and strengthens family relationships. However, telecommuting can blur the boundary between work and family roles in unproductive ways. (p. 12)

Managing boundaries can be problematic for teleworkers and others who work in their homes (Nippert-Eng, 1996; Rankin & Gulley, 2018). One way that teleworkers create a semblance of the traditional physical and temporal boundaries at home by making a separate space for work activities and setting specific times for work, even though they still tend to work more than their scheduled hours require (Basile & Beauregard, 2016). One study on telework found that the more people participate in telework, the less work-life conflict they face; however, there is often an increase in life-work conflict (Golden et al., 2006). Yet, a separate study in the same year showed many teleworkers reported the degree of control they had over their boundaries is a key facet in lower family-work conflict (Kossek et al., 2006), showing that control over boundary

management allows individuals to craft boundaries that work for their needs, along with giving them a sense of control over their own work and non-work spheres.

Teleworkers' boundary work strategies are similar to those that could benefit traditional workers who find technology makes work encroach on their non-work time, such as logging off from work computers, turning off phones related to work, and disabling technology's ability to distract or tempt the worker into engage in work during their personal time (Basile & Beauregard, 2018). Communicative strategies are also slightly different for teleworkers compared to office workers, as they negotiate expectations for ensuring worktime is maintained at home to the level of integration the individual prefers (Basile & Beauregard, 2016). Telework may be problematic for people with segmentation preferences, as the work necessarily forces boundary integration with work taking place in the home space, or for those with children (Kossek et al., 2006; Rothbard & Ollier-Malaterre, 2016).

COVID-19 Brief History and Spread

The COVID-19 pandemic began with a new strain of coronavirus which was first reported to the World Health Organization's China Office on December 31, 2019, after causing an outbreak of unknown pneumonia-like responses in 44 people (World Health Organization, 2020).

According to information gathered and shared by the experts at Johns Hopkins Medical, the COVID-19 virus is transmitted through respiratory droplets which can be dispersed from an infected person by the exhalation of breath, talking, singing, sneezing, rubbing nose or mouth then touching people or surfaces with uncleansed hands (Farley, 2020). Symptoms include fever or chills, cough, shortness of breath, difficulty breathing, fatigue, muscle or body aches, headache, sore throat, congestion, vomiting, and a new loss of taste or smell (Center for Disease

Control and Prevention, 2020) Asymptomatic people can transmit the virus in the same manner as those who present symptoms (Farley, 2020). The incubation period for the virus is 2-14 days. The incubation period is what determined the quarantine recommendations from health professionals (Farley, 2020). Prevention measures include social distancing, wearing masks, using good hygiene for hands and cleaning touched items (Center for Disease Control and Prevention, 2020; Farley, 2020; World Health Organization, 2020)

By January 21, 2020, the virus had been confirmed in five countries, including Japan, the United States of America and Taiwan. On March 11, 2020, the World Health Organization (2020) officially declared COVID-19 a pandemic. By the end of April 2020, over 165 countries, their protectorates and territories, and disputed/unrecognized nations reported infections of COVID-19 (World Health Organization, 2020).

Country Responses

The responses to the pandemic varied widely around the world, although there were similarities and some standard practices most countries put into place at various times. Some of those responses included restricting international travel to varying degrees, mandating mask-wearing, implementing social distancing guidelines, restricting the capacity of public space and private businesses (to include temporary closures), and closing schools (International Monetary Fund, 2020)

The United States of America's responses varied widely from state to state with restrictions and guidelines ranging from few restrictions to total bans on indoor gatherings and temporary business closures (International Monetary Fund, 2020). At the national level, the United States provided new unemployment benefits, student loan relief, eviction and foreclosure safeguards, individual economic stimulus funds business loans and guarantees, and additional

monies to states for discretional spending in relation to the pandemic (International Monetary Fund, 2020).

COVID Education

Spring 2020

For teachers and students around the world, the shift to teaching and learning during the pandemic came swiftly and with little warning, many leaving school one day not to return the next, or for the rest of the school year. By mid-spring 2020, over 1.6 billion students (94% of students in the world), in over 190 countries were affected by schools' physical closures due to the COVID-19 pandemic (United Nations, 2020; Vegas, 2020). Worldwide, over 90% of countries implemented some form of remote learning during this time (UNICEF, 2020). This upset in the when, where, and how of education was unprecedented (Bubb & Jones, 2020; United Nations, 2020).

Designing and implementing online instruction creates additional preparation and work for teachers, more than is required for in-person instruction (Bauwens et al., 2020; Li & Wang, 2020). Along with the challenges of preparing and teaching amid the changes created by COVID-19, teachers found they were spending up to 27% of their time assisting students with technology and troubleshooting (Kurtz et al., 2020) which are often not a part of teachers' training, expertise, or content areas. In addition to the difficulties faced by teachers in operating their classrooms during the pandemic were problems with disparities between what leaders and policymakers believed in comparison to educational administrators and teachers faced. In the spring of 2020, leaders underestimated student access to curriculum and overestimated the supports in place for teachers (Reimers & Schleicher, 2020).

Efforts by administrators and experts were made to try to help teachers manage work-life balance during this time by encouraging behaviors that were safe yet encouraged taking time away from work (Gewertz, 2020). Although administrators recognized the difficulties with the shift to remote teaching and learning during the pandemic, educator morale was severely affected. One early report warned that teacher morale was at a dangerously low level, so much so that "without adequate intervention, the student and educator morale crisis occasioned by the pandemic may linger long after the threat of the virus itself has faded" (Kurtz et al., 2020, p. 3). Similarly, the United Nations (2020) policy brief on COVID education noted that without psychological support for teachers, the risk of burnout and attrition could be high, thus compounding the problems created by the pandemic as experienced educators leave the field. In an article published in 2018, two online college professors warned fellow online teachers the possibilities for burnout when teaching online are high because of the lack of traditional boundaries and the ubiquitous nature of online classroom (Hansen & Gray, 2018). Although published before the pandemic and with the focus on professors, the implications of burnout for educators in the online environment can be extrapolated.

Research by Cohen et al. (2009) on working as educators from home created several categories for order and disorder in work-life balance. Most emotionally responsive in the disorder group was the category labeled Overwhelming in which "conceptual borders [boundaries] among roles, identities, and activities of different realms are unwillingly and completely breached" (p.235). For teachers who are more role segmentors, COVID-19 teaching, especially in the spring of 2020, would categorically be considered overwhelming. Even for those who are not highly segmented, boundaries set in their regular work-life balance were changed.

School Year 2020-2021

Most teachers ended the 2019-2020 school year not knowing what reopening in the late summer or early fall would look like, even though recommendations from studies such as one produced by Rand research asserted teachers needed to prepare in advance for how students, especially those with digital connectivity issues, would learn (Stiltano, 2020). Although guidelines for reopening schools physically included social distancing (United Nations, 2020), which would require reductions in class sizes, only 22% of school leaders said there were plans to hire more teachers to meet these needs (Reimers & Schleicher, 2020).

Schools opened to varying degrees and in a variety of forms in August and September of 2020, and levels and lengths of closure/reopening varied around the world (UNESCO, 2021). Many schools started the year virtually, while others started their year with a form of hybrid learning that combined in-person and virtual or at home learning, and some began in a more traditional in-person school environment (International Monetary Fund, 2020; Schwartz et al., 2021). By November 2020, 84% of schools surveyed in the United States had at least part of their education program in a remote learning format (Kurtz, 2020a). Rand research reported from their survey group, 39% of teachers were teaching fully online, 38% were in hybrid models, and 23% were fully in person (Kaufman et al., 2020). Some schools changed their format from remote to in person and vice-versa in response to outbreaks or easing of cases in their area. Differing modes of instruction and similar pandemic-specific teaching difficulties were causes for increased stress and burnout for many teachers in school year 2020-2021 (Steiner & Woo, 2021).

For those teaching in person, 92% of administrators reported their schools required students to wear masks if their schools were or planned to use in-person instruction, and the

majority of schools provided additional sanitation products and measures (Kurtz, 2020a). In a separate data set, 90% of principals reported employees must wear masks all day, but only 81% stated students must wear masks all day (Kaufman et al., 2020). There was no explanation for the difference in numbers between students and staff wearing mask throughout the day. The impacts of health measures on in-person educators were noticeable with 57% of teachers stating their health or that of their family was a major concern, with only 4% stating it was of no concern to them (Kaufman et al., 2020).

With the variety of formats schools used to open, there were issues with staffing that were exacerbated because of the pandemic. Although there were already teacher shortages in many places in the United States, schools started the 2020-2021 school year with greater shortages due to teachers retiring earlier than planned or choosing a leave of absence due to concerns with their health and safety in returning to school (Smith, 2020). Schools were receiving fewer applications for open positions, despite high-unemployment and economic recession (Kurtz, 2020a), and to the same end, fewer substitutes were willing to apply and work in school districts (Smith, 2020). It is unclear if the lack of applicants was related to the shortages of educational staffing in school year 2020-2021, as 48% of principals stated they had not taken any actions to increase staff, and only 17% of principals who did hire additional staff hired more teachers (Kaufman et al., 2020).

In response to short staffing and low application rates even for substitutes, many school districts were changing the requirements for substitute teachers, with some removing the requisite college degree and allowing people with a high school diploma to apply, under the condition they would need to take a 20-hour training and pass a background check before entering the classroom (Smith, 2020). It appeared that issues with retaining teaching staff would

continue into the next school year, as more teachers were reporting intentions to leave the profession, many in response to the additional stresses of teaching during the pandemic (Kaufman et al., 2020; Steiner & Woo, 2021; Walker, 2021).

Teacher workloads, which were already problematic prior to the pandemic, increased as did expectations for non-teaching tasks such as hygiene management (Beames et al., 2021; Pressley, 2021). Because time pressure and stress were already causes of work-life balance issues for teachers, subsequent findings on teacher burnout and morale during the pandemic showed that the increased demands and stresses were exacerbating existing problems for teachers. By early November of 2020, teacher morale was at a new low point with 84% of teachers stating morale was lower than before the onset of educational changes created by COVID-19 (Kurtz, 2020a). Low morale, while tied to many factors could likely be attributed to feelings of burnout, as 93% of teachers felt burnout was a concern in the fall of 2020, with 57% noting it as a major concern (Kaufman et al., 2020). Working hours appeared to have increased for teachers as well, as 82% of teachers reported working over 40 hours per week, with 51% working 48 hours or more per week, compared to 76% of teachers working over 40 hours per week and only 24% working 48 hours or more per week before the pandemic (Kaufman et al., 2020). Additionally, nearly a quarter of educators stated they worked another job apart from teaching (Kaufman et al., 2020). Despite the extra hours teachers were working, students were doing less work, as fewer than 60% of teachers reported their students were turning in much of their schoolwork (Kaufman et al., 2020). With high reports of extended work hours, burnout, low morale, and a large number of students not turning in their work, it is unsurprising over 60% of teachers reported reduced enthusiasm for the job in the fall of 2020 (Kaufman et al., 2020). While the National Education Association reported that teachers were feeling a more positive

attitude at the end of the 2020-2021 school year, in part because of access to and high rates of COVID-19 vaccinations among teachers, there were still concerns over the upcoming 2021-2022 school year, the looming challenges in addressing pandemic-caused academic setbacks in student learning, and uncertainty about the continued pressures on educators (Walker, 2021).

Studies from around the world found that the COVID-19 pandemic had particularly negative effects on women's mental health and stress levels (Beames et al., 2021; Hjálmsdóttir & Bjarnadóttir, 2020, Kluger, 2020; Syrek et al., 2021; Udin, 2021). A study conducted by the international organization CARE, with results published in *Time* magazine, showed on average worldwide, women were nearly three times more likely than men to suffer from serious mental health problems because of the pandemic, including anxiety, trouble sleeping, problems with completing daily tasks, and loss of appetite (Kluger, 2020). Factors included the high percentage of women in front-line professions like health-care work and teaching, and the disproportionate level of domestic responsibilities for women, which now encompassed helping children who were schooling at home (Kluger, 2020).

Additionally, job losses during the pandemic disproportionately impacted women as female job losses were higher than for men, including in December of 2020 when 100% of job losses were women (Conley, 2021; Ellingrud & Hilton Segel, 2021). It is expected that women's reemployment numbers will not return to pre-pandemic levels until two years after men's (Ellingrud & Hilton Segel, 2021). Because education is a largely female profession, the unequal level of mental health and unemployment problems from the pandemic have direct implications of the well-being of educators.

Conclusion

The literature review focused on several main concepts: work-life balance, boundary theory, technology's impact on boundaries and work-life balance, and the COVID-19 pandemic in relation to its effects on education. These topics form the basis for the research questions and informed the creation of the study itself.

Work-life balance is highly individualized as balance can look different to each person based upon their preferences and perceptions (Adams, 2006; Cohen et al., 2009; Kalliath & Brough, 2008; Pichler et al., 2009; Valcour, 2007). Even though work-life balance is different for everyone, research from around the globe shows that teachers tend to have lower levels of work-life balance (Adams, 2013; Bumhira et al., 2017; Ching & Seok, 2018; da Silva & Fischer, 2020b; Froese-Germain, 2014; Hafeez & Akbar, 2015). Work-life balance, through its many facets and factors, has significant impacts individual's well-being (Bumhira et al., 2017; Greenhaus & Powell, 2017; Quintana et al., 2019). Additionally, teachers' work-life balance and job satisfaction can affect student achievement (Day et al., 2006; Sammons et al., 2007). Work-life balance preferences are shaped by many things, but one way that teachers attempt to manage their balance is by creating and maintaining boundaries between their work and non-work lives.

Boundary theory and management work on the principle that individuals use and create boundaries to separate or integrate the different roles within their lives (Ashforth et al., 2000; Clark, 2000; Kreiner et al., 2009; Nippert-Eng, 1996). Individuals have some degree of control over their boundaries and how they manage them, but often not total control as workplaces may have rules in place that define some boundaries (Allen et al., 2014; Olson-Buchanan & Boswell, 2005; Rothbard & Ollier-Malaterre, 2016). Individuals have preferences in how much they integrate or segregate their work and non-work lives, which has an impact of how permeable or

flexible they may be with their boundaries (Nippert-Eng, 1996). When people's boundaries or integration/segmentation preferences are violated, conflict between roles occur and work-life balance can be jeopardized. To date, no studies have been conducted on the specific tactics teachers use to enact and maintain their boundaries.

Technology, while giving flexibility has also created problems for workers (McCloskey, 2018). Technology has blurred and sometimes removed traditional physical and temporal boundaries (Greenhaus & Powell, 2017; McCloskey, 2018) and has created an expectation to respond to work demands immediately (Greenhaus & Powell, 2017). For teachers specifically, even prior to the onset of the pandemic, there was often a cultural expectation to be available via technology when not at work along with negative impacts on work life balance because of such work-related technology use at home (Bauwens et al., 2020). Once the COVID-19 pandemic began, teachers throughout the world no longer had a choice but to engage with technology from home (United Nations, 2020; Vegas, 2020).

The COVID-19 pandemic itself created a new set of problems for teachers aside from the removal of their previous physical and temporal boundaries. Teacher expectations and workload, which were already known to be very high, were higher than ever over the course of the pandemic (Darling-Hammond et al., 2020; Kaufman et al., 2020; UNESCO, 2020), and teacher morale hit all-time lows (Kurtz, 2020a). Many recommendations were made for schools to support teachers and their mental health during the pandemic (Beames et al., 2021; United Nations, 2020), yet teacher turnover intentions rose significantly (Kaufman et al., 2020, 2020b; Kurtz et al., 2020). Despite the challenges, one thing that has been agreed upon is the pandemic will change education (Reimers & Schleicher, 2020; Zhao, 2020). Hopefully, educational policymakers, administrators, and educators will learn from the successes and pitfalls and use

this time as an opportunity to make positive changes in education.

Based upon the experiences of teachers during 2020 and 2021, the known work-life balance problems with educators, and the unknown nature of teacher boundary management tactics, there is a gap in knowledge that, now identified, could help educators with managing work-life balance and reduce teacher attrition rates.

Chapter III

Design and Methodology

Introduction

Teachers' work-life balance was tenuous before the start of the COVID-19 pandemic, and the myriad changes and challenges that faced educators during this time decreased work-life balance and morale for teachers around the globe (Gewertz, 2020; Kurtz, 2020a, 2020b; Kurtz et al., 2020; Lawrence et al., 2019). As educators began teaching in new ways to accommodate health and safety requirements, some of their boundaries, regardless of their integration or segregation preference, changed as schools closed and homes became classrooms (Hale et al., 2020; Hamilton et al., 2020a, 2020b; United Nations, 2020; UNICEF, 2020; Vegas, 2020). Because the previously established boundaries for education changed throughout the pandemic, it is important to consider the principles of boundary management for educators.

Although it has been proven explicit training on segmentation practices, stress and burnout prevention increases factors like life satisfaction and recovery while decreasing exhaustion and work-life conflict (Michel et al., 2014; Pozo-Rico et al., 2020; Rexroth et al., 2017), there has been no research to-date on the specific boundary tactics of teachers on which future trainings for boundary management could be built. The gap in knowledge on how teachers create, maintain, and change their boundaries in order to attain or maintain work-life balance is addressed in this study.

Research Questions

Driven by the goals of a study, research questions narrow the study purpose to help researchers explore their topic fully (Creswell & Guetterman, 2019). The purpose of this study, to explore the boundary management tactics teachers used to attain or maintain work-life balance

over the course of shifting educational realities before and during the COVID-19 pandemic, lead to the following research questions as guides for exploration:

1. What were teachers' perceptions of their work-life balance for three specific timeframes:
    - before the onset of the COVID-19 pandemic
    - during the spring of 2020 from the beginning of the pandemic's effects on their school through the end of school year 2019-2020
    - during school year 2020-2021?
2. What were teachers' boundary management tactics during these times?
3. Were there similarities in boundary work tactics for teachers who reported higher perceptions of work-life balance?

Research Design

Because this study aimed to determine what boundary management tactics teachers used to establish or maintain work-life balance, a mixed-methods approach was used to gather both qualitative and quantitative data. This mixed-method approach allows the researcher to "gain information about different aspects of the phenomena… rather than simply strengthen particular conclusions" (Maxwell, 2013, p. 102). This form of research creates a better understanding of the problem than using a single method (Creswell & Guetterman, 2019), as quantitative data will provide measurable information and the qualitative data will help understand the reasons and actions behind the measured perceptions (Hoy & Adams, 2016). The purpose and research questions of this study necessitated both qualitative and quantitative measures in combination to help quantify work-life balance satisfaction and qualify the individual boundary management tactics of teachers, which could be compared to individual perceptions of balance to find patterns

of tactics for those with higher or lower work-life balance.

A retrospective survey was used, as the purpose of the study requires participants to look back and remember their feelings and actions in the past. In relation to retrospective surveys tied to the pandemic, a German research team recommended minimizing cognitive efforts tied to each question, asking questions in a broad to specific order, and using introductory phrases or anchor points to help with respondent memory (Hipp et al., 2020). Some carefully selected techniques were used in writing the survey questions to aid in accurate recall, to include using the important events of the pandemic as memory anchors, restating the context of the time period to be recalled, and keeping the periods of reference short (Hipp et al., 2020; Tanur, 1992). The measurement of perceptions before and during the pandemic also gives a baseline level of comparison, which is necessary for research regarding the pandemic (Hipp et al., 2020; Jaspers et al., 2008).

Qualitative and quantitative data were collected in a single multi-section survey. The survey was sent out via Facebook groups specifically for teachers and via email or personal message to known teacher contacts. In the survey information and request, teachers were asked to pass on the survey to other teachers. The literature makes clear that time pressure for teachers is already a significant strain on work-life balance (Conley & Jenkins, 2011; da Silva & Fischer, 2020a; Rose, 2015; Rose et al., 2013; Skaalvik & Skaalvik, 2018); therefore, an online method of survey was chosen to allow participants the opportunity to take part in the survey at a time and place that in convenient for them. This also determined the timeframe in which the data was gathered, by collecting data during the summer before the new school year began. Additionally, online surveys have benefits for reach in attempts at surveying a large population (Creswell & Guetterman, 2019). Creswell and Guetterman (2019) note that many of the weaknesses

associated with online surveys deal with access to possible participants via email. This survey, which gathered participants via social media and snowball sampling aimed to avoid such pitfalls by avoiding the need for email to recruit participants.

The first section of the survey collected demographic data, including years of teaching experience and the online or in-person status of their school during the stages of the timeframe of interest for this survey. The second grouping of questions focused on the quantitative measure of work-life balance, and the third group of questions collected qualitative and quantitative responses to questions regarding teachers' boundary management tactics.

To measure perceptions of work-life balance, a quantitative analysis was necessary to give a measurement that could be standardized across the participant population (Creswell & Guetterman, 2019). A nonexperimental design, as is commonly used in educational research, was used because the measured variable (teachers' perception of their work-life balance) already existed and was not controlled or manipulated by the researcher (Hoy & Adams, 2016). The quantitative work-life balance instrument was created using a modified version of Valcour's (2007) five item survey measuring satisfaction of work-life balance.

In understanding the various boundary work tactics teachers use, qualitative and quantitative approaches were used to limit the length and amount of time necessary for the survey and to ensure participants could share their own words on their experiences and practices. Quantitative questions to measure boundary management strategies were based on Kreiner et al.'s (2009) categories and observed behaviors of teachers. The qualitative portions of the survey were designed to allow participants to self-report and describe their experiences (Creswell & Guetterman, 2019). Most quantitative questions in the boundary management section featured an option for an "Other (please describe)" response to allow participants to give additional

responses not covered in the existing choices.

Participants

Purposeful sampling was used in participant selection which ensured the sample size included only those who were uniquely situated to bring relevant experiences to the study (Maxwell, 2013). Therefore, participants were limited to classroom teachers and respondents who were teaching during the 2019-2020 and 2020-2021 school year. Teachers who left the profession at the end of the 2020-2021 school year or after could participate. This decision was made because it would not be possible to measure work-life balance changes for teachers who were not teaching before the onset of the pandemic. However, teachers who chose to leave the profession can lend valuable insight into their work-life balance perceptions and their boundary work tactics immediately before leaving the profession.

Because "the way we sample partially makes what we find" (Browne, 2005, p. 57), the participants were recruited from as diverse as group of educators as possible to encompass the experiences of educators around the world to the greatest extent possible. Participants were gathered from July through early September 2021. The timeframe was set to respect teachers' time by attempting not to impede the start of the school year while also refrain from creating a mental overlap of work-life balance and boundary management strategies being enacted at the beginning of a new school year not being measured in the study.

There were 133 total responses recorded in Qualtrics when data collection ended. Upon reviewing the data gathered from Qualtrics, one respondent chose to decline participation after reading the informed consent, three stopped the survey at the beginning of the demographics section, and eight responses were removed because they completed less than 50% of the survey which resulted in incomplete data for even the first timeframe of measurement. Eleven additional

participants were removed because they were filtered out in the demographics section as not meeting the qualifications to continue, having taught only online or not been a classroom teacher prior to the start of spring 2020. Qualified participants who finished at least one complete timeframe were kept. Of the remaining 103 respondents, 19 completed various amounts of response from 57%-89% completion. A total of 84 participants completed the full survey according to Qualtrics reports. It must also be noted that participants had the right to decline answering any question which is reflected in the number of participants for each question and set. Missing case data was excluded in all analyses. Although the number of participants lowered over the timeframes and varied, even with the lowest number of participant responses (n= 74) there was still a sufficient number of participants to perform the necessary confirmatory factor analysis statistical measures on the work-life balance measure using a pre-validated scale (Field, 2018; Knekta et al., 2019).

The final study group consisted of K-12 educators from around the world, with participants from the Germany, Italy, Japan, Kyrgyzstan, South Korea, the United Kingdom and the United States. Within the United States, participants were from 18 states. Five participants declined to disclose their location. It is important to note that nearly all participants in countries outside the United States worked for government or international schools; only one participant listed school affiliation with the local government school system. The clustered locations and types of schools for teachers who responded show a limitation in reliance on social media and snowball sampling for gathering participants.

The demographic makeup of study participants showed a variety of teachers and contexts, though there were several high clusters (see Table 1). Participants were 80.6% female and 19.4% male. Most respondents were married (77.7%), while 11.7% were unmarried, 8.7%

divorced, and 1.9% widowed. Additionally, 50.5% of participants had at least one child living at home, while 49.5% had no children living at home. High school teachers comprised the majority of respondents at 47.6%, with 30.1% of respondents teaching middle school and the remaining 22.3% teaching elementary grades. The level of teaching experience was varied. In the experience ranges of fewer than five years' experience and more than 30 years' experience, each group made up 5.8% of respondents. The majority of participants had between 10-19 years' experience (37.9%), while 35.2% of teachers reported 5-9 years' experience and 25.2% reporting 20-29 years. Most participants had earned a master's degree or higher, with only 27.2% reporting a bachelor's degree as their highest level of education. Only three teachers reported ever having formal boundary management training.

Table 1

General Demographics of Survey Participants

Variable	n	%
Age		
20-29	9	8.7%
30-39	25	24.3%
40-49	40	38.8%
50-59	24	23.3%
60+	5	4.9%
Gender		
Female	83	80.6%
Male	20	19.4%
Marital Status		

Not married	12	11.7%
Married	80	77.7%
Divorced	9	8.7%
Widowed	2	1.9%

Children Living at Home		
None	51	49.5%
Ages 0-4	6	5.8%
Ages 5-9	12	11.7%
Ages 10-14	20	19.4%
Ages 15-18+	31	30.1%

Highest Education Level		
Bachelor's Degree	28	27.2%
Master's Degree	61	59.2%
Education Specialist	10	9.7%
Doctoral Degree	4	3.9%

Grade Level Taught		
Elementary/Primary School	23	23.3%
Middle/Junior High School	31	30.1%
High School	49	47.6%

School Type		
Public	59	57.3%
Private	1	1.0%
Charter	1	1.0%
International	2	1.9%

Government (DoDEA/Embassy)	39	37.9%
Other	1	1.0%

Teaching Method Spring 2020		
In-person	16	15.5%
Online	86	83.5%
Hybrid	11	10.7%
Asynchronous	29	28.2%

Teaching Method SY 2020-2021		
In-person	77	74.8%
Online	62	60.2%
Hybrid	47	45.6%
Asynchronous	30	29.1%

Note. The Teaching Methods section numbers and percentages may equal more than the total n or 100% because teachers may have used multiple methods over time.

Teachers experienced a variety of teaching methods over the course of spring 2020 and school year 2020-2021, with many teachers reporting multiple methods within the same timeframe. During the spring of 2020, the majority of teachers were not teaching in person, though four (3.8%) reported only teaching in person with no additional methods listed indicating they may have been teaching in-person the entire time, though that was rare worldwide (UNICEF, 2020). In school year 2020-2021, most teachers used multiple modes of instructional delivery, with only 19.42% of teachers reporting a single mode during that timeframe. Those single method reporters included fully in-person (n=21), hybrid (n=11), and online modes (n=2) of instruction for the year.

Data Collection

The three research questions that guided this study led to the use of a mixed methods approach and the purposeful collections on qualitative and quantitative data. The basic mixed methods approach of collecting qualitative and quantitative data simultaneously for integration during the analysis stage was most appropriate for the research questions and the target population (Creswell & Guetterman, 2019). Prior to any data collection, the researcher requested and obtained permission from the Institutional Review Board (IRB) at Northwest Nazarene University (Appendix C), following the completion of the "Ethics and Human Subject Protection" training from the Association of Clinical Research Professionals (Appendix D).

Prior to participant recruitment, questions were tested for faced validity and content validity, and a pilot study was conducted. Face validity was gathered via 10 educators who were not a part of the study itself. The choice was made to use face validity, as it takes into account the layperson's perspective regarding the relevance and accuracy of a question (Lynn, 1986). Because the survey was sent to teachers who may not have background understanding of work-life balance and boundary management tactics, it was important to get perspectives from regular classroom teachers. Validators gave insight into additional quantitative response possibilities, word-choice, and their understandings of the questions and response options.

Content validity was gathered from four expert respondents (researchers in relevant fields and online teachers with experience in boundary work tactics) using a four-point content validity index with ranges from 1 (not relevant) to 4 (very relevant). Because the number of experts varies from study-to-study based on access to agreeable expert validators, the minimum accepted number is three (Lynn, 1986; Polit & Beck, 2006). When there are fewer than five expert validators, all must concur for content to be considered reliable (Lynn, 1986; Polit & Beck,

2006). For this survey, all respondents concurred that all survey questions were 4 “very relevant” or 3 “quite relevant.” Some minor wording changes were made to the survey questions based on feedback of specific phrasing from the content experts.

Pilot studies should be administered to “volunteers who are as similar to the target population as possible” (van Teiljlingen & Hundley, 2001, p. 2), therefore the pilot study was conducted with administrators and former classroom teachers, as this group understands the context of being in the classroom and experienced the pandemic while working in education but were not eligible to be study participants. This group was not a part of the study sample, as they provided direct feedback on the study and questionnaire itself (Creswell & Guetterman, 2019). It was important to ensure the questions were clear and designed in a manner that people could easily and honestly answer and that the questions themselves elicit answers that are relevant to the research questions of the study. Pilot studies are useful for researchers, as the pilot participants give feedback to the researcher to improve the instrument and give clarifications that can strengthen the design if necessary (Creswell & Guetterman, 2019; Maxwell, 2013). Additionally, any study can benefit from the feedback given through a pilot study to strengthen its design and give valuable insight to the researcher (Maxwell, 2013). The work-life balance scale in the pilot was measured for reliability using Cronbach’s alpha, which showed a high level of internal consistency for each timeframe schoolyear 2019-2020 prior to COVID-19 ($\alpha = .912$), spring of schoolyear 2019-2020 after COVID-19 affected the school ($\alpha = .966$) and school year 2020-2021 ($\alpha = .980$). Feedback from pilot participants showed that the questions were easily understood, the options were clear, and indicated no need to add additional options to the multiple response sections.

Following the pilot, participants were recruited through the social media site Facebook,

specifically by posting into teacher-related groups and snowball sampling from those posts as teachers were asked to pass on the survey link to other teachers who might be helpful in sharing their experiences (Appendix E). Snowball sampling was used to reach a larger group of teachers from more places, as it gives a broader and more generalizable perspective than in sampling from a known group (Browne, 2005; Creswell & Guetterman, 2019; Marshall & Rossman, 2016). Social media has become an important and effective recruitment tool with widespread usage reaching diverse groups of participants, with Facebook being the most-used platform (Gelinas et al., 2017; Hough & Flood-Grady, 2020; Ramo & Kaur, 2020). The recruitment message gave potential candidates the purpose of the study and a link to the survey in Qualtrics XM where participants would give their responses. Email and IP addresses were not collected.

Ethical considerations are an imperative part of any study involving human participants (Marshall & Rossman, 2016). When social media, which is a largely public space, is involved, ethical and privacy considerations must be considered through a specific lens that takes the nuances of social media into account (Gelinas et al., 2017; Hough & Flood-Grady, 2020; Ramo & Kaur, 2020). Those participants contact information was kept private per IRB guidelines and procedures. As per Facebook's guidelines on collection of data from users, the researcher-maintained transparency with potential participants as to the purpose of the study and that an individual doctoral candidate, not Facebook, was asking to gather information (Facebook, 2020). A copy of the text used for each post is in Appendix E.

Survey response data was collected using software from Qualtrics XM. Participant names, specific locations, school names, email or IP addresses were not collected. All data was kept secure in a secure file on the researcher's password protected laptop and backed up on a password-protected cloud file. In accordance with regulations on the protection of human

subjects, all data will be kept for three years, after which it will be destroyed (45 CRF 46.115).

Before starting the survey, teachers were asked to complete an electronic informed consent (Appendix F). Upon affirming their consent to participate in the survey, respondents began the survey, which first collected demographic questions (Appendix G). The demographic information included age, marital status, children ages, and gender questions, the purpose of which would aid in seeing patterns within the data. Gender information was purposefully inclusive and with options for male, female, nonbinary, transgender, and a blank for other responses. Failure to include options beyond male and female relegates those who identify as other than the dichotomous option and removes the ability to gain valuable and accurate demographic data, which impacts all respondents (Ruberg & Ruelos, 2020; Slade et al., 2020). Gender demographic questions which are inclusive and leave room for all people ensures ethical treatment of all people and reduces nonparticipation and measurement errors that exists when only binary options exist (Slade et al., 2020). Additionally, the choice to include multiple gender options addresses one major ethical concern of mixed methods research: social justice and social action. According to Creswell and Guetterman (2019), one of the ethical dilemmas posed by mixed methods approaches is marginalization of participants who may be grouped into generalized categories.

Further demographics asked for location, education level, grade levels taught, primary role, teaching experience, and the status (in person, online, combination, or other) of their school during the pandemic stages studied. Lastly, the survey asked if teachers had ever had boundary management training and if they left the teaching profession during the survey's interested timeframes.

The work-life balance portion of the survey was a modified version of Valcour's (2007) satisfaction with work-family balance scale. Valcour's scale was pilot tested prior to her use and measured using confirmatory factor analysis, which confirmed the instrument's fit and reliability (Valcour, 2007). Permission was granted from Dr. Valcour to use the modified version of the scale (Appendix H). The modifications dealt with the terms "family" and "home," which were replaced with non-work life. Additionally, the verbs were changed from present to past tenses, as this study asks teachers to reflect. The Likert scale ranging from very dissatisfied to very satisfied was maintained from Valcour's (2007) work, although the neutral response was removed to require participants to choose their predominant perception removing the ability to take the perceived easy neutral response (Chyung et al., 2017). Fewer Likert options result in less ambiguity in participant responses, though that benefit has the contrasting effect of less response variation (Knekta et al., 2019). That effect was mitigated by using factor scores in determining the ranking of participant responses for analysis in Research Question 3. While some may have concern over the change in scale items, Chang (1994) addressed the idea of fewer scale items negatively affecting reliability, validity, and internal consistency. The study found that larger scales may not necessarily increase reliability and that larger scales can artificially inflate correlations (Chang, 1994).

The boundary management portion of the survey contained both quantitative questions with multiple response sets (check all that apply) and custom responses in the form of fillable "other" options, and qualitative open-ended questions which allow for participants to craft their own responses, thus removing constraints placed by closed-ended questions and allows the researcher to explore ideas beyond their own knowledge (Creswell & Guetterman, 2019). Additionally, custom response and open-ended questions remove cultural or social bias of the

researcher in allowing respondents to explain their experiences without pre-structured responses (Creswell & Guetterman, 2019). The questions, separated by time period, are in the full survey (Appendix G).

The initial question formulation for the boundary management section was based on Kreiner et al.'s (2009) organization of boundary work tactics (permission granted in Appendix I). The questions asked teachers about their boundary work tactics in the behavioral, communicative, physical, and temporal realms (Kreiner et al., 2009). The question formulation was purposeful in word choice as such questions strive to engage episodic memory, which elicits more specific and less generalized response from participants (Maxwell, 2013). By framing the question sections by specific periods of time and ensuring the questions are in the past tense, the respondent is more likely to engage episodic memory (Maxwell, 2013).

At the closing of the survey, participants were thanked for their time, as Maxwell (2013) reminds researchers that the participants should feel that they were appreciated and not simply used as a tool to gather data.

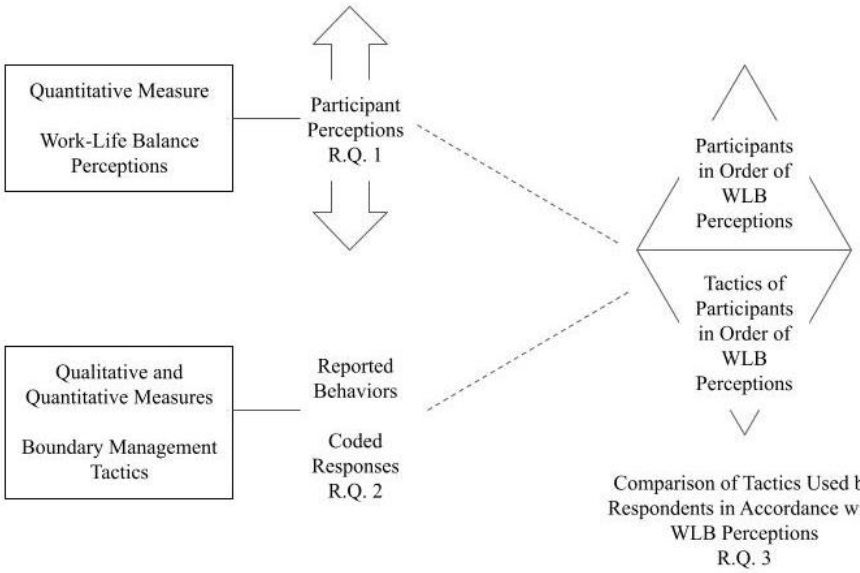
Analytical Methods

Responses were downloaded from Qualtrics XM and imported into IMB SPSS Statistical Software Version 27 and IBM SPSS AMOS Version 26. Qualitative responses were printed for hand coding and additionally coded using the CAQDAS online software DiscoverText. Descriptive statistics were run to determine pertinent demographic information. Work-life balance question sets were analyzed using principal axis factoring and maximum likelihood confirmatory factor analysis. Factor scores were generated with the confirmatory factor analysis and saved for each participant for later use in ranking (DiStefano et al., 2009; Field, 2018; Hoffman, 2018) average work-life balance perception for analysis in Research Question 3.

Additionally, factor-based scores for each participant and group means for each time frame were calculated to create an easy frame of reference discussion for laypeople (DiStefano et al., 2009) who will benefit from this study. Boundary management tactics from the quantitative data were determined using frequencies of multiple response sets for each timeframe. Responses in the "other" category were coded with qualitative response questions unless they clearly fit within one of the multiple response categories.

Figure 3

Research Diagram



Qualitative information was gathered from the open-ended questions and responses. Those responses were loaded into Microsoft Excel and organized in sheets by question type. The responses were printed, read, and coded multiple times including through the CAQDAS online program DiscoverText. Reading the responses, thinking about the meaning, and note-taking are important to the qualitative analysis process, as are coding and categorizing (Maxwell, 2013). According to Marshall and Rossman (2016), preemptive planning for possible coding categories

creates a solid foundation for initially analyzing qualitative data. The responses were coded first using provisional codes (Saldaña, 2016) based on Kreiner et al.'s (2009) existing categories. The responses were then reviewed and coded to identify new or additional themes, to ensure the research was not only looking for existing categories, but instead being flexible and responsive to the data (Saldaña, 2016). Concept coding was used to look for the reasonings behind actions undertaken by teachers that may have fallen within or outside of the provisional codes (Saldaña, 2016). Based upon the themes that emerged from first cycle coding processes, second cycle coding was used to focus and elaborate on initial findings (Saldaña, 2016).

Lastly, participants' reported and coded tactics were organized based on their perceived work-life balance from their factor scores to determine if there were commonalities in boundary management strategies among those with high perceptions of their work-life balance. The mixed methods approach used in this study necessitates the integration and connection of both the qualitative and quantitative data to answer the posed research questions (Creswell & Guetterman, 2019).

Role of the Researcher

It is important that researchers recognize their own potential biases (Marshall & Rossman, 2016; Maxwell, 2013). As an educator teaching during the COVID-19 pandemic, I was affected by my own struggles with my newly changed work boundaries, advising a yearbook program and senior class during a four-month school closure, studying and researching as a doctoral student, and helping my high school senior navigate the sudden changes, cancellations, and loss of the expected culmination of her final year of compulsory education. This experience led me towards a curiosity in how other teachers experienced this shift and how (or if) they adjusted their boundaries to manage their work-life balance during this rare time when nearly all

teachers around the world faced very similar changes to their own work lives.

Because "*any* view is a view *from some perspective*" (Maxwell, 2013, p. 46) it is not reasonable to believe bias can be completely eliminated. Instead, one can use his or her perspective to better understand the nuances of the problem and the data collected while being aware of biases and keeping them in check through critical subjectivity (Maxwell, 2013). In this vein, I recognize that my own experiences were not everyone's experiences and that my own boundary management tactics may not have been effective for myself or transposable to others. Yet, I approach this research as a colleague asking other colleagues, as is so typical with teachers and professional learning communities, what they did in this situation and how it may have worked for them.

Limitations

While this study provides a broad view of teachers' boundary management and perceptions of work-life balance, due to its broad nature there will necessarily be factors for which the study cannot control. Additionally, the survey was only available in English, which necessarily limits the participant pool to teachers who read and write in English. The participant responses show that there were clusters of areas and that international respondents were largely linked to international or government schools. Recreating this study with the survey translated into multiple languages would strengthen the larger understanding of global teacher boundary management tactics, as would access to a larger respondent pool. Because teachers are a group that tend to have a struggle with work-life balance, it is possible that time to complete the survey may have limited the group of participants.

Additionally, retrospective surveys have a possibility of unreliable memories for an individual; however, at the larger collective level, retrospective studies tend to be consistent

(Hipp et al., 2020; Jaspers et al., 2009). Specific to pandemic related studies, it is noted that there may be an underrepresentation of changes, as there tends to be more accuracy when changes are minimal between points in time being measured (Hipp et al., 2020), although pilot data and feedback showed that some participants became more aware of their changes over the course of the pandemic. This is possibly due to the considerable impact and breadth of changes during the pandemic. Such salient events are more likely to be recalled (Tanur, 1992), which could help with the accuracy of retrospective responses in this study.

Lastly, the sample size across timeframes is not as large as anticipated, however, concerns over moving into a new school year with the COVID-19 Delta variant affecting two-thirds of the world (United Nations, 2021) and other challenges facing teachers starting the school year amid continuous and new changes in the pandemic made it necessary to stop data collection in order to avoid affecting retrospective perceptions based on current challenges. Despite the low sample size, there was a sufficient number of respondents to conduct all necessary statistical tests (Field, 2018; Knekta et al., 2019). From the participant sample, teachers with postbaccalaureate degrees were over-represented in relation to the average in the United States. In this study, 77.7% of participants had a masters' degree or higher, while the national average was last recorded at 58% in 2017-2018 (National Center for Education Statistics, 2021) and the global average was roughly 52% (World Bank Group, 2022). This may have an effect on teacher responses, as participants in this study tended to have more education and experience than the larger population of educators nationally and worldwide.

Chapter IV

Results

Introduction

The purpose of this study was to explore the boundary management tactics teachers used to attain or maintain work-life balance over the course of shifting educational realities before and during the first year of the COVID-19 pandemic. The aim was to identify boundary work tactics used by teachers to add to the knowledge regarding teacher work-life balance and with the goal to clearly identify tactics teachers can use beyond the era of the pandemic. Three research questions guided this study on teacher boundary management tactics:

1. What were teachers' perceptions of their work-life balance for three specific timeframes:
    - before the onset of the COVID-19 pandemic
    - during the spring of 2020 from the beginning of the pandemic's effects on their school through the end of school year 2019-2020
    - during school year 2020-2021?
2. What were teachers' boundary management tactics during these times?
3. Were there similarities in boundary work tactics for teachers who reported higher perceptions of work-life balance?

Chapter IV contains a comprehensive view of the qualitative and quantitative data gathered from the participants in the survey on work-life balance satisfaction and boundary management tactics. The survey results are presented in order by research question and order of the survey questions as given to participants. They are then sub-organized by timeframe beginning with the timeframe prior to the onset of COVID-19, then spring of 2020, and lastly

school year 2020-2021 which was the final timeframe of measure for the study.

Results

Research Question 1

To determine teacher's perceptions of their work-life balance, a modified version of Valcour's (2007) satisfaction with work-family balance scale was used. This single-factor instrument consisted of five questions with responses gathered from a four-point Likert scale. Response choices ranged from very satisfied (4) to very dissatisfied (1). The neutral option was eliminated to force a response about participants perceptions, removing the ability to opt out of answering in a way people may feel in socially undesirable or to choose the easy out answer (Chyung et al., 2017) and to reduce ambiguity in responses (Knekta et al., 2019). For the three timeframes listed in the research questions, there were a different number of participants, as not all participants finished the full survey. However, any participant who finished the section for any timeframe of measure was kept in the data. The five-item modified work-life balance satisfaction scale had a high level of internal consistency (see Table 2) utilizing Cronbach's alpha (Field, 2018; Garson, 2016) and composite reliability (Garson, 2016) across all timeframes: prior to COVID-19 (N 103, $\alpha = .934$, CR = .951), spring of 2020 once the pandemic took effect (N 82, $\alpha = .969$, CR = .976), and school year 2020-2021 (N 76, $\alpha = .975$, CR = .980).

Table 2

Work-Life Balance Scale Reliability

	Prior to COVID-19	Spring 2020 during COVID-19	School Year 2020-2021
Cronbach's alpha	0.934	0.969	0.975
Composite reliability	0.936	0.970	0.975
Factor loading ranges	0.796 - 0.926	0.863 - 0.968	0.924 - 0.968

Principal axis factor analysis was conducted for all time periods on the modified version of Valcour's (2007) five-item work-life balance scale. Because the scale was predesigned using five component questions to test for a single factor, no rotation methods were used. The correlation matrix (see Table 3) showed that all variables had correlations greater than 0.6 in each analysis, which is important to ensure the test is adequate with a sample size under 100 (Field, 2018), which is the case in two of the three timeframes of study. The Kaiser-Meyer-Olkin (KMO) measure was considered meritorious (Field, 2018; Laerd Statistics, n.d.) with scores > 0.8 (0.884, 0.872, and 0.882) with all individual KMO scores ranging from 0.838 to 0.936 rating them as meritorious/marvelous (Field, 2018; Laerd Statistics, n.d.). Bartlett's test of sphericity was significant in all timeframes, which indicated that the data was factorable. Because the scale was predetermined and validated, all factors were retained.

Table 3

Suitability of Principal Axis Factoring

	Prior to COVID-19	Spring 2020 during COVID-19	School Year 2020-2021
Correlations	0.603 – 0.831	0.785 – 0.921	0.835 – 0.939
Kaiser-Meyer - Olkin (KMO)	0.884	0.872	0.882
Individual KMO Ranges	0.864 – 0.901	0.838 – 0.936	0.855 – 0.910
Bartlett's test of sphericity	< 0.001	< 0.001	< 0.001

Maximum likelihood confirmatory factor analysis was run using the IBM SPSS extension software AMOS version 26, as the existing theoretical model was the basis for the collection of work-life balance satisfaction perception (see Table 4). For the model on the timeframe prior to

COVID-19, the model was an acceptable fit (χ^2 = 11.118; df = 5; p = .049; χ^2/df = 2.224; GFI = 0.961; CFI = 0.986; TLI = 0.972; RMSEA = 0.110; SRMR = 0.022; AVE = 0.746). While the chi-square was .001 from the desired threshold and the RMSEA measurement of parsimony was above the standard fit of < 0.08, all other measures were in acceptable ranges (Epskamp, 2019; Hoffman, 2018; Marquier, 2019). Chi-square was reported for all time periods, even though its fourth assumption of containing five expected frequencies was violated (Laerd, n.d.), as it is a measure that is expected to be reported in virtually all confirmatory factor analysis responses (Epskamp, 2019; Jackson et al., 2009). The alternative ratio of chi-square by the degrees of freedom (χ^2/df) was calculated and reported and showed a superior fit across all three timeframes (Alavi et al., 2020).

For time periods spring 2020 (χ^2 = 22.679; df = 5; p > .001; χ^2/df = 1.640; GFI = 0.972; CFI = 0.969; TLI = 0.937; RMSEA = 0.209; SRMR = 0.016; AVE = 0.865) and school year 2020-2021(χ^2 = 38.771; df = 5; p >.001; χ^2/df = 1.015; GFI = 0.978; CFI = 0.942; TLI = 0.884; RMSEA = 0.304; SRMR = 0.025; AVE = 0.879), the same model did not prove to be a good fit of multiple measures upon initial analysis. Because the existing model is a well-established and frequently used model, it was retained with minor modifications. As most models require modification, calculating for the covariance of error variances is a common adjustment that can improve the model fit (Division of Statistics and Scientific Computation, 2012). Accounting for error covariance between WLB2 and WLB4 in the spring 2020 model and of WLB1 and WLB2 in the school year 2020-2021 as suggested by the software modification indices improved the models in all areas, although RMSEA still remains just above the suggested level of 0.08 for spring 2020. Because this is an instrument that has been used and validated multiple times by many researchers, the over-threshold calculation of parsimony was not considered a reason to

alter the scale further. The researcher was not concerned with perfect parsimony, as the multiple questions were important to the overall perception teachers had of their work-life balance. This decision is further supported because scale modifications, or lack thereof, should be based not only on results in modification indices and fit outputs, but also in existing theory (Division of Statistics and Scientific Computation, 2012). Additionally, all other measurements showed a good fit (Epskamp, 2019; Hoffman, 2018; Marquier, 2019; Prudon, 2015). An examination of the average variance extracted (AVE) showed that there was adequate convergent validity, as all values were above 0.50 (Marquier, 2019).

Table 4

Goodness-of Fit Indicators for Confirmatory Factor Analysis Work-Life Balance Satisfaction

	Prior to COVID-19	Spring 2020, during COVID-19	School Year 2020-2021
χ^2	11.118	6.562	4.059
df	5	4	4
p value	0.049*	0.161	0.398
χ^2/df	2.224*	1.640*	1.015*
GFI	0.961*	0.972*	0.978*
CFI	0.986*	0.998*	1.00*
TLI	0.972*	0.989*	1.00*
RMSEA	0.110	0.089	0.014*
SRMR	0.022*	0.010*	0.006*
AVE	0.746*	0.865*	0.879*

Note. Table shows the final, modified models. * Indicates acceptable or better scores

Standardized factor loadings for all items (see Table 5) in all timeframes were high (> 0.6), showing that each item contributed strongly to the overall perception of work-life balance

(Hair et al., 2006; Worthington & Whittaker, 2006). Because the factor loadings were all high and relatively similar, it is appropriate to use either factor-based scores or factor scores (Grace-Martin, n.d.).

Table 5

Factor Loadings for Confirmatory Factor Analysis of Work-Life Balance Satisfaction

	Prior to COVID-19		Spring 2020		School Year 2020-2021	
Item	Unstandard-ized	Standard-ized	Unstandard-ized	Standard-ized	Unstandard-ized	Standard-ized
WLB1	1.00 (--)	0.876	1.00 (--)	0.933	1.00 (--)	0.902
WLB2	1.094 (0.079)	0.926	1.039 (0.055)	0.967	1.027 (0.049)	0.903
WLB3	0.897 (0.086)	0.801	1.003 (0.059)	0.956	1.153 (0.075)	0.965
WLB4	1.106 (0.087)	0.889	1.019 (0.059)	0.948	1.190 (0.073)	0.982
WLB5	1.108 (0.101)	0.821	0.903 (.071)	0.861	1.138 (0.081)	0.938

Note. Dashes (--) show that the standard error was not estimated.

The work-life balance perceptions of teachers over the three different timeframes were calculated using both the factor-based and the factor score using the loadings from confirmatory factor analysis loadings via SPSS AMOS (Ver. 26). This was done so a comparison made against responses across different times, number of participants, and factor loadings could be made for Research Question 1, and a more discrete mathematical differentiation could be used for ranking participants in Research Question 3 (Grace-Martin, n.d.). Used together, the two sets of numbers create an easy-to-interpret set of data alongside one that considers the weights of each component in the factor and is more complex (DiStefano et al., 2009). An additional reason both

factor-based and factor score were used is that factor loadings were not equal across time periods, though they were quite similar, meaning direct comparison of the factor scores would not have been ideal but would have been acceptable (Grace-Martin, n.d.). However, any changes made to the factor score equation by requiring the program to estimate means and intercepts would have changed participant score to estimated scores instead of true scores and changed the factor weights across each timeframe (DiStefano et al., 2009; IBM Support, 2018), which was not the intent of this research. Therefore, while both factor-based and factor scores are reported in Table 6 and were considerations for cutoff scores in Research Question 3, only factor-based scores are used and discussed in Research Question 1.

Work-Life Balance Satisfaction.

The average work-life balance satisfaction for teachers decreased (see Table 6) from pre-COVID perceptions (2.683, SD = 0.665) during the spring of 2020 and the beginning months of the pandemic (2.283, SD = 0.991). Satisfaction was on the uptick to nearly pre-pandemic levels in school year 2021(2.562, SD = 0.881). In the first timeframe, average teacher perceptions of their work-life balance leaned toward satisfaction overall. In the second timeframe, they dropped, leaning towards dissatisfaction. In school year 2020-2021, satisfaction began to lean towards satisfaction again. The standard deviation was greater in both spring of 2020 (SD = 0.991) and school year 2021 (SD = 0.881) showing a greater variance in perceptions of work-life balance than before the pandemic.

Table 6

Facto-based Scores and Factor Scores for Work-Life Balance

	Prior to COVID-19 n=103	Spring 2020 during COVID-19 n=82	School Year 2020-2021 n=74
Factor-based Score	2.6832	2.283	2.562
SD	0.665	0.901	0.881
Minimum	1.00	1.00	1.00
Maximum	4.00	4.00	4.00
CFA Factor Score	2.405	2.222	2.173
SD	0.601	0.898	0.778
Minimum	0.90	0.97	0.85
Maximum	3.58	3.88	3.40

The breakdown of satisfaction levels by Likert scale ratings (Very Satisfied, Satisfied, Dissatisfied, and Very Dissatisfied) were calculated using the factor-based scores of participants (see Table **7**). Prior to the pandemic, 47.58% of teachers showed satisfaction with their work-life balance. During the spring of 2020, the number of teachers who reported satisfaction with work-life balance dropped by nearly one-third to 31.71%. In school year 2021, a higher percentage of teachers reported satisfaction with work-life balance than before the pandemic with 51.35% of teachers perceiving satisfaction with their work-life balance.

Table 7

Work-Life Balance Satisfaction of Teachers

	Prior to COVID-19 n=103	Spring 2020 during COVID-19 n=82	School Year 2020-2021 n=74
Very Satisfied (4.0)	7.77%	6.10%	10.81%
Satisfied (3.9 -3.0)	39.81%	25.61%	40.54%
Dissatisfied (2.99- 2.00)	41.75%	39.02%	28.38%
Very Dissatisfied (1.99-1.00)	10.67%	29.27%	20.27%

Less than half of teachers reported satisfaction with their work-life balance prior to the pandemic, and that rate dropped to less than one-third during the spring of 2020. However, during school year 2020-2021, teacher work-life balance satisfaction was higher than before the pandemic, with just over half of teacher reporting satisfaction, and more teachers reported being very satisfied with their work-life balance in school year 2020-2021. Conversely, the percentage of teachers who were very dissatisfied was nearly double that of pre-pandemic levels.

Research Question 2

To determine teachers' boundary management tactics, both quantitative and qualitative measures were used. Quantitative data was gathered via survey questions that asked teachers which boundary management tactics they used during each timeframe. Participants could select all options that applied. Additionally, there was a choice to add information explaining other tactics teachers may have used. Lastly, there were several open-ended survey questions that requested teachers give further explanation on how they managed their boundaries and

disengaged from work during their non-work time.

When Teachers Conducted Work.

There were three questions in each time used to determine how teachers managed their temporal boundaries. The first question asked when teachers would conduct work activities outside their contracted school hours. Across all timeframes, more than 60% of teachers did not set temporal boundaries for conducting work but would conduct work whenever they had time (see Table 8). There were shifts in the percentage of teachers who only conducted work during work hours. Prior to COVID-19, 12.62% of teachers reported that their boundaries limited work to contracted work hours. During the spring of 2020, that number dropped to 7.14%; however, the percentage rose above pre-COVID levels in the 2021 school year with 17.72% of teachers keeping work within the contracted work-time boundary. Alternately, teachers who chose to work outside of contract hours during a self-set timeframe declined from pre-pandemic levels of 22.33% to 21.43% in spring of 2020 and continued to decline into school year 2021 to 16.46%. Those who chose to work outside of contracted work hours but did not set a specific boundary on that time also changed from 62.14% of teachers pre-COVID to 65.48% during the spring of 2020 with a slight downward change in school year 2021 to 64.56%.

Table 8

When Teachers Conducted Work

	Prior to COVID-19 n=103	Spring 2020 during COVID-19 n=84	School Year 2020-2021 n=79
Only during contracted work hours	12.62%	7.14%	17.72%
Self-set pre-determined time	22.33%	21.43%	16.46%
Whenever there was time (not pre-determined)	62.14%	65.48%	64.56%
Other	2.91%	5.95%	1.26%

The qualitative responses from teachers regarding when they would work gave insight into how teachers handled their temporal boundaries before and during the early months of the pandemic. Prior to COVID-19, necessity was a driving factor in teachers' working outside of their contracted hours, with one teacher reporting that they would break their own rule about keeping work only within contract hours when "there was no way around having to do it on personal time" because of "unavoidable deadlines."

Pandemic responses were mixed, showing the varied nature of the pandemic's effects on educators. Some educators felt that their work and nonwork time had morphed into a seemingly endless workday where "it felt like I was working 24/7." Yet, some educators felt that the freedom to conduct work or non-work activities as they deemed fit was a positive experience. One respondent shared that the pandemic allowed them to manage their time differently and more flexibly:

> I would take 1-2 hours off each day for lunch where I'd eat and watch tv or play with my dog. After about 8pm I'd take my dog for walks each night. If it was sunny, I'd stop work

early so I could go lay in the sun or play with my dog in the yard and then return to work later after the sun had gone away.

In school year 2020, one teacher noted that they would conduct work in the evenings because "hybrid teaching was way more time consuming."

Work Communication on Personal Cell Phones.

The second two questions dealing with teachers' temporal boundaries asked about the use of electronic communications via personal cell phones. The literature is quite clear that work-related technology use during non-work time is often considered invasive and a cause of work-life imbalance (Bauwens et al., 2020; Boswell et al., 2016; Butts et al., 2015; da Silva & Fischer. 2020b; Park et al., 2019). Teachers' acceptance of work-related communication increased from 74.50% of teachers accepting work communications, with or with or without restrictions, on their personal cell phone prior to the pandemic, to 90.59% during the spring of 2020 (see Table 9).

Table 9

Receipt of Electronic Communications on Personal Cell Phone

	Prior to COVID-19 n=102		Spring 2020 during COVID-19 n=85		School year 2020-2021 n=79	
	n	%	n	%	n	%
Yes	63	61.76%	71	83.53%	61	77.22%
No	26	25.50%	8	9.41%	10	12.66%
Sometimes (Describe)	11	10.78%	5	5.88%	7	8.86%
Other (Describe)	2	1.96%	1	1.18%	1	1.26%

The numbers remained high in school year 2021 as well, with 87.34% of teachers allowing work communications on their personal phone. While a high percentage of teachers received communication on their cell phones, their boundaries for responding were different (see Table 10). Few teachers expressed set hours for responses across timelines, with 11.65% of teachers setting temporal boundaries on electronic communications via their cell phone prior to the pandemic with a slight drop to 11.46% during the spring of 2020. There was an increase in temporal boundaries around work-related communications using personal cell phones in school year 2020 with 16.09% reporting time restrictions.

Table 10

Work-Related Responses to Communication on Personal Cell Phones

	Prior to COVID-19 n=102	Spring 2020 during COVID-19 n=85	School Year 2020-2021 n=79
Accepted WRC (restrictions)	74.51% (12.74%)	90.59% (7.06%)	87.34% (10.13)
Immediate responses to WRC	34.95%	48.96%	32.18%
Set times for response to WRC	11.65%	11.46%	16.09%
No set time for response: teacher convenience	39.81%	28.13%	34.48%

Note. With restrictions numbers are a percentage of the total number, not of those accepting communication.

The qualitative responses showed that teachers had different criteria for what work-related communications they received on their personal cell phones. Choice was an overarching theme in what communications teachers received, who they received them from, and how they

responded. Many teachers chose only to allow communications via certain applications while excluding others. Emails were most frequently mentioned (10 mentions), though one noted that email notifications were turned off after work hours, and two teachers specifically noted restricting emails from their phones. Text messages and apps like Remind or Class Dojo were allowed by two teachers for communication with parents and students. Although parents and teachers were groups who were specifically allowed and restricted (based on teacher choice) from after-hours communication, colleagues were the most frequently allowed communications via cell phone, with 11 teachers allowing for communication for colleagues across timeframes.

An open-ended follow-up question asked teachers who set restrictions on responding to work-related communications on their cell phones what determined their restrictions. Teacher responses showed that they had different criteria for determining what messages to answer and when they would answer them, though larger themes shone through. Two significant themes developed around perceived importance. The two most noted areas of discernment for teachers determining if they would respond after hours were based on who sent the message and the perceived urgency of the message. Some differentiated this based upon the mode of message delivery (text vs. email or a particular email account). Colleagues were the most frequently read and responded to group. Many teachers across all timeframes had specific after-school hours in which they would respond, of which a considerable amount lasted until 10 p.m. Some teachers had looser bounds that dealt more with what they happened to be doing at the time the message was received. Others simply responded immediately or made efforts to maintain their boundaries, even using apps to limit incoming messages, or intimated that they had no specific boundaries on their afterhours responses. One teacher felt compelled to respond to messages from students “24/7” during spring of 2020 because they “wanted to.” Several other teachers felt

it was important to respond into the weekend or evening hours to students and parents during spring of 2020 because they were being cognizant of the times in which students would work or when parents were available.

Where Teachers Worked Outside the School Day.

In the question asking about where teachers would conduct work activities, a problem with participant interpretation of a question that did not come to light during content validation or piloting arose upon analysis of the data. Because of this problem, some teachers' responses needed to be recoded based upon their complete answer. The question asked where participants would conduct work activities outside of their school workspace. In the pre-COVID timeframe, nine participants answered that they only conducted work activities at work, but then also selected multiple other locations outside of school where they would conduct work. Because their answers could not be both, their responses to only conducting work at home were removed and the other locations were kept. In spring of 2020, three different teachers answered similarly, as did fourteen teachers in the period of school year 2021. Interestingly, only one participant answered in this manner in two separate timeframes. While it is believed that the teachers in the latter two time periods (who almost unanimously answered the second space as a place within their homes) were intending to give additional clarity as to where their workspace was during that timeframe, it is beyond the capabilities of the researcher to verify with anonymous participants their intended meaning. Therefore, the answers that conflicted with the option of *only* working at school were kept and the "only" answers were removed.

From the response to this question about physical boundaries, few (2.3%) teachers worked in their school buildings during spring of 2020 (see Table 11). By school year 2021, the number of teachers reporting only conducting work at their workplace increased to 20.70%,

which was a small change from the 23.30% reported during pre-pandemic education. Teachers who conducted work activities at home tended not to have a specific area in their home where they conducted work. However, during the spring of 2020, there was a greater than 10% difference in the number of teachers who did not have a specific work area at home compared to those who did. While there was a downtick during Spring of 2020 in the number of teachers who reported conducting work anywhere they had inclination to work (36.40%), the rate increased to 39% by school year 2021. This was still lower than pre-COVID percentages of 48.50%.

Table 11

Where Teachers Worked

	Prior to COVID-19		Spring 2020		School Year 2020-2021	
	n	%	n	%	n	%
Only at work	24	23.30%	2	2.30%	17	20.70%
Public transport	2	1.90%	3	3.40%	2	2.40%
At home in specific workspace	22	21.40%	43	48.90%	25	30.50%
At home, no specific workspace	41	39.80%	47	53.40%	35	42.70%
Anywhere	50	48.50%	32	36.40%	32	39.00%
Family activities	12	11.70%	4	4.50%	3	3.70%
Other	2	1.30%	6	6.80%	7	8.50%

Qualitative responses elaborating on where teachers worked gave insight into other places teachers conducted work outside their school or home. Some tried to keep home and work separate by working in other locations, like local cafes, when it was necessary to work outside of school hours. During the pandemic, some teachers physically went to work if they could, while

others had to seek areas with “better wifi [sic] connection” in order to teach remotely because they did not have sufficient access at home.

How Teachers Communicated Boundaries.

The way teachers communicated boundaries over time changed (see Table 12). Prior to the pandemic, nearly two-thirds of teachers did not communicate their work boundaries at all, with one-third of those participants reporting that they did not communicate their boundaries because they did not set specific work-nonwork boundaries for themselves. During the spring of 2020, the percentage of teachers who had but did not communicate boundaries decreased by 12.5% but the percentage of teachers who felt they had no boundaries to communicate increased by 4.5%. The overall percentage of teachers who did not communicate boundaries decreased to 58% during this time. In school year 2021, the percentage of teachers not communicating boundaries fell to under half. The percentage of teachers reporting that they did not have boundaries to communicated dropped to under one-third.

Teachers who did communicate their boundaries tended to do so in multiple ways. Written communication increased over the time periods, increasing from 29.1% in pre-COVID time to 38.6% in spring of 2020, to 42.2% in school year 2021. Social media and learning management system (LMS) communications increased over time as well, from 9.7% before the pandemic to 27.3% during the spring, then with a small decrease in school year 2021 to 26.5%. Verbal communication of boundaries dropped from 31.1% in non-COVID time to 22.7% during the spring of 2020, but then rose to above pre-pandemic levels in school year 2021 to 38.6%.

Table 12

How Teachers Communicated Boundaries

	Prior to COVID-19		Spring 2020		School Year 2020-2021	
	n	%	n	%	n	%
Written	30	29.10%	34	38.60%	35	42.20%
Social media or LMS	10	9.70%	24	27.30%	22	26.50%
Verbally	32	31.10%	20	22.70%	32	38.60%
Did not communicate but had set boundaries	33	32.00%	18	20.50%	19	22.90%
Did not communicate; did not have set boundaries	34	33.00%	33	37.50%	19	22.90%
Other	5	4.90%	4	4.50%	2	2.40%

Teachers who did communicate boundaries sometimes found that communicating their boundaries was not enough as the boundaries were violated by others and by the teachers themselves. Prior to the pandemic, boundaries may have been “aspirational” but unattainable for some. In the spring of 2020, some teachers “tried to be clear and consistent…but still had people needing [them] at all hours.” One teacher reported that they “didn’t re-communicated [their] boundaries” during spring of 2020 but “began to ignore them.” Fear of consequences in not responding to communications or conducting work outside of contracted hours drove some to disregard their own communicated boundaries, while others felt compelled to do so because of the unusual circumstances of educating during the pandemic when students would reach out for help at all hours. Teachers reported that their own boundaries were ignored or changed to meet the needs of students. One teacher noted that in school year 2020-2021, their communicated

boundaries were “constantly being invaded and in flux. Students working from home felt they needed your attention whenever. I felt like my policies and responses kept shifting to meet the landscape.”

Boundary Helpers.

Often, people need help in maintaining their own boundaries. For teachers, family members were the biggest helpers across all timeframes (see Table 13). For many, family members’ percentage declined slightly in spring of 2020 from prior to the onset of the pandemic, though for some, their role increased. One teacher reported that in the spring of 2020, “My partner and I moved in together, and he was not used to how time consuming I let my work become. We agreed daily hour-long walks were phone-free.” During school year 2020-2021, family members as helpers increased over 10% in school year 2021. Similarly, colleagues as boundary helpers decreased slightly during the spring but rose significantly in school year 2021. All categories of helpers, with the exception of friends, increased in school year 2021 from pre-COVID times. While the percentage of teachers reporting that no one helped them maintain their boundaries did decline (with a slight uptick in spring of 2020), the shift was not as great as the increases of most groups as helpers. The school year 2021 data shows that over 45% of teachers felt that nobody helped them maintain their work-life boundaries. While there was an increase in the percentage of students and parents who helped maintain boundaries, it was a small increase from that of pre-pandemic measures, especially in comparison to spring of 2020 where no teachers felt that parents or students were helpful for teacher boundaries.

Table 13

Boundary Helpers

	Prior to COVID-19 n=102		Spring 2020 during COVID-19 n=88		School year 2020-2021 n=84	
	n	%	n	%	n	%
Family members	37	36.30 %	30	34.10%	41	48.80%
Colleagues	20	19.60%	15	17.00%	26	31.00%
Supervisor/admin	9	8.80%	11	12.50%	12	14.30%
Friends	11	10.80%	10	11.40%	9	10.70%
Students	1	1.00%	0	0.00%	3	3.60%
Parents/guardians of students	1	1.00%	0	0.00%	2	2.40%
No one	51	50.00%	46	52.20%	38	45.20%
Other	1	1.00%	4	4.50%	2	2.40%

Although the qualitative responses to the topic of helpers was rather limited, respondents made clear that spouses and significant others were helpers who needed to be recognized separate from family. While the researcher's intent was that spouses and significant others are family, their role is unique, and they may recognize boundaries or work-life balance needs in a way that needs distinction, as they are the most frequent home boundary helpers (Clark, 2000). One dual-teacher couple took care to help one another in the spring of 2020: "The day didn't end and we both knew it. Normally, we remind each other to stop." Another teacher who was a military spouse noted a difference in their boundary management fidelity with and without their spouse. This teacher shared that during school year 2020-2021 it was "a lot easier to follow through because my husband isn't deployed here, so I follow my boundaries a lot better."

Additionally, supervisors and administration may have been offering words of encouragement for supporting boundaries, but once the pandemic began sometimes their actions contradicted those supportive statements, with one teacher calling their administrative support “lip service” when compared to their expectations for teachers.

Boundary Hindrances.

In boundary management, sometimes people violate set boundaries or make it harder to maintain boundaries (Hunter et al., 2019; Kreiner et al., 2009). These people hinder an individual’s attempt at boundary management and work-life balance (Kreiner et al., 2009). Family and friends hindered teachers least in maintaining their boundaries, even during the spring of 2020 when most people were at home each day together (see Table 14). Colleagues and supervisors/administrators increased across all timeframes, indicating that people in the workplace would not always honor one another’s boundaries. Students and parents were the highest hindrances across all timeframes. The perception of students as an interference to boundaries returned to near pre-pandemic levels during school year 2021, though parents changed little between those two timeframes accounting for a 10% increase from the first timeframe. Fewer than half of teachers reported that no one negatively affected their personal work-life boundaries, with a slight decline in spring of 2020 that began to rebound in school year 2021.

Table 14

Boundary Hindrances

	Prior to COVID-19 n=102		Spring 2020 during COVID-19 n=86		School year 2020-2021 n=82	
	n	%	n	%	n	%
Family members	5	4.90 %	2	2.30%	2	2.40%
Colleagues	19	18.60%	17	19.80%	20	24.40%
Supervisor/admin	27	26.50%	24	27.90%	25	30.50%
Friends	1	1.00%	1	1.20%	2	2.40%
Students	31	30.40%	35	40.70%	27	32.90%
Parents/guardians of students	35	34.30%	38	44.20%	36	43.90%
No one	49	48.00%	37	43.00%	37	45.10%
Other	2	2.00%	3	3.50%	1	1.20%

While the few additional responses from the open-ended section on hindrances did not have much commonality for categories of people hindering, they did give insight into some specific ways different people hinder teachers' boundaries. Prior to the pandemic, two teachers reported that they had "guilty" feelings about when they should respond to work communications outside school hours thus making themselves their own hindrances to maintaining their boundaries. During the pandemic, one teacher noted that "everyone" was a hindrance: "family made demands during work hours and work made demands 24 hours. Literally had students text me at 3 am." In school year 2020-2021, the only additional information on hinderers was that "colleagues chatting after work hours during time I had allocated for prepping" made maintaining boundaries more difficult.

How Teachers Disengaged from Work.

Fully open-ended responses were requested in the final two questions in each timeframe to determine how teachers would maintain work-life balance through boundary setting or disengaging from work to elicit as individual a response as possible (Allen, 2017; Labuschagne, 2003). These responses were coded by timeframe and then compared across timeframes for larger overarching themes (see Table 15).

Table 15

Frequency Table for Teachers' Disengagement from Work

Code	Prior to COVID-19 n=94	Spring 2020 during COVID-19 n=75	School year 2020-2021 n=70	Code	Prior to COVID-19 n=94	Spring 2020 during COVID-19 n=75	School year 2020-2021 n=75
Activity	58	31	42	Never	7	13	9
Time	39	25	20	Relaxation activities	7	4	6
Pleasure activities	27	10	21	Daily time	7	4	1
Exercise	24	17	15	Work at work	6	0	6
Family	15	8	8	Friends	6	4	2
Avoiding tech	9	9	2	Attempted	6	3	2

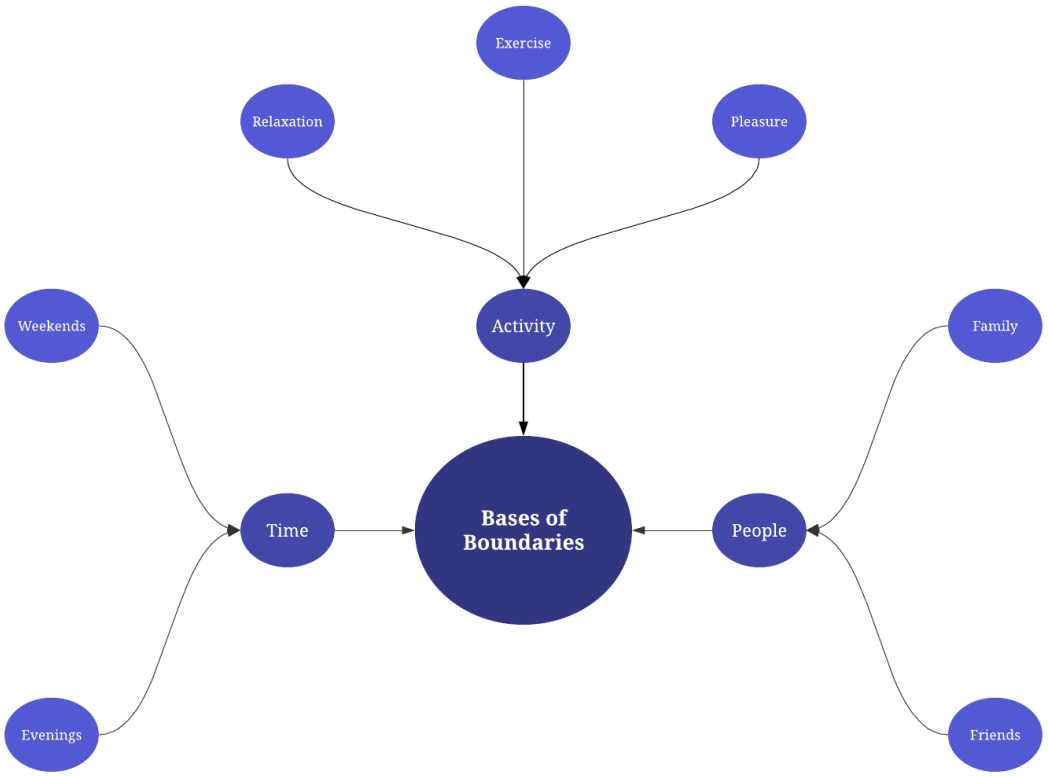
Note. Top 10 codes. The activity code includes activity types.

Several themes emerged in the ways people would disengage fully from work and how they would set boundaries for disengagement. Those themes were based on three factors: time, people, and activity (see Figure 4). Teachers found themselves disengaging from work during

periods of time they set for themselves. Often these periods of time would consist of part of the weekend or set times in the evenings, though weekends were most common. A few teachers set aside morning times, though those teachers' boundaries often were tied to a routine. Time boundaries commonly coincided with the other two bases for disengagement: activities or people. Time spent with family was mentioned by several teachers as specific time in which they would completely disengage from work and focus on their children and family. Time with friends was also considered a reason to disengage. Some people had time boundaries around specific activities like church, exercise routines, or classes. These multi-based activities were coded under all applicable categories.

Figure 4

Bases of Boundaries



Participants also largely disengaged from work based upon the people they were around. The most frequent people-based group was family and honoring time and activities spent with them. Responses with family boundaries gave the message that those people "deserve 100% of [teachers'] time and attention." Friends were another group with which teachers would disengage, though one teacher noted that could be more difficult with "friends who were also colleagues" because "the topic of work always came up."

Teachers would also disengage based upon the activity they were undertaking. Frequent activities included exercise; pleasure activities such as reading, cooking, traveling, and watching television or movies; and sometimes relaxation activities like taking baths, getting massages, or other physical care. Pleasure activities were the most common types of activity-based disengagement, though that category encompassed a broad spectrum of actions. Exercise was nearly as frequent in participant responses, and the types of exercise varied from walks and hikes to yoga or running.

During time and activity-based disengagement, many teachers avoided their technology to ensure they were not receiving work communications while participating in their nonwork time and activities. Some did this by physically separating from or turning off their technology, while others used features that turn off notifications. For other teachers, avoiding work-related technology was difficult, as one teacher noted they would "force myself to watch a movie without my computer or phone near me."

Other teachers leveraged physical locations for separating work from nonwork life and ensured that they "left work at work." For those teachers who used their school building to keep work away from home, they reported that often they would stay late, work through lunch, or would go to their schools during the weekend to get the job done instead of brining that work

home. Others would “refuse to bring work home” or only bring work home when “I had too much that I couldn’t accomplish at school.”

Prior to the pandemic, some teachers reported attempts to disengage or total inability to disengage physically and mentally from work while others felt they could never fully let go of work. Six teachers shared that they tried to disengage, but that it was “easier said than done” or that they could “decompress at least physically although not mentally.” Some teachers stated that they “did not feel comfortable” disengaging or that their only reprieve was “sleeping or showering. Every other minute was fair game” for work.

During the spring of 2020, some teachers set aside specific time that they would not work and were recognizing technology’s role by specifically avoiding its use more than before the pandemic. A teacher summarized their experience with technology by explaining they would “turn my phone notifications off so that I would not be bothered. Working from home, work and personal life boundaries seemed non existent [sic] so it was difficult to completely disengage.”

Incidentally, more teachers reported that they could never disengage from work during spring of 2020 or that it was much harder to disengage than before. One stated that they “felt like I was living at work while in my home.” Another reported being “always plugged into work. Never disconnected.”

In contrast, some found it easier to disengage because their school’s format during the spring allowed for more freedom in when they worked. Some reported that schoolwork was optional for students in the spring of 2020, or that students were sent home packets every 2-3 weeks, thus lightening the workload for teachers. For others, the ability to manage their own time by “being able to eat lunch normally and go to the bathroom as needed” made it possible to care for oneself “in small ways that I could not do in a regular classroom setting.”

Activity based disengagement was similar to before the pandemic, though exercise was reported more than pleasure activities during the spring. Some teachers utilized the more flexible worktime of pandemic teaching to exercise. One teacher noted that they would make themselves go for a walk during the time that was normally scheduled as their preparation/planning period. Multiple others noted taking walks during their lunch breaks to disengage during the workday.

People were less commonly considered a basis for disengaging from work, though being with family was still the largest category of people-based separation from work. Family was very important for some teachers. One stated that the time at home gave "more time to be with family an [sic] I think that helped." Another teacher reported that their family time was one of the only times in which they could disengage:

> Because the country I'm in had a strict lockdown at that time, I struggled to disengage. My work and home life all blurred together. Even if I wasn't working, I could see my laptop at my desk, and my to-do list loomed heavily in my mind. The only time I felt that I truly disengaged is when I would Skype with my family or when I would play video games.

Friends were also an important part of people-based disengagement, though the amount and scope may have been limited as some teachers spent time outdoors walking or only with "select friends." With the many changes that surrounded living and working during the pandemic, more teachers reported never being able to or struggling to disengage during the spring of 2020 than prior to the pandemic, though that did drop slightly in school year 2020-2021.

During school year 2021, teacher disengagement was less time-based than either period before. Using self-determined times in which to disengage was still very common, though, and those times often connected to scheduled activities and people. Weekends were considered non-

work time for many teachers and were not necessarily tied to any specific activity or people. Evenings were also a common time for disengagement, though not as frequent as weekends.

The conscious effort to avoid using technology for work-related purposes was also less common during school year 2021, although nearly 50% fewer teachers allowed work-related communications on their cell phones compared to before the pandemic which may account for the decline in technology avoidance. Fewer teachers mentioned turning off their technology in the qualitative disengagement and additional tactics responses and seven discussed trying to avoid technology during personally set times in explaining their boundaries for using cell phones for work outside of school hours.

There was a small increase of teachers choosing to leave work in the physical workspace to keep it from infringing on non-work time. Some teachers made additional attempts to leave work at the workplace, as one teacher reported:

> I would leave work every day by 5pm every day and did not take my bag home so I wouldn't be tempted to work. I would occasionally check for messages and emails but only if I felt inclined to do so.

While teachers were making efforts to use physical boundaries, technology played a role in making leaving work-at-work an easier boundary to overlook, as access to work via technology is available virtually anytime, anywhere.

Pleasure activities were again the top ways people used specific endeavors to disengage from work. There were few changes in the types of pleasure activities people undertook, with reading, watching television or streaming shows, and playing video games frequently mentioned. Gardening was a pleasure activity that became increasingly popular over the time periods.

Exercise as a means to disengage continued to be important for many educators. Some

teachers had set times and routines for their exercise, while others reported that during this timeframe exercise was "more sporadic" or used to alleviate stress when they "felt overwhelmed." The types of exercise undertaken were varied, though walks were commonly reported.

In the school year 2021, more teachers noted that it was harder to disengage from work during their nonwork time. While never being able to disengage was less common than in the spring of 2020, it was still much more common than prior to the pandemic. Teachers who reported difficulties with disengagement stated that it was mentally challenging to let go of work: "Even when I would take time for myself I still thought about work." Others reported that they were sleeping more than before. One teacher said, "I would go to sleep earlier than normal. The year 2020-2021 was so mentally draining that all I wanted to [do] after work was go to sleep." Another said that they "could not do anything other than sleep" upon arriving home.

Overall, teachers used a variety of boundary management tactics over time to regulate their work-life balance practices. The strategies shifted somewhat over time in response to the changes in teaching contexts in response to the pandemic.

Research Question 3

Participants were ranked based on their factor score generated in Research Question 1. The top 10 percent of teachers with the highest factor scores in each timeframe were considered those with high work-life balance. Because the data was not normally distributed, standard deviations were not an acceptable measure for cutoff points (Madadizadeh et al., 2015). Additionally, the Chebyshev's Theorem was not an acceptable formula for determining a cutoff point since the standard deviation of the data was < 1.0 (Glen, 2021). Visual inspection of the data showed that there was a distinguishable shift in the scores of balance satisfaction at the 10

percent mark, as well. In school year 2020-2021, the percentage was 10.81 because there was a total of 8 teachers (of 74 respondents that timeframe) with the same satisfaction score putting them all tied for the top position. All teachers in the top categories fell within the category of very satisfied with their work-life balance.

The demographics of these teachers were relatively close to the demographics of the overall survey participants, with the exception of gender. There was a disproportionate number of males in the top group of work-life balance satisfaction in the second and third timeframes with 25% of respondents being male. In the timeframe prior to COVID-19, males were proportionately represented at 20%. This finding is consistent with the literature on gender and work-life balance which shows that males tend to have higher work-life balance satisfaction than females (Conley & Jenkins, 2011; Drago 2001; Froese-Germain, 2014; Mercado, 2019). Additionally, research on the pandemic's impact on mental health found that women were more negatively affected than men (Dogra & Kaushal, 2021; Kluger, 2020; Syrek et al., 2021).

One other notable difference in demographics appeared in the years of teaching experience. No teachers with more than 29 years of experience were in the highest group of work-life balance perception at any point in time. However, during the spring of 2020, only teachers with fewer than 20 years' experience reported work-life balance perceptions within the top grouping, and more than half of that group had less than 10 years of teaching experience.

Top Teachers: Temporal Boundaries.

Teachers' boundaries around when they would conduct work activities outside their contracted workday shifted over the three timeframes (see Table 16). The choice to only conduct work during contracted hours was most frequent before the pandemic and in school year 2021, with a 25% increase in school year 2021 as compared to pre-pandemic time.

Table 16

Top WLB Perceptions: When Teachers Conducted Work

	Prior to COVID-19 n=10	Spring 2020 during COVID-19 n=8	School Year 2020-2021 n=8
Only during contracted work hours	50.00%	12.50%	75.00%
Self-set pre-determined time	30.00%	62.50%	25.00%
Whenever there was time (not pre-determined)	20.00%	25.00%	0.00%

During the spring of 2020, nearly all teachers conducted work outside working hours, with only one teacher who maintained workday-only hours. Teachers who self-designated a specific time outside their work hours were more prevalent among those reporting high work-life balance perception in the spring of 2020, though that dropped to below pre-pandemic rates in school year 2020-2021. One teacher leveraged benefits of more unstructured time during the pandemic, reporting that:

> Since I was not physically working, when I was teaching online, I did my work when I pleased. Sometimes at night, sometimes in the morning. Whenever I felt like it. Teaching virtually also gave me more time to do the things I needed, and it was very relaxing to not have a set amount of time to be at work and teaching. I enjoyed teaching virtually.

Even though some teachers used the freer time structure of pandemic to work outside of contract hours, the new school year changed many teachers' temporal boundaries. The number of teachers who chose to take a less-prescriptive approach to their temporal boundaries and

conducted work whenever they had time was already low but dropped completely to zero by school year 2020-2021.

Top Teachers: Cell Phone Boundaries.

The percentages of teachers with strictly yes or no responses to receiving work related communications on their personal cell phones was lower than that of the larger participant groups as a whole, with the exception of in school year 2020-2021 where more of the high work-life balance perception teachers did not accept work related communication on their personal phones (see Table 17). Those who sometimes accepted communications was also higher in the high-satisfaction group, except in 2020-2021 where the percentage was the same as with the larger group.

Table 17

Top WLB Perceptions: Receipt of Electronic Communications on Personal Cell Phone

	Prior to COVID-19 n=10	Spring 2020 during COVID-19 n=8	School year 2020-2021 n=8
Yes	50.00%	62.50 %	62.50%
No	20.00%	0.00%	25.00%
Sometimes (Describe)	20.00%	37.50%	12.50%
Other (Describe)	10.00%	0.00%	0.00%

Note. There was only one person in the Other (Describe) category in the first and last timeframe. One response changed based on qualitative response contradicting their “no” choice.

The criteria for judgement in the categories sometimes and other was varied among respondents and were based on the type of communication (text or email), purpose of the communication, sender, and timeframe received. These bases for discernment were comparable to the responses from the larger group as a whole. Colleagues were noted as those from whom teachers would receive texts and emails, as were emails from students and parents. These criteria were also those used in deciding when or how quickly to respond for teachers making choices on when or if to respond to communications. One teacher noted that their cell notifications served as "reminders" for what they would respond to upon returning to work.

Teachers in the higher work-life balance perception group differed noticeably in when they responded to communications, especially once the pandemic took effect (see Table 18). Teachers in this group were far less likely to respond to work communications on their cell phones prior to the pandemic, but in spring 2020 and school year 2021, half the number of teachers were immediate responders as compared to those in the larger study. Additionally, the high perception group had more teachers with set response times and far fewer who chose to respond at their convenience. These teachers also used their discretion in responding based on "urgency" or if a message was deemed "time-sensitive."

Table 18

Top WLB Perceptions: Work-Related Responses to Communication on Personal Cell Phones

	Prior to COVID-19 n=10	Spring 2020 during COVID-19 n=8	School Year 2020-2021 n=8
Never: only conducted work during work hours	20.00%	25.00%	37.50%
Immediate response	10.00 %	12.50%	12.50%
Set times for response	20.00%	37.50%	12.50%
No set time for response: teacher convenience	40.00%	0.00%	12.50%
Other (Tied to restrictions)	10.00%	25.00%	25.00%

Prior to the pandemic, these teachers had varied self-imposed rules set around when or if they would answer work communications on their cell phones, similar to those of the larger participant set. Some depended upon the urgency of the message, the sender, or what the teacher was doing at the time. While their rules were flexible and based in their own discretion, teachers were not hesitant to let things wait until the next workday to respond. One teacher used their judgement based both upon time it would take to respond and in accounting for people who respected or consistently violated their non-work boundaries:

> If it was an easy response, I would respond right away. If it was a nagging parent, I would wait until school hours. If it was someone who constantly sent things outside of school hours, I would wait until school. If it was someone who never sent outside of school, I was much more likely to respond outside of school.

Other teachers gave themselves a set timeframe in which to respond, noting that they would respond to emails during "grading and planning time" or "within 24hr hours [sic] after receiving email, during normal business week."

Once the pandemic began, the high satisfaction group reported similar restrictions, some with specific timeframes. One teacher stated that they became "much better about setting boundaries" during the pandemic. In the final timeframe, fewer teachers responded to work communications on their phones, and the urgency of the message and format in which it was sent (text vs. email) was a repeated criterion for determination. One teacher shared how they utilized technology features to help them organize their responses that would only take place during work hours: "I would often read emails and star them if they needed to be answered but could wait until contracted hours. If it seemed very time-sensitive/emergency, I would answer immediately." Another noted that they went back to a keeping work-at-work boundary stating that they would respond to work communications on their phone if they were "still in the building."

Top Teachers: Where They Worked.

The group of teachers with high work life balance perceptions (see Table 19) differed in where they conducted work activities from the larger group. In both the first and last timeframe, the high satisfaction teachers conducted work activities only at work at a much higher percentage, with over double the percentage in school year 2020-2021 when compared to the larger group. One teacher used a neutral space at a local coffee shop to conduct work activities outside the workday. Those who did conduct work at home were more likely to do so in a specific workspace in school year 2020-2021 than they were before the pandemic, though utilizing unspecified space at home was dominant in the spring of 2020.

Table 19

Top WLB Perceptions: Where Teachers Worked

	Prior to COVID-19 n=10		Spring 2020 during COVID-19 n= 8		School year 2020-2021 n= 8	
	n	%	n	%	n	%
Only at work	4	40.00%	0	0.00%	4	50.00%
At home in specific workspace	1	10.00%	3	37.50%	2	25.00%
At home, no specific workspace	3	30.00%	6	62.50%	1	12.50%
Anywhere	2	20.00%	2	25.00%	0	0.00%
Family activities	1	10.00%	0	0.00%	0	0.00%
Other	1	10.00%	0	0.00%	1	12.50%

Note. No teachers in this group responded that they conducted work on public transportation, thus that category was removed.

Top Teachers: Boundary Communication .

Most teachers who communicated boundaries used multiple methods for communicating across timeframes (see Table 20). The percentage of teachers who reported not having boundaries to communicate dropped by over 50% during spring 2020 and fell to zero in school year 2020-2021 when all teachers in the high-satisfaction group reported having personally set boundaries, though 50% did not communicate those boundaries to others. There was an increase in teachers who had but did not communicate boundaries from 30% prior to the pandemic to 50% in the remaining two timeframes.

Table 20

Top WLB Perceptions: How Teachers Communicated Boundaries

	Prior to COVID-19 n=10		Spring 2020 during COVID-19 n=8		School year 2020-2021 n=8	
	n	%	n	%	n	%
Written	3	30.00%	3	37.50%	3	37.50%
Social media or LMS	1	10.00%	1	12.50%	0	0.00%
Verbally	4	40.00%	0	0.00%	1	10.00%
Did not communicate but had set boundaries	3	30.00%	4	50.00%	4	50.00%
Did not communicate; did not have set boundaries	3	30.00%	1	12.50%	0	0.00%

Note. Other responses were removed. See explanation in text below.

There was one response listed in the "Other" category in each timeframe. The first two timeframe other responses fit within one of the multiple response options so were moved to that set. In the school year 2021, the teacher's additional response noted that their school had a culture that respected non-work boundaries so communicating them was not necessary. This teacher's response was moved to the category of having boundaries but not communicating them.

Top Teachers: Boundary Helpers.

Research on boundary management by Kreiner et al. (2009) showed that people often have others who help with maintaining boundaries. These boundary helpers can consist of

family, friends, and coworkers. For teachers with the top boundary perceptions, family members were considered helpers, however, family members were not the largest percentage in any timeframe (see Table 21).

Table 21

Top WLB Perceptions: Boundary Helpers

	Prior to COVID-19 n=10		Spring 2020 during COVID-19 n=8		School year 2020-2021 n=8	
	n	%	n	%	n	%
Family members	1	10.00%	1	12.50%	1	12.50%
Colleagues	1	10.00%	0	0.00%	0	0.00%
Supervisor/admin	0	0	0	0.00%	1	12.50%
Friends	0	0	2	25.00%	0	0
Students	0	0	0	0	1	12.50%
Parents/guardians of students	0	0	0	0	1	12.50%
No one	8	80.00%	6	75.00%	7	87.50%

The majority of this group reported that no one helped them in maintaining their boundaries. There was a slight shift during the spring of 2020 when friends were reported as being helpers and fewer teachers reported that no one helped them maintain their boundaries, though by school year 2020-2021, a higher percentage of teachers reported no one helping them maintain their boundaries. The one teacher who found help with boundaries during school year 2020-2021 was the same teacher who previously reported working in a school where work-nonwork boundaries were respected by all as a part of school culture.

Top Teachers: Boundary Hindrances.

Opposite of boundary helpers are those who hinder a person in maintaining their boundaries. For the teachers with the highest work-life balance satisfaction, more teachers reported that no one impeded upon their boundaries (see Table 22). Among those who reported that others made maintaining boundaries more difficult, parents and guardians of students were most frequently mentioned.

Table 22

Top WLB Perceptions: Boundary Hindrances

	Prior to COVID-19 n=10		Spring 2020 during COVID-19 n=8		School year 2020-2021 n=8	
	n	%	n	%	n	%
Family members	1	10.00%	1	12.50%	1	12.50%
Colleagues	1	10.00%	1	12.50%	0	0.00%
Supervisor/admin	1	10.00%	1	12.50%	0	0.00%
Students	1	10.00%	1	12.50%	1	12.50%
Parents/guardians of students	1	10.00%	2	25.00%	1	12.50%
No one	8	80.00%	6	75.00%	6	75.00%

Note. The category “Friends” and “Other” were removed since response rates were zero across all times.

Family members were a hindrance to boundary management for one teacher across all timeframes. This teacher had two children under the age of four and reported that work which needed to be done outside of contract hours would wait until kids and spouse were in bed, then the teacher would conduct additional work if necessary, or go to work early. The teacher also

checked that no one was a hindrance in two of the three timeframes, along with family. Although this teacher felt their family was a bit of a hindrance to boundary management, this teacher also was one of the teachers who reported the highest work-life balance perception across all timeframes.

The qualitative responses from teachers who reported high work-life balance perception were all explanatory, unapologetic, and seemed satisfied with their boundary management tactics. In the full survey groups as a whole, words like “attempted,” “tried,” and “never” appeared in the descriptions of disengagement; however, these words did not appear in the high-satisfaction groups. In the high-satisfaction group, even those who did not set specific restrictions for themselves stated that they did so consciously because they were “fulfilled with work” or otherwise were happy to have a more relaxed approach to their boundaries.

Teachers Who Sustained Top Work-Life Balance Perception.

Within the group of teachers with high work-life balance satisfaction, there were three who were in the top 10 percent across all timeframes. Of this group, two were male, two had taught less than 10 years with the other teaching between 10-19 years, and two were middle school teachers with the remaining person teaching elementary. Their ages spanned 20-59 years. Two were urban area teachers with the other taught in a rural school. Two of the three were married, and two teachers had children living at home though the children were in different age groups. One teacher was one of two from this study who had previous formal training in boundary management strategies. In the spring of 2020, two of the three teachers taught online and the other taught asynchronously. In school year 2020-2021, all teachers taught in more than one mode, creating multiple combinations of in-person, online, hybrid, and asynchronous teaching.

Though the teachers were different demographically, they had some distinct similarities. Each person was protective of his or her temporal boundaries across time designating specific time to conduct work when not at school or keeping work only at work. One noted that they were "with family from 4-bed time" ensuring that time with their small children and spouse was for them alone. These teachers had varied methods on where they would conduct their work during non-work hours. Two teachers each conducted work at home during their set times, but one had a set physical space for working at home and the other did not. The teacher who did not conduct work outside of work prior to the pandemic shifted during the spring of 2020. This teacher reported responding to student communications at any hour because they "wanted to" and would conduct work in any location in which they felt the inclination to work. However, during school year 2020-2021 the teacher returned to only conducting work at work during contracted hours.

Additionally, all teachers reported that nobody helped maintain their boundaries. Their tactics in determining when and where they would conduct work and how they would communicate those boundaries were all different, but they each had conscious boundaries that they protected and respected for themselves. One teacher reported that their family was a hindrance to their boundaries, though the teacher did not report any other boundary hinderers and noted ways in which they had worked their boundaries around the needs of their family. These management tactics included ensuring family time was kept sacred and removing extra duties like coaching that competed for their time.

These teachers each had unique ways in which they would disengage. Across the timeframes, these routines did not change. One teacher reported that they "don't usually have a problem disengaging from work" and that it was even easier to do so "during virtual teaching, which was much easier than working at school." Another teacher used video games as a

consistent way to disengage. The other teacher maintained social and exercise routines, though some social events became virtual once COVID-19 began due to pandemic restrictions. Lastly, one teacher removed additional responsibilities like coaching to create extra time for beginning their master's program which required a shift in some boundaries from work, though their family boundaries did not change.

Summary

The results of the data showed that teachers' work-life balance perception lowered during the spring of 2020 but rose to above pre-pandemic levels in school year 2020-2021 with just over 50% of teachers reporting satisfaction with their work-life balance. The tactics that teachers used to manage their work-life balance also changed over the three periods of time with some, like work-related communications on personal cell phones and conducting work at home and outside contract hours, increasing during the spring of 2020 but shifting back towards pre-pandemic levels in school year 2020-2021. Other management tactics, like communicating boundaries or even having set boundaries increased over the timeframes.

Teachers found time to disengage based in three categories: time, people, and activity. These bases were similar throughout the timeframes, though activity-based disengagement appeared to be slightly more popular during school year 2020-2021 than time-based boundaries for disengagement which had been the most frequent in the previous two timeframes. Teachers increasingly found it harder to disengage from work in spring of 2020 and more so in school year 2020-2021, despite more teachers reporting work-life balance satisfaction.

The teachers in each timeframe who reported the highest satisfaction with their work-life boundaries had some similarities in that they did not have help in maintaining their boundaries and all had specific ways they disengaged. Over the timeframes of study, more of the top 10

percent of teachers set boundaries for their work and nonwork life, though those specific boundaries and how or if they were communicated differed. Additionally, the high satisfaction group only conducted work in their workplace and during work hours (except during spring 2020) at a much higher percentage than the larger participant group. The implications of these differences are discussed in the following chapter.

Chapter V

Discussion

Introduction

The purpose of this study was to explore the boundary management tactics teachers used to attain or maintain work-life balance before and during the first year of the COVID-19 pandemic. The aim was to identify boundary work tactics used by teachers to add to the knowledge regarding teacher work-life balance and with the goal to clearly identify tactics teachers can use beyond the era of the pandemic. While some tactics were found in common among teachers with high work-life balance satisfaction, an attitude of respecting and protecting one's own boundaries appeared to be more important than any specific set of boundaries.

Three research questions, designed to build upon one another, guided this research:

1. What were teachers' perceptions of their work-life balance for three specific timeframes:
    - before the onset of the COVID-19 pandemic
    - during the spring of 2020 from the beginning of the pandemic's effects on their school through the end of school year 2019-2020
    - during school year 2020-2021?
2. What were teachers' boundary management tactics during these times?
3. Were there similarities in boundary work tactics for teachers who reported higher perceptions of work-life balance?

Summary of the Results

Research Question 1

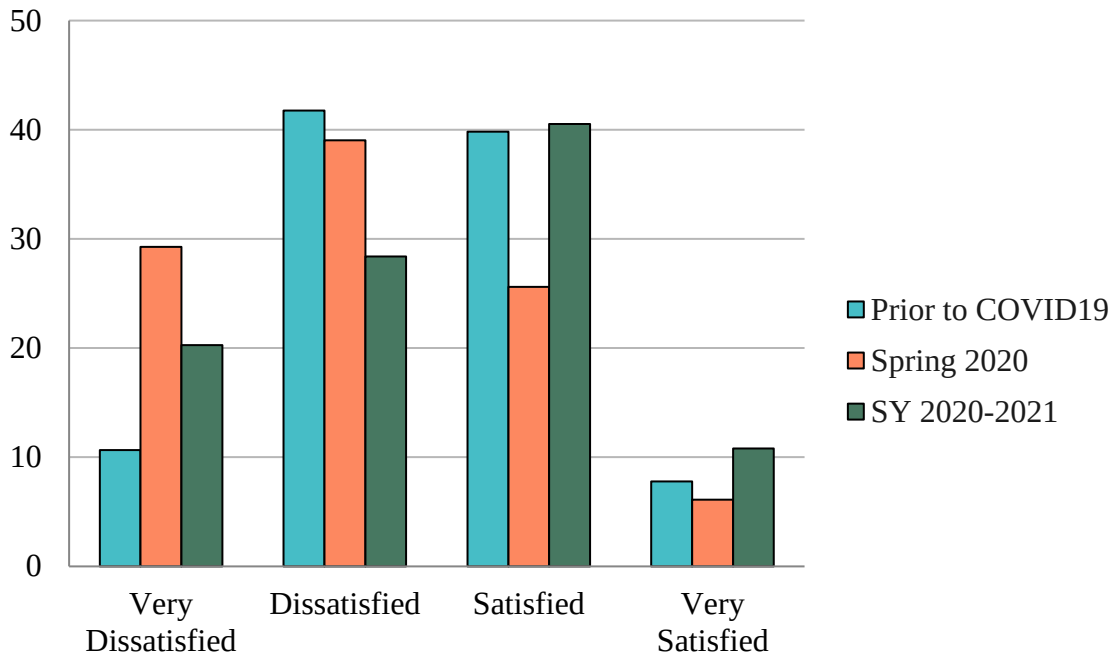
Work-life balance, as defined in this study, is the perceived satisfactory balance of time and activities in the domains of work and non-work at any given point in time. This perception is not fixed and changes based upon demands and salience in either domain or changes in one's own priorities (Adams, 2006; Cohen et al., 2009; Kalliath & Brough, 2008; Kreiner et al., 2009; Nippert-Eng, 2006; Pichler et al., 2009; Valcour, 2007). The first research question in this study is based in the theory of work-life balance satisfaction and focuses on teacher perceptions of their work-life balance. Work-life balance satisfaction is a holistic view of an individual's relative contentment with their levels of demands in the work and nonwork domains (Valcour, 2007). The fully quantitative findings from Research Question 1 were consistent with existing research which shows that teachers had relatively low work-life balance satisfaction throughout the timeframes measured (Bauwens et al., 2020; da Silva & Fischer, 2020a, 2020b).

Prior to the onset of the pandemic, 52.42% of teachers reported dissatisfaction with their work-life balance (see Figure 5). The data also shows that during the spring of 2020, teachers, like many people during the pandemic, were less satisfied with their work-life balance (Syrek et al., 2021). During the spring of 2020, the percentage of teachers dissatisfied with their work-life balance rose to 68.29%, and the percentage of teachers who were very dissatisfied increased almost 20% from 10.67% before the onset of the pandemic to 29.27% in spring. Research conducted prior to the pandemic about online education had already shown that teaching online had heavy workloads and low work-life balance for teachers (Hansen & Gray, 2018). Participants in this study had not been teaching online previously, and therefore many whose schools chose an online format in response to the early months of the pandemic needed to adjust

to this new and demanding mode of delivery. Aside from the upheaval of traditional work and non-work physical boundaries and the concerns surrounding the COVID-19 virus itself, working from home may have made boundary management more difficult for teachers accustomed to traditional teaching, as more physical integration of work and technology into nonwork spaces makes establishing and maintaining work and nonwork boundaries more difficult (Currie & Eveline, 2011). Because nearly all participants were working from home, for many the new shift in boundaries likely influenced work-life balance satisfaction.

Figure 5

Teacher Work-Life Balance



Through the first full school year of COVID-19, there were several notable changes in teacher work-life balance in comparison to pre-pandemic perceptions. Unexpectedly, there was a small upward shift in overall satisfaction as just over 50% of teachers now reported satisfaction

with their work-life balance, which was 3.77% higher than before the pandemic. The number of teachers who were very satisfied with their work-life balance accounted for the majority of this change with an increase of 3.04%, despite a variety of instructional modes including fully online, hybrid models, and in-person instruction amid an array of COVID measures. Some scholars believe that the pandemic may bring about positive changes in work and family dynamics, as the forced pandemic environment creates new understandings of individual and family values regarding work and nonwork lives (Kumar, 2021; Rudolph et al., 2020), which could account for the small change in high satisfaction percentages.

While there were some slight increases in the number of satisfied teachers and the number of dissatisfied teachers dropped by over 10%, the percentage of teachers who reported being very dissatisfied nearly doubled to 20.27% in school year 2020-2021 as compared to 10.67% prior to the pandemic. The perceptions in exceptional dissatisfaction account for much of the changes in percentage from the dissatisfied group. This shows that many teachers who were already dissatisfied became even more so in 2020-2021.

Aspects of boundary theory may help to explain some of the changes in work-life balance satisfaction in school year 2020-2021. When people cannot separate their physical and/or temporal boundaries between work and nonwork aspects of their life, it can create role-blurring where interruptions from one domain to another are much easier and it can be “difficult for one to decouple the roles psychologically” (Ashforth et al., 2000, p. 481). During the spring of 2020 when teachers were mostly working completely from home, for most there was no physical separation of work and nonwork space which allowed for more interruptions between work and nonwork roles, thus rendering the profession more integrative (Ashforth et al., 2000). Because of role blurring and difficulty in separating roles, individuals need to work harder at managing their

boundaries to achieve the desired level of integration or segregation that creates their satisfactory level of work-life balance (Ashforth et al., 2020). As teachers adjusted their boundaries over time, as seen in the data from Research Question 2, some teachers seem to have found boundaries that align better with their chosen preferences for maintaining work-life balance, while others have not yet been able to make the changes they need to find satisfaction.

Research Question 2

There is no one-size-fits all approach for work-nonwork boundaries. Boundary theory asserts that people create different boundary management strategies based on their individual preferences and work contexts, that boundaries are fluid, and they should be adjusted to an individual's needs and desires over time (Cannilla & Jones, 2011; Hecht & Allen, 2009; Nippert-Eng, 1996; Rothbard & Ollier-Malaterre, 2016). The aim of the second research question was to explore boundary management tactics teachers used across the timeframes of measure. Using quantitative questions with common boundary work tactics as response options and an open-ended choice for teachers to give qualitative input on other possible strategies, the mixed methods used in the survey allowed for a great freedom and depth of response while also respecting teachers' valuable time (Creswell & Guetterman, 2019). Over the timeframes measured in this study, teachers tried many different variations of boundary tactics to varying degrees of success. Other studies on work life during the pandemic also found that employees from multiple sectors shifted their boundary management tactics during the initial lockdown months, and that the pandemic may cause lasting changes in boundary management tactics for many people (Cho, 2020; Syrek et al., 2021).

Physical and Temporal Boundaries.

Physical and temporal boundaries are an important facet of boundary theory, as

individuals tend to focus much of their boundary work on the temporal and physical realms (Ashforth et al., 2000; Carlson et al., 2016). Findings in the present study revealed that over 80% of teachers conducted work outside of their contracted workday across all timeframes. Additionally, across all timeframes, over 60% of teachers did not control their worktime by having specified periods for working outside their normal school duty hours. These findings support existing research on the extensive amounts of teacher workload and the effects of time pressure, which are significant factors in teacher burnout and attrition rates (Adams, 2013; Austin et al., 2005; da Silva & Fischer 2020b; Skaalvik & Skaalvik, 2017, 2018). If teachers have more work than they can complete within their workday as the data indicates, it shows that the demands on teachers are beyond what they can reasonably be expected to complete while maintaining boundaries for work-life balance.

In school year 2020-2021, there was a downward trend in those who had pre-determined when they would choose to work outside of school, and an upward trend at roughly the same percentage for those who chose to conduct work only during school hours. While it is outside the confines of this study to determine the causes of this trend, one teacher noted that in both pre-pandemic time and during school year 2020-2021 they did "more grading during lunch break to avoid working at home." Another teacher noted that they "just tried to ignore school when I was home, but much easier said than done, some things just have to get done." Based upon the findings in this study, the amount of work that teachers must complete will infringe upon nonwork time for the majority of teachers, thus having a negative impact on work-life balance.

Physical boundaries use space, place, and objects which serve as visual and physical cues for separation between domains (Kreiner et al., 2009; Nippert-Eng, 1996). Teachers' physical boundaries for where they would conduct work showed that over 75% of teachers conducted

work outside of their work building (noting that during spring of 2020, this number increased significantly as most teachers were working from home). Of the many teachers who conduct work at home, few teachers (39.80% in timeframe one, 53.40% in timeframe two, and 42.70% in timeframe three) have specific physically distinct areas in which they keep work activities. Physical boundary management tactics have a very strong impact on role and domain segmentation and engagement (Carlson et al., 2016). Research on teleworkers and work-life balance has shown that most people who work from home tend to mimic the traditional work boundaries, including specific work times and keeping work in a set physical space within the home (Basile & Beauregard, 2016). While all teachers may not have the ability to create a physically separate space in the home in which to conduct work (like a home office or extra room), creating a space in which work is done, such as a desk or area of a table could be an alternative that allows for physical boundaries when working at home. Additionally, a similar percentage of teachers (48.50% pre-pandemic, 36.40% in spring of 2020, and 39.00% in school year 2020-2021) conduct work "anywhere" they have the opportunity. This finding shows that many teachers either could not or chose not to keep work within the confines of their workplace.

Work-related Technology Use.

Work-related technology use at home after work hours has become ubiquitous in the modern world with a breadth of research on how it (most often negatively) affects the work-life balance of employees (Bauwens et al., 2020; Boswell et al., 2016; Butts et al., 2015; Park et al., 2019). During the spring of 2020, over 20% more teachers accepted work-related communications on their personal cell phones than the 61.76% prior to the pandemic, and while that number did drop slightly in 2020-2021, over 75% of teachers chose or felt compelled to receive work communications on their personal devices in school year 2020-2021.

A pre-pandemic study on the role of technology in teachers' work-life balance found that most teachers engage in work related technology use outside of their contracted day not because of the professional benefits but because of the expectations of peers, colleagues, and perceived norms and behaviors of teachers as a group (Bauwens et al., 2020). Additionally, that study found even small amounts of work-related technology use outside of the workday can have severe impacts on teacher work-life balance (Bauwens et al., 2020). Boswell et al. (2016) noted that work-related technology use at home can create a sense of "never being able to disconnect from work" (p. 2), a finding which is very similar to a statement made by one teacher in the current study who noted that in the spring of 2020 they were "always plugged into work. Never disconnected." Another teacher shared that in the school year before the pandemic they had "no structure" for disengaging from work or work technology. While the data in this study cannot conclusively determine the degree to which boundaries surrounding work-related technology use after hours affect work-life balance, it can show that teachers have different approaches to accepting and responding to communications delivered in such formats, and that those who had high work-life balance had some boundaries, even if they accepted work communications after hours (see Research Question 3).

Of the teachers in this study, very few had set timeframes in which they would respond to work communications on their personal phones, but instead made choices about responses based upon their perceived urgency of the message, the platform in which the message was received, the time of day, or who sent the message. These choices teachers made as message receivers often aligned with the recommendations made for senders by Boswell et al. (2016) in considering message content/urgency, response times, and the relationship of the sender and receiver. Many teachers leveraged technology in ways similar to those Kreiner et al. (2009)

found in their study on the boundary management tactics of priests, though teachers increasingly used text/email content to filter who or what would and would not get a response before the next workday. Most teachers who allowed and responded to work communications on their cell phones utilized differential permeability in making the choice as to what communications would be allowed into their non-work domain (Kreiner et al., 2009). For example, one teacher expressed that they "wouldn't address anything work related after I left school, except for a single check for student emails at about 6pm," another noted that they were "more responsive to my AP students/parents," and yet another determined if they would respond on a "case-by-case situation." Differential permeability and leveraging technology allowed these teachers to choose when to check work-related communications, what types of communications to receive, and determine if they would respond immediately or wait based upon the sender or urgency of the message.

Communication of Boundaries.

Communication tactics allow individuals to make their boundaries known and potentially keep others from violating those boundary preferences (Kreiner et al., 2009). Teachers who communicated their boundaries tended to do so in multiple ways, though until school year 2020-2021, the majority of teachers did not communicate their boundaries at all. For nearly one-third of teachers (33% prior to the pandemic and 37.5% in spring of 2020), this was because they had no specific boundaries to communicate. The number of teachers who did not have set boundaries dropped by 10% from pre-pandemic numbers to 22.9% in school year 2020-2021. Although more teachers had boundaries and more were communicating them, there was still nearly a quarter of teachers who did not communicate their boundary expectations with others. Because boundaries are individualized, communication can be important in establishing and maintaining

clear limits for work and nonwork life. Yet, there may be underlying reasons people do not communicate their boundaries. Carlson et al. (2016) found that communicating boundaries to the work domain was a popular boundary tactic for managing boundaries, though it was not effective in the opposite direction (keeping family separate from work) and even may have been a cause of stress and decreased job satisfaction. For teachers specifically, as a part of a caring profession, it is possible that similar stress could occur communicating boundaries to the work domain, especially as there are existing norms in place that teachers conduct work in a variety of ways outside of school hours.

By school year 2020-2021, 77.10% teachers reported having established work-nonwork boundaries, and 54.20% were communicating those boundaries with others. Yet, nearly half of teachers were not sharing their boundaries with others, and 22.90% were not communicating boundaries because they had not set any. When there are no conscious boundaries, it may make it more difficult for individuals to maintain work-life balance, as such boundaries help to negotiate different life domains (Kreiner et al., 2009). Communicating boundaries allows for others to know what the expectations are for one's work and nonwork roles and creates shared understanding (Clark, 2000; Kreiner et al., 2009). Additionally, when teachers clearly communicate reasonable work-nonwork boundaries, they are modeling positive limitations and self-care for students (Cruz, 2021). When there is no communication of boundaries, violations are bound to occur.

Boundary Helpers and Hindrances.

Behavioral tactics, as discussed by Kreiner et al. (2009), in boundary management deal with leveraging technology (as described in sections on work-related communications), using other people to help manage boundaries (helpers), and invoking triage (prioritization of

responsibilities from different domains). This study also looked at hindrances, or people who seemed to make boundary management more difficult. Teachers had different groups of people who both helped and hindered maintaining boundaries for work-life balance. Helpers include those who actively assist in enforcing boundaries (Kreiner et al., 2009). Family members and colleagues were most helpful over all timeframes, and students and parents hindered most over all timeframes. Although it is unsurprising that students and parents challenged teachers' boundaries most as they are the individuals whose needs are met by educators. However, with the omnipresence of technology and few, if any, clear guidelines on teacher work/nonwork boundaries, it is unsurprising that students and parents hinder teacher boundaries. Considering that many teachers do not communicate their boundaries, it is unsurprising that violations occur. That is not to say that even communicated boundaries may not be ignored or disrespected by others. In the scope of managing the realms of work and nonwork life, "individuals must often work diligently to defend their boundaries against erosion and the incursion of other roles" (Ashforth et al., 2000, p. 482). Utilizing an array of boundary management tactics can help individuals protect their domains for managing a satisfactory work-life balance.

Aside from parents and students, colleagues were also noted as an increasing hinderance on boundary management (although some teachers still found these to be helpers), as were supervisors and administrators. Most notably however, were reports from between 40-50% of teachers across all periods that no one helped or hindered their boundaries. This indicates that for many teachers across all timeframes, maintaining their boundaries is largely viewed as a personal responsibility in which they make and maintain the rules.

Disengagement from Work.

A key aspect in maintaining work-life balance is disengaging from work activities

because it allows for recovery time and mitigates stress or strain caused by work-nonwork conflict (Kreiner et al., 2009; Sonnentag et al., 2016; Wepfer et al., 2018). Study participants shared information on how (or if) they disengaged from work with responses to a fully open-ended question. From their responses, qualitative analysis revealed three major themes that acted as a basis for disengagement: time, activity, and people. These three themes comprised not only the bases for disengagement, but also were found as considerations for when teachers responded to work-related communications after hours as explained in the open-ended response question in that section of the survey.

Many of the decisions teachers made regarding if they would respond to electronic communications and when they would disengage from work were grounded in specific times, certain activities, or who a teacher was with or receiving communications from. These themes were also consistent for the foundations of determining disengagement from work, which is an interesting relationship considering that work-related technology use at home can have negative impacts on disengagement from work and work-life balance (Bauwens et al., 2020; da Silva & Fischer, 2020b). The themes around which people disengage from work or reengage outside work time show that the permeability of boundaries may be strongly tied to these categories of people, time, and activity. Additionally, these categories often overlapped or were mentioned together, as one teacher noted “I am with family from 4- bed time” indicating that a set period of time was reserved for spending with certain people.

While people were the least frequent theme in the qualitative data, they gave a sense of being important and a boundary that did not need justification or explanation. This perception was given because many answers regarding family as a basis for disengagement or reason for not responding to electronic communications were stated simply and matter-of-factly, for example

"Family Time" or "When I was with my family." Still other responses gave the impression of protection of this boundary with responses stating "If I'm with family or friends, they come first. No work" or that a teacher's child "deserves 100% of my time and attention." These statements and perceptions remained true throughout the timeframes of study which indicated, unsurprisingly, that people are an important aspect of teachers' nonwork lives. In Kreiner et al.'s (2009) categorization of boundary management tactics, they noted that family was often a part of disengagement, or finding respite, as the term used in their study. However, they also asserted that using peopled as a behavioral tactic for boundary management

> necessarily constitutes an active, conscious choice to somehow utilize the resource of another individual. As opposed to earlier discussions of boundary influences, which depict other people more passively, as merely available, this tactic illustrates how individuals actually engage and use others strategically. (Kreiner et al., 2009, p. 715)

Yet, the present study shows that using people as boundary helpers can encompass simply having these people in one's life as a basis on which to choose to set boundaries for separating work and nonwork domains. Since people were a reason unto themselves for both choosing to engage and disengage, it shows that a necessarily active role in assisting to maintain the teacher's boundary is not always a factor in their usefulness or importance in establishing or maintaining a boundary.

Termed "blocking time" by Kreiner et al. (2009), teachers commonly disengaged from work around set timeframes that individuals controlled and self-selected. From the larger theme of time as extracted from the qualitative data, there were two sub-categories in which teacher would block time for disengagement from work: daily time or weekly time. Daily time included setting aside periods each day in which one would not conduct work. Weekly time generally

consisted of taking one day of the weekend in which teachers would not conduct work activities.

Many teachers used the words “tried” or “attempted” in describing setting aside set times for which they would not work, especially when that time was not tied to people or activities. Statements such as “tried to preserve at least one day a week in which I did not work” and “Usually I tried to block off the weekends completely, but easier said than done.” Although there was a commonality of weak boundaries around just blocking time itself, many teachers set aside time specifically to engage with the other themes of people and activities. These statements often did not indicate that the boundary was as weak or flexible. Teachers who tied specific times to activities often mentioned exercise, both light with “walking the dog every morning” and more structured with “workout time: 5-6am every morning.” Times that connected to people consisted frequently of family times and activities like hiking, walking, and cooking and “family outings.” Time with friends included unwinding in different ways like “Every Friday, the weekend began with a couple hours of socializing with friends at my favorite pub” or just “gathering with friends.”

The framework that created the basis of the survey questions in this study as described by Kreiner et al. (2009) did not categorize activities as a basis for finding respite or disengagement. However, the qualitative analysis in this study determined that many people determine their boundaries for disengagement based upon activities they enjoy. Activities as a basis for disengagement fell into three subcategories: pleasure activities, relaxation activities, and exercise. Pleasure activities included reading, cooking, watching television or movies, playing video games, gardening, crafting, and other similar activities. Relaxation activities included “self care [sic], long baths, face masks,” sleeping in, naps, and massages. Exercise was a very common way to disengage and was also frequently tied to time. Exercise, like pleasure and

relaxation activities, are key aspects of recovery and reducing stress and burnout symptoms (Austin et al., 2005; Sonnentag et al., 2016). One teacher mentioned specifically that "exercise(walking) relieves stress" for them, and indeed many teachers shared that they use walks as a form of disengagement over all timeframes.

Spring of 2020 paradoxically created both inabilities to disengage and newfound freedom for teachers. Much of this seemed to stem from the different ways in which teachers were working and how schools chose to handle educating during the spring of 2020. Some teachers felt they had increased their work-life balance during the spring of 2020, despite the 15.87% drop in teachers finding satisfaction during that time. One teacher who had increased their work-life balance only during the spring of 2020 noted that:

> It was much easier to disengage during the spring pandemic because we were teaching remotely. Everyone was at a distance, so I wasn't henpecked or grabbed on the fly to do something. It was as if everyone simply took a step back.

This teacher indicated that the decrease in extra unexpected responsibilities and demands on their time freed up space in their life for disengagement. While a minority of teachers found an increase in their work-life balance during spring of 2020, most experienced decreased work-life balance and decreased abilities to disengage from work. The results indicate that some teachers struggled with the shifting boundaries and expectations during the spring. Many teachers found that their boundaries were difficult or nonexistent. Teachers reported, "During COVID-19 I felt like I was living at work while in my home. It became very stressful" and "I was 'on' work mode all day."

By school year 2020-2021, many teachers continued to struggle to disengage and for most the ability to work from home had been removed, as only 8.5% of participants reported

teaching fully online for the entire year. Several teachers stated that they could only disengage when they slept. One noted it was “so mentally draining that all I wanted to do after work was to go to sleep,” while another said, “My eyes were so stressed from staring at two screens and watching the students in my classroom, that I could not do anything other than sleep when I got home.” Although sufficient rest is a part of recovery, reducing stress, and good health (Austin et al., 2005; Sonnentag et al., 2016), it cannot be the only way for people to destress and disengage.

Although the ability to disengage remained a struggle for some, others brought about changes in their lives that increased their abilities to disengage and improved their work-life balance. One participant shared that they returned to their pre-pandemic boundaries of setting aside one day a week where no work would be completed, as they “had to give that up during our remote learning in the spring.” Another teacher’s boundaries changed from conducting a set amount of work at home prior to spring of 2020 to a new boundary where they “did not take work home at all and only responded to quick messages if I was free. Everything else I only did at school.” These boundary changes support existing research on the recursive and continuous nature of boundary work (Cannilla & Jones, 2016; Nippert-Eng, 1996).

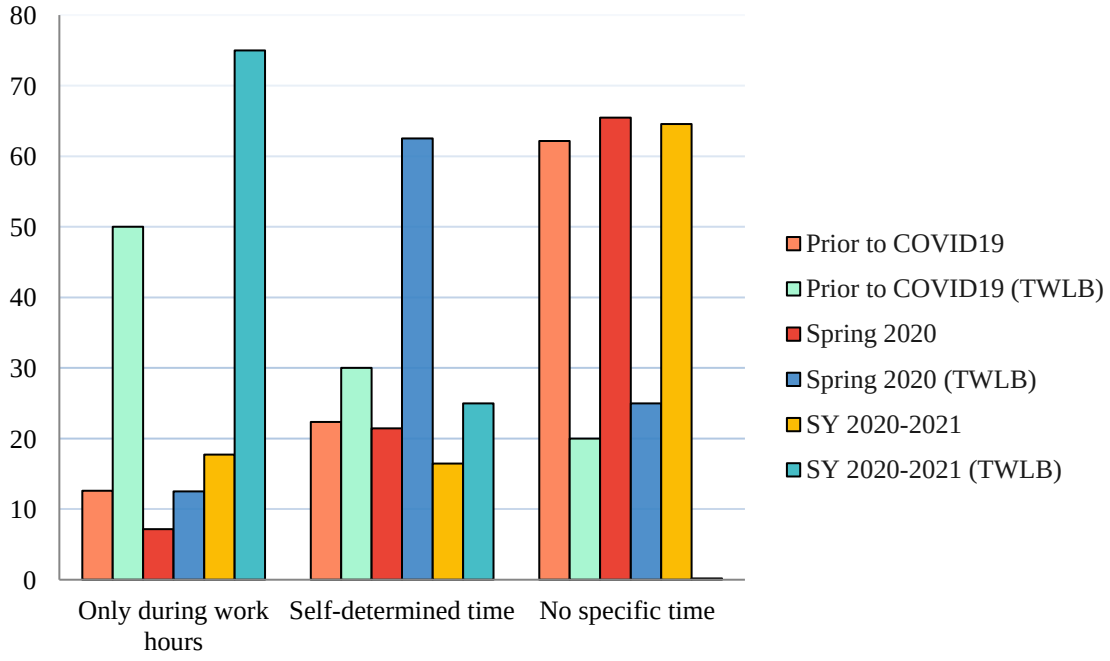
Research Question 3

Teachers with high work-life balance satisfaction had similar tendencies if not specific techniques for managing their boundaries. Overall, these teachers had boundaries that were more prevalent than in the larger group. These teachers overwhelmingly kept work at work, both temporally and physically, when compared to the larger group, especially pre-pandemic and even more so in school year 2020-2021. Prior to the pandemic, 50% of the highest work-life balance satisfaction teachers only conducted work during work hours as compared to the 12.62% of the full study set of participants (see Figure 6). During the spring of 2020, this number dropped

significantly to 12.50% compared with the slight drop in the large group to 7.14%. However, during school year 2020-2021, 75% of the high satisfaction group only conducted work during work hours as compared to 17.72% within the total study. The remaining 25% of the high satisfaction group had specific timeframes they had set for their after-hours work.

Figure 6

Temporal Boundaries



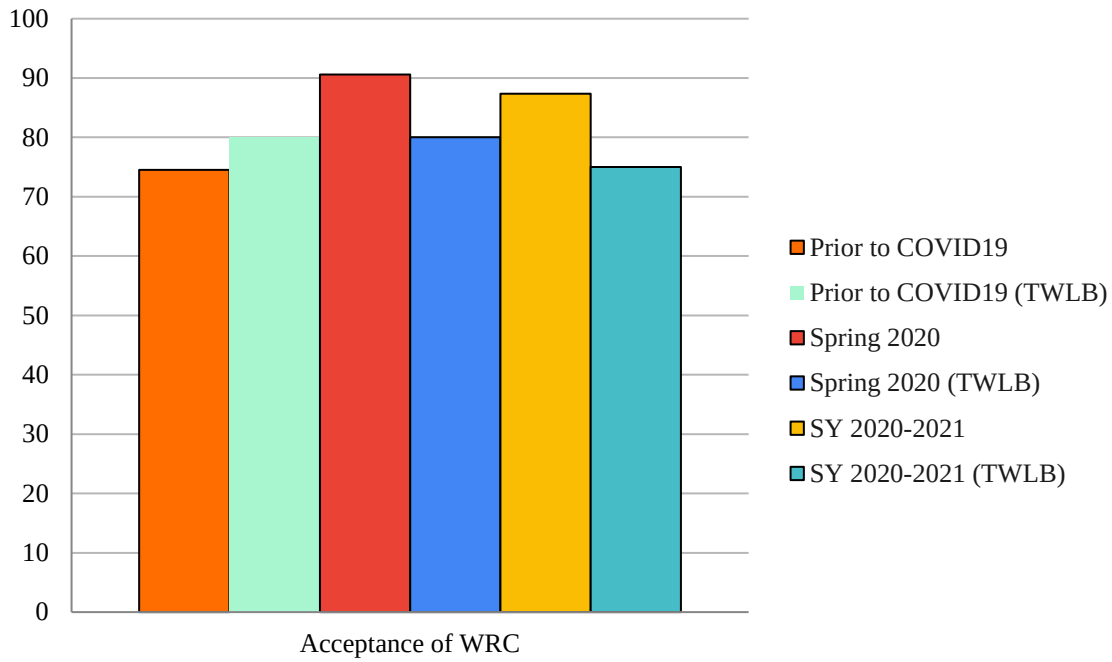
Two teachers who set new temporal boundaries during the spring of 2020 and continued those new boundaries into school year 2020-2021 were teachers in the top work-life balance satisfaction group in both timeframes, though in the dissatisfied group during the first timeframe. These teachers changed from having no specific boundaries or keeping one day a week work-free to setting personal boundaries that excluded work from nonwork time. One teacher specifically noted that “I worked during contract hours. I was not able to or as tempted to work

outside of those contracted hours" because they would begin to focus on their home life by "cooking dinner" or doing "chores at home." The other teacher commented that because of this boundary change they "slept better and I found [themself] waking up early." The temporal boundary change to keeping work during contracted hours shifted these teachers' balance satisfaction from dissatisfied to very satisfied. This finding is consistent with those of Carlson et al. (2016) who found that physical and temporal boundaries were strongly related to work and family domain satisfaction.

Despite most teachers keeping work at work, the data shows that many teachers do not necessarily consider receiving work-related communications on their personal cell phones as conducting work. The percentage of high satisfaction teachers who accepted work-related communications on their phones was lower than the larger group by 15%, but this still left over 70% of teachers accepting work communications over all timeframes (see Figure 7). Interestingly, although 75% of the high satisfaction group received work communications on their personal phones, 62.50% reported that they would only respond during work hours.

Figure 7

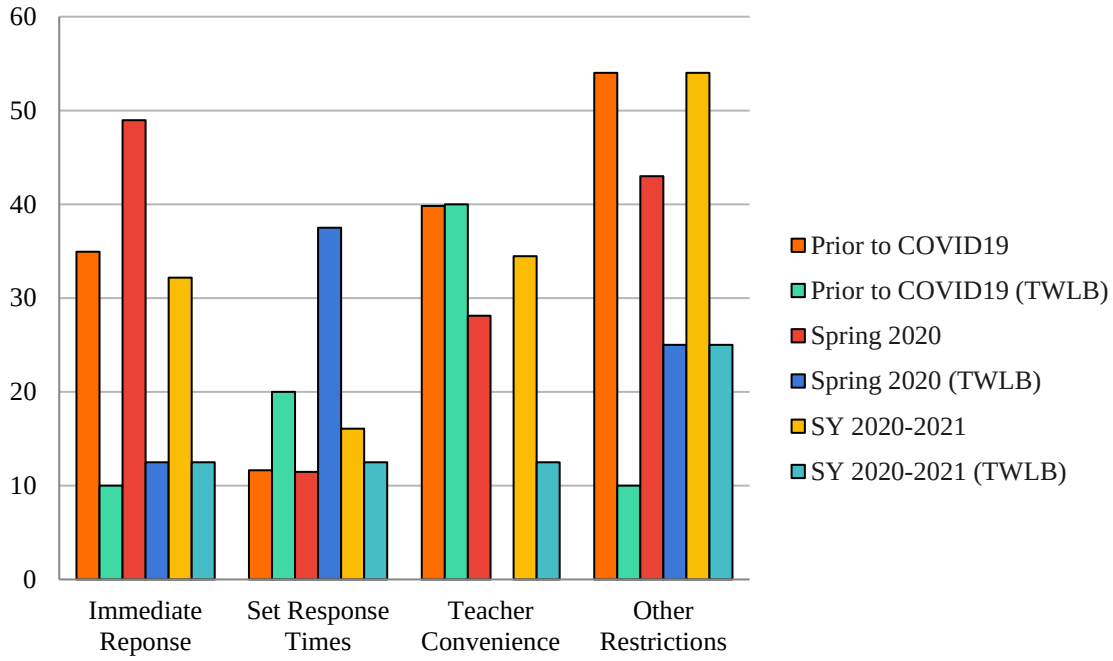
Acceptance of Work-Related Communications



Several teachers stated that the notifications were there as "reminders" or for them to take note of for responding during working hours. Another teacher reported that they would "answer if I was still in the building." Others set response boundaries similar to those of the larger group, basing their response on who sent the message or the perceived urgency of the communication. The percentage of teachers in this group reporting that they would respond to communications immediately was 20-30% lower than in the larger group across all timeframes (see Figure 8), indicating that while they receive the communications, they did not feel compelled to respond until it was within their established boundaries, or they chose to do so.

Figure 8

Work-Related Communication Response



Teachers in the highest satisfaction group increasingly set boundaries, though they did not necessarily communicate them. The percentage of teachers reporting that they did not have specific boundaries decreased across the three timeframes until school year 2020-2021 when all members of the high work-life balance satisfaction group reported that they had set specific boundaries for work and non-work. However, half of the teachers did not communicate those boundaries. Participant responses indicate that establishing and following their own boundaries was enough for these teachers to maintain them without having to communicate and reinforce them with others.

Although the highest satisfaction group had their own boundaries, they largely and consistently did not have or seem to need help in protecting those boundaries. Similarly, they did

not allow others to hinder or interfere with their boundaries (see Figure 9 and Figure 10). The data shows that the teachers with the highest work-life balance perceptions were strong at respecting and managing their own boundaries, regardless of differences in specific tactics. These teachers' boundaries were proactive or enactive as they prepared for and negotiated the needs of their multiple roles in work and nonwork life (Clark, 2000).

Figure 9

Boundary Helpers

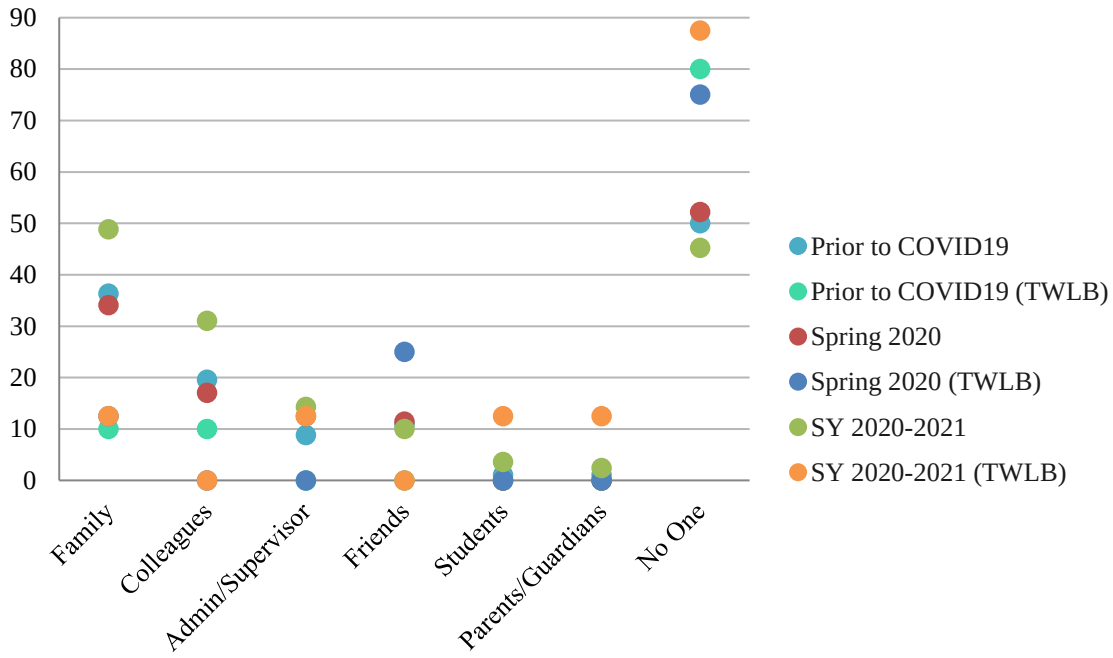
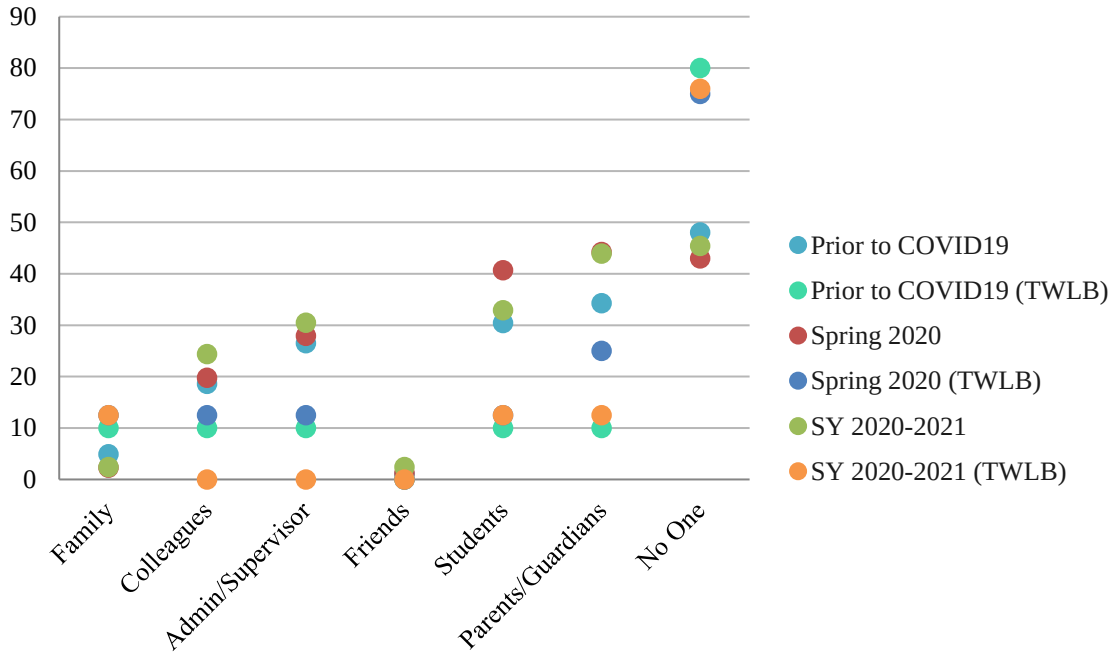


Figure 10

Boundary Hindrances



Indeed, one teacher who reported high work-life balance over the course of all three timeframes noted changing boundary management over time. In the year prior to COVID, they noted that they would "work after the kids and wife got to bed if not in contract hours. I may come in early if needed, but I don't stay late." In spring of 2020 and school year 2020-2021, the same teacher "stopped coaching" and made space for their work-life balance by "removing extra things to do." This teacher's account demonstrates how teachers with sustained work-life balance satisfaction maneuver their boundary tactics based upon their needs at any given time. The tactics used for work-life balance were created and adjusted to the for each individual and their work context over time.

Conclusions

Research on boundary management tactics over the years have shown different categories of tactics and methods people use to attempt and manage work-life balance (Allen et al., 2014; Ashforth et al., 2000; Kreiner et al., 2009; Nippert-Eng, 1996). Among those studies, no known studies to date have specifically addressed teachers' boundary management tactics in relation to work-life balance satisfaction. This study has confirmed some existing findings on teacher work-life balance and ways people in general manage their boundaries, expanded on current research, and added new findings specific to the lives and roles of educators.

Teachers faced many changes in their work-life balance perceptions and boundary management tactics between the three timeframes in this study. While teacher work-life balance satisfaction unsurprisingly dropped during the early stages of the pandemic in the spring of 2020 as it did for many professions, the following year brought changes that polarized some teachers, especially in their levels of dissatisfaction. The large shift from dissatisfied to very dissatisfied showed that a higher percentage of teachers were struggling with work-life balance than prior to the pandemic, even as the percentage of teachers reporting satisfaction increased slightly. This finding is significant because issues with work-life balance can lead to burnout, health issues, and teachers choosing to leave the career (Adams, 2013; Edge et al., 2016; Johari et al., 2018) at a time when the profession continues to grapple with maintaining workforce numbers and highly qualified educators (Boren, 2021; Zinkand, 2021; United States Department of Education, 2022). Increasing teacher salary is largely considered the go-to solution when school systems deal with teacher retention, yet school systems must consider different aspects of job and work-life satisfaction. While making a living wage commensurate to one's education is important for educators, salary is increasingly less important to people across careers and countries. One

survey showed that only 22% of workers around the globe list salary as the most important consideration in a job (Schwedel et al., 2022), and another study on college-educated workers during the pandemic showed that career passion and fulfilment are increasingly driving factors in career decision making (Cech & Hiltner, 2022). Higher work-life balance increases job satisfaction and can even mediate differences between employee benefits and job satisfaction (Bumhira et al., 2017; Malik et al., 2014) showing that financial and fringe benefits are not very effective without work-life balance.

Recent research supports these findings, especially in the wake of the pandemic and the onset of The Great Resignation, the description for the phenomenon surrounding the record numbers of people around the world who are choosing to leave their jobs (Cech & Hiltner, 2022; Cook, 2021; Schwedel et al., 2022). A study in late 2021 reported that fewer than 20% of Americans feel their finances or job are sources of significant meaning in their lives (van Kessel & Silver, 2021), and globally families are most frequently reported to bring the most significant meaning to life (Silver et al., 2021). Another study, aptly titled *The Working Future: More Human, Not Less* gathered information from 20,000 workers across various sectors in 10 different countries, where they reported that "58% of workers feel the pandemic has forced them to rethink the balance of work and life" (Schwedel et al., 2022, p. 2). Support from workplaces in creating and maintaining boundaries for work-life balance satisfaction can itself increase well-being (Clark, 2000). Finding ways to empower teachers to attain and maintain work-life balance is a necessary aspect of dealing with teacher shortages and retention issues. Utilizing boundary management professional development and supporting teacher creation and maintenance of boundaries is a key facet thereof.

Teachers' boundaries changed in many ways during the spring of 2020 in response to upheavals in education during the first months of the COVID-19 pandemic and the rapid shift to various forms of distance learning modes. Noticeable shifts in boundary management from pre-pandemic times occurred in school year 2020-2021, especially for teachers who reported high work-life balance satisfaction. This signals that the spring of 2020 may have triggered transformations in the way teachers maintain their boundaries for work-life balance, as some scholars expect (Kumar, 2021; Rudolph et al., 2020). Indeed, more teachers reported that they did have boundaries in school year 2020-2021 when compared to the earlier timeframes. Those with high perceptions who did not report having set boundaries had specific ways in which they would disengage from work which fell within the bases of disengagement discovered in qualitative data analysis: activities, time, and people. The data found in this study supports other research which shows the pandemic has brought work-life balance into a new focus for many, and this study adds that utilizing boundaries to manage that balance has been helpful for many teachers.

Despite changes in boundary tactics, including attempts to keep work at work, the data shows that teachers have more work than most can complete within their contracted day. The majority of teachers conduct work outside of school facilities and contracted hours, which builds upon years of research that assert teachers have more workload than they can reasonably conduct during their workday. The overload of work and time-pressure, or imbalance between the amount of work to be done and time allotted to complete the work, relates strongly to the relative overall low work-life balance among teachers, highlighting Valcour's (2007) finding that increased work hours decrease work-life balance satisfaction. One teacher who was in the high work-life balance satisfaction group only in the school year 2020-2021 timeframe noted, "This

was the first year that I feel like I had a work life balance. Fridays without students really helped." The pandemic afforded this teacher the time to conduct non-teaching tasks during their duty day, which they seem to believe contributed to a higher degree of satisfaction with their work-life balance. One teacher who had high work-life balance satisfaction after changing to a new school in school year 2020-2021 stated that "time was allotted in our day to conduct school work [sic]. It was the best experience of my teaching career" and that they did not have to communicate their work-nonwork boundaries because "personal time was respected by all." While schools are struggling with teacher shortages, the workload and amount of work time teachers have should be considered as a key component in managing teacher retention. For teachers themselves, respecting and managing temporal boundaries is "crucial to professional success and personal satisfaction" (Kreiner et al., 2009, p. 719).

Technology and its demands on teachers' time and energy outside of work appear to be here to stay, and most teachers have accepted this into their lives. However, work-related communications at home often have negative implications for work-life balance as it can increase expectations for immediate responses and create additional work outside of school hours (Adams, 2013; Bauwens et al., 2020; Currie & Eveline, 2011; da Silva & Fischer, 2020b; Duxbury et al., 2014; Greenhaus & Powell, 2017; Towers et al., 2006). Since most teachers seem compelled or choose to receive communications at home, understanding that doing so can come with a variety of boundary management choices that help individuals balance their work and nonwork life is essential to mitigating the potential for technology to encroach upon and violate nonwork time. The choices can include using a variety of tactics enumerated in this study including restricting the types of communication one receives outside work (i.e., only texts or emails), using time-based tactics like only responding during certain times, or choosing to read

or respond based upon the sender or perceived urgency of the message.

In developing boundary management trainings, and even in revisiting school cultural expectations for work communications outside of school, leaders should consider the effects of work-related communications after hours and the effects they have on teachers' boundary management and work-life balance. Making a schoolwide cultural shift in giving teachers the right to disconnect (Park et al., 2019) may be a necessary step in helping teachers manage their technology boundaries during nonwork time, as school culture and expectations are a driving influence in teacher acceptance of after-hours work-related communications (Adams, 2013; Bauwens et al., 2020).

While teachers received communications on their cellular phones, they did not always communicate with others regarding their own boundaries, which can lead to many unintentional boundary violations. Communicating boundaries has been found to be an effective tactic for managing boundaries and expectations with work (Carlson et al., 2016; Clark, 2000; Kreiner et al., 2009). Additionally, communicating boundaries can increase work-life balance (Clark, 2000). Communication of boundaries may be even more important for teachers who are not yet adept at maintaining and respecting their boundaries on their own. This may also account for some of the people who are considered hindrances to teacher boundaries. Those who did communicate boundaries tended to do so in multiple ways, ensuring that their boundaries were known.

Although teachers may have different boundary preferences and tactics for maintaining work-life balance, the ability to first create, then respect and protect their boundaries set apart those teachers who reported higher work-life balance satisfaction. Teachers who sustained high work-life balance perception over time, showed that more important than specific tactics or

rigidity to staying with the same boundary management strategies was simply having and respecting boundaries. Having boundaries does not imply rigidity. Some teachers made decisions to modify their work-nonwork boundaries and were able to use those boundaries in a way that lead to higher satisfaction with their work-life balance. Teachers' boundaries, though conscious and protected, were also flexible and responsive, especially during the spring of 2020.

This study shows that while there have been some improvements in teacher work-life balance, there have also been concerning declines. Understanding what some effective boundary management tactics are, trying them out, and adjusting tactics as necessary could have a positive effect for many teachers who are feeling dissatisfied with their work-life balance. What has become clear is that while some tactics are more widely used in high work-life balance satisfaction groups, simply having personally established work-nonwork boundaries and using them is more important than the specific boundaries themselves.

As a teacher friend of the researcher stated in conversation one day, "Work never ends, so I've learned not to deny myself joy in my nonwork time by putting enjoyable things off until 'I am done with work' because I am never done with work." Setting any boundaries in which one can bring balance to the needs of work and nonwork life are a step in the right direction towards finding work-life balance. Boundary management is an ongoing and recursive process that will likely change over time for individuals based on their own needs, desires, and work contexts; however, understanding some ways in which boundaries can be managed and feeling empowered to change and maintain one's own boundaries can be one way to help educators who are feeling dissatisfied with their work-life balance.

Recommendations for Further Research

There are several recommendations for building upon and expanding the findings of this

study. First, conducting this study or a similar version with a larger population or a more focused population could lead to useful extensions of the conclusions drawn here. Continuing this research to determine and measure the differences in work-life balance over the additional year(s) of the pandemic could lead insight into teachers' satisfaction over time as the educational world responds to the shifting realities and challenges brought on by COVID-19 and its variants. Additionally, research that specifically targets the effects of workload and time pressure on teacher work-life balance satisfaction would build upon the findings here and in other research which could be used to pinpoint aspects of teacher satisfaction and retention issues that go beyond salary. In fact, the findings from this study indicate that conclusions in previous research which state time-pressure may be a less-subjective, more quantifiable way to measure work-life balance (Rose, 2015) are worth studying further as a means for alternative work-life balance scale development.

Regarding technology and communicating boundaries, an experimental study determining if conveying boundaries with common violators/hindrances (often parents and students, as found in the data here) would lead to a decrease in the expectation for work-related communications from teachers outside of work hours could support educators and schools searching for research-based technology policies. Additionally, building on the data that shows high teacher use of work-related technology at home and on the findings of Bauwens et al. (2020), future research could examine the school and community cultural expectations for after hours technology use for work purposes and possible correlations to levels of teacher use and work-life balance.

Future research could also contain a similar study that incorporates measures to determine integration and segmentation preferences. This method could expand upon the

research here to deliver tactics that may benefit teachers based upon their integration and segmentation values. Lastly, more nuanced information could be gained from additional research that considers the work-life balance satisfaction and boundary management tactics of teachers who have additional hours of work in the forms of high-workload content areas or leadership and extra-curricular roles such as academic program advisers or athletic coaches.

Building on the findings that some teachers are establishing boundaries on when and where they conduct work, future research could determine the individual steps and school context that allow these teachers to get work done only at school or during school hours.

Implications for Professional Practice

Teacher retention is a critical issue, not only in staffing our schools but also for student success as experienced teachers are linked with higher student achievement (Carver-Thomas & Darling-Hammond, 2017; Chetty et al., 2014; Day et al., 2006; Sammons et al., 2007). In school year 2021-2022, there were teacher shortages in multiple certification areas across all states and territories, and the United States Department of Education currently predicts teacher shortages in at least 36 locations for multiple teacher certification areas for school year 2022-2023 (Boren, 2021; United States Department of Education, 2022; Zinkand, 2021). Worldwide, it was estimated that roughly 69 million new teachers are needed to meet the United Nations' sustainable development goals for ensuring quality education for all students by 2030 (UNESCO Institute for Statistics, 2016). Those estimations were made prior to the COVID-19 pandemic. Teacher shortages may be further exacerbated by levels of stress and teacher burnout (Adams, 2013; Kurtz et al., 2020; Sorensen & McKim, 2014).

Research has shown that training to assist employees in managing stress and aspects that affect work life balance, such as boundary management and segmentation preferences, are

effective in helping improve their stress and work-life balance satisfaction (Michel et al., 2014; Pozo-Rico et al., 2020; Rexroth et al., 2017). This study brings to light specific boundary management tactics of teachers who report high satisfaction with work-life balance. Trainings based upon this research should include a breadth of strategies across the domains of physical, temporal, behavioral, and communicative tactics (Kreiner et al., 2009) to include up-to-date methods and discussions of school culture regarding boundaries and work-related communications outside work hours, as recommended by Boswell et al. (2016) and Currie and Eveline (2011).

Trainings can build upon the findings in the present study by exploring the common traits of those with top-work life balance as possible models or starting points for teachers to build upon and construct their own toolbox of boundary management tactics. The top satisfaction teachers largely kept work within the physical and temporal boundaries of work, and they accepted work communications of their personal devices (though did not necessarily respond and did leverage technology to customize what types of communications they received and from whom). While many of the top scoring teachers did not communicate their boundaries, it is recommended that they do so, especially to decrease violations or hindrances as those with lower work-life balance begin to shape new boundaries and begin to learn respect and enforce their own boundaries.

This study also adds to the findings of Cannilla and Jones (2011) who noted the reformative nature of boundary work for those with low work life balance (see Figure 2) by showing that boundary management is continuous and can require changes despite an individual's work-life balance satisfaction. Participants in this study helped to show that even teachers with very high work-life balance satisfaction adjust and recalibrate their boundary work

tactics in response to work and personal needs.

Carlson et al. (2016) and Kreiner et al. (2009) called for continuing research on the boundary work choices individuals make to maintain healthy work-life boundaries and balance. McCloskey's (2018) findings in her research on telework and boundaries noted the importance of employees understanding their boundaries between work and personal life and then are responsible for the boundary work to maintain them, and Hunter et al. (2019) concluded for boundary work to be successful, employers and employees need to be clear in communicating their boundaries in managing work-life balance. Importantly for the field of education, numerous studies and organizations have stated that there must be research and action taken to address the myriad issues leading to teacher attrition including stress, burnout, and work-life imbalance (Beames et al., 2021; Pressley, 2021; Steiner & Woo, 2021; Syrek et al., 2021; UNESCO, 2020; United Nations, 2020). This study addresses these calls and responds with data and conclusions that can extend the larger knowledge base for employee work-life balance satisfaction and boundary management tactics used by teachers with high work-life balance satisfaction.

The results of this study give insight on the current boundary work tactics of teachers and can be utilized for understanding strengths and areas for possible change in the general tendencies of teachers' boundary management. Additionally, these tactics can be posed as research-based options used as a starting point for teachers beginning to establish or modify their boundaries. More importantly than the tactics themselves, however, this study shows that teachers who have high work-life balance satisfaction tend to set boundaries that are acceptable and successful for themselves as individuals, and that they maintain those boundaries with fidelity but not rigidity. It is highly recommended that schools prepare practical professional development trainings on setting boundaries, creating and managing different boundary

management tactics, and then supporting teachers as they work to create and manage work-nonwork boundaries. Additionally, policymakers, school board members, and education administrators at all levels should look to the findings of this study and use the tools within their powers, to include leveraging budgetary discretion, to help manage teacher work-life balance by considering ways to ease time-pressure and help teachers to maintain temporal boundaries. Such strategies at the larger level could include reducing class sizes or increasing teacher planning times to help make workloads manageable.

There is an underlying expectation, both from society and often among teachers themselves, that teachers put their students and their work first always (Cruz, 2021). Because these expectations are prevalent and shared, it may take concentrated and larger efforts to change them (Kreiner et al., 2009; Zerubavel, 1991). Considering all aspects of this study and the findings based on teachers who attained and maintained high work-life balance satisfaction, it becomes clear that while specific boundary tactics are different based on individualized preferences and may change over time, allowing and empowering teachers to create, manage, respect, and protect their work-nonwork boundaries is imperative for teachers themselves, the profession, students, and the educational system as whole.

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Appendix A

Permission to Use Visual Concept

Molly Austinson <maustinson@nnu.edu> Sat, Mar 27, 1:36 PM
to ramatthews2

Dear Dr. Matthews,

I am a doctoral student at Northwest Nazarene University. I am seeking your permission to use your and your colleagues' conceptual model of work-family culture and job design as process moderators from your article "A longitudinal examination of role overload and work-family conflict: The mediating role of interdomain transitions" in the Journal of Organizational Behavior.

My dissertation, with the working title "Teachers' Use of Boundary Work Tactics to Maintain Work-Life Balance During the COVID-19 Pandemic," seeks to explore teachers' boundary work tactics as a facet of managing work-life balance before and during the COVID-19 pandemic. I bring my proposal to my dissertation committee in June of 2021 with anticipated data collection in July-October of 2021. I plan to finish with coding and compiling the findings by Spring of 2022 in order to have final dissertation defense in May of 2022.

I would like to use your model as a visual aid to help my readers in understanding role overload and work-family conflict as it pertains to teachers.

I would use your model credited appropriately to you and your colleagues as support for understanding of concepts in my literature review. If there is any specific statement you would like to use in this attribution, please provide it in your response. Also, at your request, I will send a link to my completed and approved dissertation.

If these terms and conditions are acceptable, please indicate your approval and permission by replying to me via email at maustinson@nnu.edu. If someone else owns the copyright to this information, if you could please let me know to whom I should direct a permission request, I would greatly appreciate that information.

Sincerely,

Molly Austinson

Russell Matthews <ramatthews2@ua.edu> Mar 30, 2021, 6:49 AM
to me

Hi Molly,

Apologies for the delayed response. I wanted to carve out some time to provide a more detailed response as your topic is near and dear to my heart.

First, the simple answer is, yes, by all means, feel free to use the material as you see fit if you think it will help you (or your committee) as part of your dissertation. No need for any special reference or link for your dissertation - again, use as you see fit.

Appendix B

Permission to Use Visual Concept

Molly Austinson <maustinson@nnu.edu> 11:57 AM (40 minutes ago)
to gwen_jones

Dear Dr. Jones,

I am a current doctoral students at Northwest Nazarene University writing a dissertation on teachers' boundary management tactics. I would like to request permission to use the boundary tactic figure you and Linda Cannilla created in your 2011 publication "Understanding How Individuals Use Boundary Management Tactics to Manage Work-Life Interference." I would like to reference your figure as an image for discussing and framing my findings and recommendations.

I appreciate your time and assistance. Please let me know if you have any questions.

Respectfully,

Molly Austinson

Gwen E Jones <gjones@fdu.edu> 12:13 PM (24 minutes ago)
to me

Hi Molly - yes, as long as we are cited, that's fine. Good luck with your dissertation!

Dr. Gwen Jones
Chair, Department of Management & Entrepreneurship
Associate Editor (Leadership, Ethics, and Organizational Behavior) *SAJBS*
Professor of Management
Silberman College of Business
Fairleigh Dickinson University
Description: Description: phone: 973.443.8850 | Description: Description: email: gjones@fdu.edu

Appendix C

Internal Review Board Approval

Submittable

Dear Molly,

The IRB has reviewed your protocol: (0275) Teachers' Use of Boundary Work Tactics to Maintain Work-Life Balance During the Covid-19 Pandemic. You received "Full Approval". Congratulations, you may begin your research. If you have any questions, let me know.

Northwest Nazarene University
Bethani Studebaker
IRB Member
623 S University Blvd
Nampa, ID 83686

Appendix D

Ethics and Human Subject Protection Certificate

ACRP

FOR LEARNING FOR LISTENING FOR LIFE

Certificate of Completion

This is to certify that

Molly Austinson

has successfully completed

ACRP CREDITS - Ethics and Human Subject Protection: A Refresher Course

Date of completion: Jan 31, 2020

Credits Earned: 1.5 ACRP

Jim Kremidas — Executive Director

ACRP

The Association of Clinical Research Professionals (ACRP) provides contact hours for this educational activity.

Appendix E

Recruitment Messages

Facebook Recruitment Message

Teachers: A doctoral research student is looking for participants to share their experiences regarding work-life balance and boundary management tactics. Boundary management consists of the specific actions people take to separate or incorporate their work and non-work lives. Participants include K-12 teachers worldwide who were teaching in-person classes prior to spring of 2020. The survey takes less than 15 minutes to complete. Data will be used to research boundary management strategies classroom teachers used over the course of the pandemic to try to attain or maintain work-life balance. Please consider participating in this survey, and please share with your educator friends worldwide! (SURVEY LINK)

Message to Known Teacher Contacts

(Custom Greeting),

I am currently a doctoral student at Northwest Nazarene University researching teachers' work-life balance and boundary management tactics. Boundary management consists of the specific actions people take to separate or incorporate their work and non-work lives. Participants include K-12 teachers worldwide who were teaching in-person classes prior to spring of 2020. The survey takes less than 15 minutes to complete. Data will be used to research boundary management strategies classroom teachers used over the course of the pandemic to try to attain or maintain work-life balance. I am asking if you will both consider participating in my study and passing the survey link and information on to your teacher contacts. Thank you for your time and consideration. (SURVEY LINK)

Appendix F

Electronic Informed Consent

You are invited to participate in a research project about teachers' work-life balance and boundary management tactics. This online survey should take about 10-15 minutes to complete. Participation is voluntary, and responses will be kept confidential to the degree permitted by the technology being used. All information will be kept confidential and any identifying information will be withheld. No personal names, school names, city names, or IP addresses will be collected.

You have the option to skip/not respond to any questions that you choose. Participation or nonparticipation will not impact your relationship with your employer. Submission of the survey will be interpreted as your informed consent to participate and that you affirm that you are at least 18 years of age.

There are risks and benefits in everything we do. The risks to the participants include a loss of time or a sense of frustration or discomfort. Your time is valuable, and you may elect to skip any questions you wish or end your participation at any time. You may also feel frustrated or uncomfortable as you examine your work-life balance or how you manage your boundaries between work and non-work life. However, by participating in this survey, you will help to contribute to the body of educational research in the area of teacher work-life balance and how to help teachers with tactics they can use to manage their work and non-work lives. Specifically, your information will also contribute to research investigating how teachers used boundary management tactics over different phases of the COVID-19 pandemic.

If you have any questions or concerns about the study, please contact the researcher, Molly Austinson, via email at maustinson@nnu.edu or the faculty advisor, Dr. Heidi Curtis, at hlcurtis@nnu.edu. If you have any questions regarding your rights as a research subject, contact the NNU Institutional Review Board at IRB@nnu.edu.

___ I affirm I am at least 18 years of age and agree to participate in the survey.
___ I do not wish to participate in the survey.

Appendix G

Survey

Study of Teacher Work-Life Balance and Boundary Management

Q1 Thank you for taking the time to participate in this study. This survey is gathering information about teachers' work-life balance and boundary management tactics. Boundary management consists of the specific actions people take to separate or incorporate their work and non-work lives. Participants for this study include K-12 classroom teachers worldwide who were teaching in-person classes prior to spring of 2020.

The survey you are about to take contains five sections and will take 10-15 minutes to complete.
Section 1 is the electronic informed consent to ensure you understand your rights as a research participant.
Section 2 collects demographic information.
Section 3 asks for information on work-life balance and boundary management in school year 2019-2020 **before** the onset of the COVID-19 pandemic.
Section 4 asks the same information as Section 3, but during COVID in the spring of school year 2019-2020.
Section 5 repeats the same questions for the **2020-2021** school year.

- Click the arrow button on the bottom right to begin the survey.

End of Block: Study Format

Start of Block: Electronic Informed Consent

Q2 You are invited to participate in a research project about teachers' work-life balance and boundary management tactics. This online survey should take about 10-15 minutes to complete. Participation is voluntary, and responses will be kept confidential to the degree permitted by the technology being used. All information will be kept confidential and any identifying information will be withheld. No personal names, school names, city names, or IP addresses will be collected.

You have the option to skip/not respond to any questions that you choose. Participation or nonparticipation will not impact your relationship with your employer. Submission of the survey will be interpreted as your informed consent to participate and that you affirm that you are at least 18 years of age.

There are risks and benefits in everything we do. The risks to the participants include a loss of time or a sense of frustration or discomfort. Your time is valuable, and you may elect to skip any questions you wish or end your participation at any time. You may also feel frustrated or uncomfortable as you examine your work-life balance or how you manage your boundaries

between work and non-work life. However, by participating in this survey, you will help to contribute to the body of educational research in the area of teacher work-life balance and how to help teachers with tactics they can use to manage their work and non-work lives. Specifically, your information will also contribute to research investigating how teachers used boundary management tactics over different phases of the COVID-19 pandemic.

If you have any questions or concerns about the study, please contact the researcher, Molly Austinson, via email at maustinson@nnu.edu or the faculty advisor, Dr. Heidi Curtis, at hlcurtis@nnu.edu. If you have any questions regarding your rights as a research subject, contact the NNU Institutional Review Board at IRB@nnu.edu.

- ☐ I affirm I am at least 18 years of age and agree to participate in the survey.
- ☐ I do not wish to participate in the survey.

Skip To: End of Survey If You are invited to participate in a research project about teachers' work-life balance and bounda... = I do not wish to participate in the survey.

End of Block: Electronic Informed Consent

Start of Block: Demographics

Q3 Current Age
- o 20-29 (1)
- o 30-39 (2)
- o 40-49 (3)
- o 50-59 (4)
- o 60+ (5)

Q4 Gender
- o Female (1)
- o Male (2)
- o Non-binary (3)
- o Transgender (4)
- o Other (5) _____

Q5 Marital Status
- o Not married (1)
- o Married (2)
- o Divorced (3)
- o Widowed (4)

Q6 Children living at home (check all that apply)
- None (1)
- Ages 0-4 (2)
- Ages 5-9 (3)
- Ages 10-14 (4)
- Ages 15-18+ (5)

Q7 What is your highest education level?
- Bachelor's degree (1)
- Master's degree (2)
- Education specialist (EdS) (3)
- EdD, PhD, or other doctoral degree (4)

Q8 Where do you live? (State/province and country)

Q9 How would you describe the community where your school is located?
- Urban (1)
- Suburban (2)
- Rural (3)
- Other (4) _____

Q10 What grade levels do you currently teach? (If changing in SY 21-22, please report grades taught in SY 20-21.)
- Elementary/primary grades (1)
- Middle/junior high grades (2)
- High school grades (3)

Q11 What is your primary role?
- Teacher (1)
- Librarian (2)
- Administrator (3)
- Counselor (4)
- Other (5) _____

Skip To: End of Survey If What is your primary role? != Teacher

Q12 How many years have you been teaching?
- 1-4 (1)
- 5-9 (2)
- 10-19 (3)
- 20-29 (4)
- 30+ (5)

Q13 In what type of school do you teach?

- Public (1)
- Private (2)
- Charter (3)
- International (4)
- Government (Embassy, DoDEA, similar) (5)
- Other (6) _____

Q14 During school year 2019-2020 before the COVID-19 pandemic affected your area, were you teaching

- In person (1)
- Online (2)
- Hybrid (3)
- Asynchronous (4)
- Other (5) _____

Skip To: End of Survey If During school year 2019-2020 before the COVID-19 pandemic affected your area, were you teaching = Online

Skip To: End of Survey If During school year 2019-2020 before the COVID-19 pandemic affected your area, were you teaching = Hybrid

Skip To: End of Survey If During school year 2019-2020 before the COVID-19 pandemic affected your area, were you teaching = Asynchronous

Q15 During school year 2019-2020 after the COVID-19 pandemic affected your area, were you teaching

- In person (1)
- Online (2)
- Hybrid (3)
- Asynchronous (4)
- Other (5) _____

Q16 During school year 2020-2021 were you teaching (check all that apply)

- In person (1)
- Online (2)
- Hybrid (3)
- Asynchronous (4)
- Other (5) _____

Q17 Did you leave the teaching profession in 2021?

- Yes (1)
- No (2)

Skip To: Q19 If Did you leave the teaching profession in 2021? = No

Q18 If you left the teaching profession in 2021, was it because of dissatisfaction with your work-nonwork life balance?

- ○ Yes (1)
- ○ No (2)

Q19 Have you ever had formal training on boundary management (how to set boundaries between work and nonwork life) at your school?

- ○ Yes (1)
- ○ No (2)

End of Block: Demographics

Start of Block: School Year 2019-2020 Pre-COVID

Q20 Think back to the 2019-2020 school year prior to the COVID-19 pandemic. How would you rate your satisfaction in the following areas?

	Very dissatisfied (1)	Dissatisfied (2)	Satisfied (3)	Very satisfied (4)
1. How satisfied were you with the way you were able to divide your time between your work and nonwork life? (1)	○	○	○	○
2. How satisfied were you with the way you divided your attention between your work and nonwork life? (2)	○	○	○	○
3. How satisfied were you with how well your work and nonwork life fit together? (3)	○	○	○	○
4. How satisfied were you with your ability to balance the needs of your job with the needs of your nonwork life? (4)	○	○	○	○
5. How satisfied were you with the opportunities you had to perform your job well and still be able to perform your nonwork responsibilities well? (5)	○	○	○	○

Q21 During the 2019-2020 school year **prior to** the COVID-19 pandemic, when would you conduct work activities like lesson planning, grading (**excluding electronic communications** like email, Remind, work texts etc.) outside your contracted school hours?

- o During a set period of time I determined for myself (1)
- o Whenever I found spare time, no particular set time frame (2)
- o Never. I only conducted work during contracted work hours (3)
- o Other (please describe) (4) _____

Q22 During the 2019-2020 school year prior to the COVID-19 pandemic, did you receive electronic communications (email, Remind, work-related texts or notifications, etc.) on your personal cell phone?

- o Yes (1)
- o No (2)
- o Sometimes (please describe) (3) _____
- o Other (please describe) (4) _____

Q23 During the 2019-2020 school year prior to the COVID-19 pandemic, when would you respond to **electronic communications** (email, Remind, work-related texts etc.) for work outside of contracted hours?

- o Immediately or shortly after receiving notification of the electronic communication (1)
- o During a set period of time I determined for myself (5)
- o Whenever I found spare time, no particular set time frame (2)
- o Never. I only conducted work during contracted work hours (3)
- o Other (please describe) (4) _____

Skip To: Q25 If During the 2019-2020 school year prior to the COVID-19 pandemic, when would you respond to electr... = Never. I only conducted work during contracted work hours

Q24 If you set restrictions on answering electronic communications (email, Remind, work-related texts etc.) outside work hours, what were the factors determining if you read or answered more immediately or waited to respond?

Q25 During the 2019-2020 school year prior to the COVID-19 pandemic, where would you conduct work activities (including grading, planning, **and** electronic communication) outside school. Check all that apply.

- o I only conducted work activities in my classroom or school-building workspace (1)
- o On public transport during my commute between work and home (2)
- o At home in a particular workspace designated for my work (3)
- o At home but not a space specifically designated for my work (4)
- o Anywhere that I find time and inclination to complete the work (5)
- o My own child's/family's extracurricular practices, games, activities, or events (6)
- o Other (please describe) (7) _____

Q26 During the 2019-2020 school year prior to the COVID-19 pandemic, how did you communicate with others (family, friends, colleagues, administration, students, and students' parents/guardians) about your work boundaries (when you would and would not conduct work activities)? Check all that apply.

- Written (email, text, course syllabus) (1)
- Social media or LMS (Seesaw, Class Dojo, Schoology, Google Classroom, etc.) (2)
- Verbal communication (telling students in class, family face-to-face, phone calls) (3)
- I **did not** communicate my boundaries **but had** personally established boundaries/rules on when I would or would not be conducting work (4)
- I **did not** communicate my boundaries **because** I did not have specific boundaries/rules on when I would or would not be conducting work (5)
- Other (please describe) (6) _____

Q27 During the 2019-2020 school year prior to the COVID-19 pandemic, did anyone **help** you to maintain boundaries between work and nonwork life? (Reminding you of your boundaries or to help you follow them.) Check all that apply.

- Family members (1)
- Colleagues (2)
- Supervisor/administrator (3)
- Friends (4)
- Students (5)
- Parents/guardians of students (6)
- No one helped me maintain separation between work and nonwork life (7)
- Other (8) _____

Q28 During the 2019-2020 school year prior to the COVID-19 pandemic, did anyone **hinder** you in maintaining boundaries between work and nonwork life? (Ignored known boundaries or somehow made you feel that you should not have those boundaries) Check all that apply.

- Family members (1)
- Colleagues (2)
- Supervisor/administrator (3)
- Friends (4)
- Students (5)
- Parents/guardians of students (6)
- No one hindered me in maintaining separation between work and nonwork life (7)
- Other (8) _____

Q29 During the 2019-2020 school year prior to the COVID-19 pandemic, please describe **when** and/or **how** you would completely disengage (not participate or engage) from work physically and mentally. (Examples: Every Sunday morning, I would practice yoga OR When I felt very stressed, I would make time to take a bath and read a good book for pleasure.)

Q30 During the 2019-2020 school year prior to the COVID-19 pandemic, please describe any additional ways you managed your balance between work and nonwork life by setting rules or boundaries for when, where, how, or if you conducted work outside of contract hours.

End of Block: School Year 2019-2020 Pre-COVID

Start of Block: Spring of School Year 2019-2020: DURING COVID

Q31 Think back to spring of the 2019-2020 school year during the COVID-19 pandemic. How would you rate your satisfaction in the following areas?

	Very dissatisfied (1)	Dissatisfied (2)	Satisfied (3)	Very satisfied (4)
1. How satisfied were you with the way you were able to divide your time between your work and nonwork life? (1)	○	○	○	○
2. How satisfied were you with the way you divided your attention between your work and nonwork life? (2)	○	○	○	○
3. How satisfied were you with how well your work and nonwork life fit together? (3)	○	○	○	○
4. How satisfied were you with your ability to balance the needs of your job with the needs of your nonwork life? (4)	○	○	○	○
5. How satisfied were you with the opportunities you had to perform your job well and still be able to perform your nonwork responsibilities well? (5)	○	○	○	○

Q32 In spring of the 2019-2020 school year **during** the COVID-19 pandemic, when would you conduct work activities like lesson planning, grading (**excluding electronic communications** like email, Remind, work texts etc.) outside your contracted school hours?

- ○ During a set period of time I determined for myself (1)
- ○ Whenever I found spare time, no particular set time frame (2)
- ○ Never. I only conducted work during contracted work hours (3)
- ○ Other (please describe) (4) _____

Q33 In spring of the 2019-2020 school year during the COVID-19 pandemic, did you receive electronic communications (email, Remind, work-related texts or notifications, etc.) on your personal cell phone?

- Yes (1)
- No (2)
- Sometimes (please describe) (3) _____
- Other (please describe) (4) _____

Q34 In spring of the 2019-2020 school year during the COVID-19 pandemic, when would you respond to **electronic communications** (email, Remind, work-related texts etc.) for work outside of contracted hours?

- Immediately or shortly after receiving notification of the electronic communication (1)
- During a set period of time I determined for myself (5)
- Whenever I found spare time, no particular set time frame (2)
- Never. I only conducted work during contracted work hours (3)
- Other (please describe) (4) _____

Skip To: Q36 If In spring of the 2019-2020 school year during the COVID-19 pandemic, when would you respond to el... = Never. I only conducted work during contracted work hours

Q35 If you set restrictions on answering electronic communications (email, Remind, work-related texts etc.) outside work hours, what were the factors determining if you read or answered more immediately or waited to respond?

Q36 In spring of the 2019-2020 school year during the COVID-19 pandemic, where would you conduct work activities (including grading, planning, **and** electronic communication) outside school. Check all that apply.

- I only conducted work activities in my classroom or school-building workspace (1)
- On public transport during my commute between work and home (2)
- At home in a particular workspace designated for my work (3)
- At home but not a space specifically designated for my work (4)
- Anywhere that I find time and inclination to complete the work (5)
- My own child’s/family's extracurricular practices, games, activities, or events (6)
- Other (please describe) (7) _____

Q37 In spring of the 2019-2020 school year during the COVID-19 pandemic, how did you communicate with others (family, friends, colleagues, administration, students, and students'

parents/guardians) about your work boundaries (when you would and would not conduct work activities)? Check all that apply.

- Written (email, text, course syllabus) (1)
- Social media or LMS (Seesaw, Class Dojo, Schoology, Google Classroom, etc.) (2)
- Verbal communication (telling students in class, family face-to-face, phone calls) (3)
- I **did not** communicate my boundaries **but had** personally established boundaries/rules on when I would or would not be conducting work (4)
- I **did not** communicate my boundaries **because** I did not have specific boundaries/rules on when I would or would not be conducting work (5)
- Other (please describe) (6) _____

Q38 In spring of the 2019-2020 school year during the COVID-19 pandemic, did anyone **help** you to maintain boundaries between work and nonwork life? (Reminding you of your boundaries or to help you follow them.) Check all that apply.

- Family members (1)
- Colleagues (2)
- Supervisor/administrator (3)
- Friends (4)
- Students (5)
- Parents/guardians of students (6)
- No one helped me maintain separation between work and nonwork life (7)
- Other (8) _____

Q39 In spring of the 2019-2020 school year during the COVID-19 pandemic, did anyone **hinder** you in maintaining boundaries between work and nonwork life? (Ignored known boundaries or somehow made you feel that you should not have those boundaries) Check all that apply.

- Family members (1)
- Colleagues (2)
- Supervisor/administrator (3)
- Friends (4)
- Students (5)
- Parents/guardians of students (6)
- No one hindered me in maintaining separation between work and nonwork life (7)
- Other (8) _____

Q40 In spring of the 2019-2020 school year during the COVID-19 pandemic, please describe **when** and/or **how** you would completely disengage (not participate or engage) from work physically and mentally. (Examples: Every Sunday morning, I would practice yoga OR When I felt very stressed, I would make time to take a bath and read a good book for pleasure.)

Q41 In spring of the 2019-2020 school year during the COVID-19 pandemic, please describe any additional ways you managed your balance between work and nonwork life by setting rules or boundaries for when, where, how, or if you conducted work outside of contract hours.

End of Block: Spring of School Year 2019-2020: DURING COVID

Start of Block: School Year 2020-2021

Q42 Think back to this past school year, 2020-2021. How would you rate your satisfaction in the following areas?

	Very dissatisfied (1)	Dissatisfied (2)	Satisfied (3)	Very satisfied (4)
1. How satisfied were you with the way you were able to divide your time between your work and nonwork life? (1)	○	○	○	○
2. How satisfied were you with the way you divided your attention between your work and nonwork life? (2)	○	○	○	○
3. How satisfied were you with how well your work and nonwork life fit together? (3)	○	○	○	○
4. How satisfied were you with your ability to balance the needs of your job with the needs of your nonwork life? (4)	○	○	○	○
5. How satisfied were you with the opportunities you had to perform your job well and still be able to perform your nonwork responsibilities well? (5)	○	○	○	○

Q43 During the 2020-2021 school year, when would you conduct work activities like lesson planning, grading (**excluding electronic communications** like email, Remind, work texts etc.) outside your contracted school hours?

- ○ During a set period of time I determined for myself (1)
- ○ Whenever I found spare time, no particular set time frame (2)
- ○ Never. I only conducted work during contracted work hours (3)
- ○ Other (please describe) (4) _____

Q44 During the 2020-2021 school year, did you receive electronic communications (email, Remind, work-related texts or notifications, etc.) on your personal cell phone?

- ○ Yes (1)
- ○ No (2)
- ○ Sometimes (please describe) (3) _____
- ○ Other (please describe) (4) _____

Q45 During the 2020-2021 school year, when would you respond to **electronic communications** (email, Remind, work-related texts etc.) for work outside of contracted hours?

- Immediately or shortly after receiving notification of the electronic communication (1)
- During a set period of time I determined for myself (5)
- Whenever I found spare time, no particular set time frame (2)
- Never. I only conducted work during contracted work hours (3)
- Other (please describe) (4) _____

Skip To: Q47 If During the 2020-2021 school year, when would you respond to electronic communications (email, Rem... = Never. I only conducted work during contracted work hours

Q46 If you set restrictions on answering electronic communications (email, Remind, work-related texts etc.) outside work hours, what were the factors determining if you read or answered more immediately or waited to respond?

Q47 During the 2020-2021 school year, where would you conduct work activities (including grading, planning, **and** electronic communication) outside school. Check all that apply.

- I only conducted work activities in my classroom or school-building workspace (1)
- On public transport during my commute between work and home (2)
- At home in a particular workspace designated for my work (3)
- At home but not a space specifically designated for my work (4)
- Anywhere that I find time and inclination to complete the work (5)
- My own child's/family's extracurricular practices, games, activities, or events (6)
- Other (please describe) (7) _____

Q48 During the 2020-2021 school year, how did you communicate with others (family, friends, colleagues, administration, students, and students' parents/guardians) about your work boundaries (when you would and would not conduct work activities)? Check all that apply.

- Written (email, text, course syllabus) (1)
- Social media or LMS (Seesaw, Class Dojo, Schoology, Google Classroom, etc.) (2)
- Verbal communication (telling students in class, family face-to-face, phone calls) (3)
- I **did not** communicate my boundaries **but had** personally established boundaries/rules on when I would or would not be conducting work (4)
- I **did not** communicate my boundaries **because** I did not have specific boundaries/rules on when I would or would not be conducting work (5)
- Other (please describe) (6) _____

Q49 During the 2020-2021 school year, did anyone help you to maintain boundaries between work and nonwork life? (Reminding you of your boundaries or to help you follow them.) Check all that apply.

- Family members (1)
- Colleagues (2)
- Supervisor/administrator (3)

- Friends (4)
- Students (5)
- Parents/guardians of students (6)
- No one helped me maintain separation between work and nonwork life (7)
- Other (8) _____

Q50 During the 2020-2021 school year, did anyone **hinder** you in maintaining boundaries between work and nonwork life? (Ignored known boundaries or somehow made you feel that you should not have those boundaries) Check all that apply.

- Family members (1)
- Colleagues (2)
- Supervisor/administrator (3)
- Friends (4)
- Students (5)
- Parents/guardians of students (6)
- No one hindered me in maintaining separation between work and nonwork life (7)
- Other (8) _____

Q51 During the 2020-2021 school year, please describe **when** and/or **how** you would completely disengage (not participate or engage) from work physically and mentally. (Examples: Every Sunday morning, I would practice yoga OR When I felt very stressed, I would make time to take a bath and read a good book for pleasure.)

Q52 During the 2020-2021 school year, please describe any additional ways you managed your balance between work and nonwork life by setting rules or boundaries for when, where, how, or if you conducted work outside of contract hours.

End of Block: School Year 2020-2021

Appendix H

Permission to Use Instrument

permission to use scale

Monique Valcour <monique@moniquevalcour.com> Wed, Jan 27, 2021 at 1:13 AM
To: maustinson@nnu.edu

Hi Molly,

That's fine with me. You have my permission.

Best regards,

Monique Valcour

---------- Forwarded message ---------
From: **Squarespace** <form-submission@squarespace.info>
Date: Wed, Jan 27, 2021 at 2:07 AM
Subject: Form Submission - Contact From
To: <monique@moniquevalcour.com>

Sent via form submission from *Monique Valcour, PhD*

Name: Molly Austinson

Email Address: maustinson@nnu.edu

Message: Dear Dr. Valcour,

I am a doctoral student at Northwest Nazarene University. I am seeking your permission to use a modified version of your work-family balance instrument from your 2007 article "Work-Based Resources as Moderators of the Relationship Between Work Hours and Satisfaction with Work-Family Balance" published in the Journal of Applied Psychology.

My dissertation, with the working title "Teachers' Use of Boundary Work Tactics to Maintain Work-Life Balance During the COVID-19 Pandemic," seeks to explore teachers' boundary work tactics as a facet of managing work-life balance before and during the COVID-19 pandemic. I bring my proposal to my dissertation committee in June of 2021 with anticipated data collection in July-October of 2021. I plan to finish with coding and compiling the findings by Spring of 2022 in order to have final dissertation defense in May of 2022.

Your scale would be used in the quantitative portion of this mixed methods study, allowing for a quantifiable measure of teachers' perceptions of their work-life balance. This information will assist in determining if there are different boundary management tactics (gleaned from the qualitative portion of the study) for teachers with higher or lower perceptions of their work-life balance.

The specific phrasing I would like to modify deals with the terms of family. My study uses the term nonwork life to incorporate those who are single or with nontraditional personal/nonwork lives. The specific modified statements, as given in the survey and listed in the appendix of my dissertation would read:
1. How satisfied are you with the way you are able to divide your time between your work and nonwork life?
2. How satisfied are you with the way you divide your attention between your work and nonwork life?
3. How satisfied are you with how well your work and nonwork life fit together?
4. How satisfied are you with your ability to balance the needs of your job with the needs of your nonwork life?
5. How satisfied are you with the opportunity you have to perform your job well and still be able to perform your nonwork responsibilities well?

I would use this modified version of your survey questions only for my own research while insuring I attribute the original to you and your work. If there is any specific statement you would like to use in this attribution, please provide it in your response. Also, at your request, I will send a link to my completed and approved dissertation.

Appendix I

Permission to Use Categories

Request to Use Prior Research Inbox ×

Molly Austinson <maustinson@nnu.edu> 7:33 AM (8 hours ago)
to Glen.Kreiner

Dear Dr. Kreiner,

I am a doctoral student at Northwest Nazarene University. I am seeking your permission to use your and your colleagues' boundary categories from your 2009 article "Balancing Borders and Bridges: Negotiating the Work-Home Interface Via Boundary Work Tactics" published in *The Academy of Management Journal*.

My dissertation, with the working title "Teachers' Use of Boundary Work Tactics to Maintain Work-Life Balance During the COVID-19 Pandemic," seeks to explore teachers' boundary work tactics as a facet of managing work-life balance before and during the COVID-19 pandemic. I bring my proposal to my dissertation committee in June of 2021 with anticipated data collection in July-October of 2021. I plan to finish with coding and compiling the findings by Spring of 2022 in order to have final dissertation defense in May of 2022.

I would like to use the categories of organization from your study for the first level of qualitative grouping of participant responses. At the second level of analysis, I would be looking for additional categories that may be specifically relevant to teachers or emerge in their responses.

I would use your categories only for my own research while ensuring I attribute the original to you, your colleagues, and your work. If there is any specific statement you would like to use in this attribution, please provide it in your response. Also, at your request, I will send a link to my completed and approved dissertation.

If these terms and conditions are acceptable, please indicate your approval and permission by replying to me via email at maustinson@nnu.edu. If someone else owns the copyright to this information, if you could please let me know to whom I should direct a permission request, I would greatly appreciate that information.

Sincerely,

Molly Austinson

GLEN E. KREINER <Kreiner@eccles.utah.edu> 8:20 AM (8 hours ago)
to me

Molly

Thanks for your email. You can definitely draw on our terms and categories for any of your academic work. Best of luck with the project!

Glen