


2022

COMMUNITY COLLEGE EMPLOYEE PERCEPTIONS OF THE FOUR-DAY SCHEDULE AS A COMMUNITY COLLEGE INSTITUTIONAL STRATEGY

Mitchell Holder

Follow this and additional works at: <https://digitalcommons.murraystate.edu/etd>

 Part of the [Community College Education Administration Commons](#), [Higher Education Commons](#), [Higher Education Administration Commons](#), and the [Organizational Behavior and Theory Commons](#)

Recommended Citation

Holder, Mitchell, "COMMUNITY COLLEGE EMPLOYEE PERCEPTIONS OF THE FOUR-DAY SCHEDULE AS A COMMUNITY COLLEGE INSTITUTIONAL STRATEGY" (2022). *Murray State Theses and Dissertations*. 273. <https://digitalcommons.murraystate.edu/etd/273>

This Dissertation is brought to you for free and open access by the Student Works at Murray State's Digital Commons. It has been accepted for inclusion in Murray State Theses and Dissertations by an authorized administrator of Murray State's Digital Commons. For more information, please contact msu.digitalcommons@murraystate.edu.

COMMUNITY COLLEGE EMPLOYEE PERCEPTIONS OF THE FOUR-DAY SCHEDULE
AS A COMMUNITY COLLEGE INSTITUTIONAL STRATEGY

by

Mitchell A. Holder

A DISSERTATION

Presented to the Faculty of

The College of Education and Human Services

Department of Educational Studies, Leadership, and Counseling

at Murray State University

In Partial Fulfillment of Requirements

For the Degree of Doctor of Education

P-20 & Community Leadership

Under the supervision of Dr. Teresa Clark

November 2022

Acknowledgements

This research study was only possible through the encouragement and sacrifices of others. First and foremost, I want to thank my dissertation chair, Dr. Teresa Clark, for being great to work with throughout the dissertation process. I also want to thank dissertation committee members, Dr. Randal Wilson and Dr. Landon Clark. Thanks to Murray State University for providing such a great doctoral program.

Thank you to every teacher I have had throughout my own P-20 academic journey. In some form, you have contributed to my ability as a student. Next, I would like to thank each student I've had as a classroom teacher and school administrator. My students have inspired me to become a better educator. To my father and mother, Myron and Kay Holder, you have taught me so much in life. I am fortunate to have such loving parents, who continue to provide a wonderful example for me. Thank you to my brothers, Matt, Mark, and Michael.

To my wife, Lori Holder, thank you for all the sacrifices you have made, as I have worked to complete this doctoral program and research study. You have sacrificed countless hours and I'm grateful. To my daughter, Remi, and my son, Wells, you inspire me every day. I'm so proud of you. You can accomplish anything that you put your mind to. This research study is dedicated to you.

To my brothers in the legendary "P. Rice XX: The Ride" fantasy basketball league, you provide me so much entertainment and camaraderie each year. Your conversations and banter mean a great deal. These individuals include Aaron Douglas, Jared Douglas, Mitch Hind, Ben Price, and Chris Lindley.

Abstract

In the face of enrollment declines (American Association of Community Colleges [AACC], n.d.; Barrington, 2020; Schwartz, 2020) and state funding cuts (Lorenzo, 2018), community colleges search for institutional strategies to gain competitive advantages in student recruitment and enrollment management. The four-day schedule has been used by a number of community colleges and four-year colleges as an institutional strategy to reduce costs (Cardinale, 2013; Chen, 2020; Moltz, 2008), improve employee morale (Ellen, 2011; Toppo, 2018; Wallace, 1981), and increase productivity (Bothwell, 2019; Ellen, 2011). Some institutions have adopted the four-day schedule believing it would provide a competitive advantage in student recruitment (Bothwell, 2019; Zarrella, 2008). This qualitative research study investigated community college employees' attitudes toward the four-day schedule, while exploring perceived enrollment growth opportunities through this institutional strategy that are not commonly practiced. Of the 20 participants interviewed for the study, one held the position of CFO, 11 worked in positions related to admissions, six worked in federal TRIO programs, and two were involved with admissions and recruitment processes, categorizing their position as "other". Findings from this study suggest the four-day schedule would create competitive advantages in student recruitment for community colleges, particularly for commuting and employed students. With student success a priority, this study's findings revealed community colleges utilizing the four-day schedule must provide student access to campus services on the non-scheduled class day.

Keywords: four-day schedule, community colleges, institutional strategy, student recruitment, commuter students, employed students, rural

Table of Contents

	Page
Chapter I: Introduction.....	1
Purpose of the Study	4
Theoretical Framework	5
Research Questions	6
Significance of the Study	6
Definitions.....	7
Summary of the Introduction	8
Chapter II: Literature Review	10
Flexible and Compressed Work Schedules.....	10
Four-Day School Week in P-12.....	16
Four-Day Schedule in Higher Education.....	37
Summary of the Literature Review.....	46
Chapter III: Methodology	49
Research Design.....	49
Purpose of the Study	50
Research Questions	51
Population	51
Sampling Procedures	52
Validity	52
Participants.....	53
Risk	53

Voluntary Participation	54
Confidentiality and Anonymity	54
Data Collection and Instrumentation	54
Variables in the Study	56
Summary of the Methodology	56
Chapter IV: Findings and Analysis	58
Data Analysis Procedures	59
Findings.....	61
Summary of the Findings.....	82
Chapter V: Discussion and Conclusions.....	84
Summary of the Study	84
Conclusions.....	91
Relationship of Conclusions to Other Research	93
Discussion.....	95
Practical Significance.....	99
P-20 Implications	101
Limitations of the Study.....	102
Recommendations for Future Research	103
Summary of the Discussion and Conclusions.....	105
References	107
Appendices.....	123
Appendix A:	123
Appendix B:	124

Appendix C:	126
Appendix D:	128
Appendix E:	129
Appendix F:	130
Appendix G:	131
Appendix H:	133

List of Tables

Table 1. Participants' Years of Experience Working in Their Current Position60

Table 2. Participants' Years of Experience Working in the Community College Sector.....61

CHAPTER I: INTRODUCTION

Many within the P-20 sector have supported adoption of four-day schedules, resulting from beliefs the institutional strategy produces cost savings, while providing employees improved mental health, increased productivity, and optimized work-life balance (Bothwell, 2019; National Conference of State Legislatures [NCSL], 2020). Four-day schedules are more prevalent within P-12 school districts across the country, as the number of districts adopting the model increased from 120 to 662 between 2016 and 2019 (Thompson et al., 2020; Walker, 2019). In response to state funding cuts and teacher shortages, P-12 districts implementing the four-day schedule aim for budgetary relief and improved teacher recruitment. In the face of enrollment declines (American Association of Community Colleges [AACC], n.d.; Barrington, 2020; Schwartz, 2020) and state funding cuts (Lorenzo, 2018), community colleges search for institutional strategies, such as the four-day schedule, to gain competitive advantages in student recruitment and enrollment management.

Community college enrollment tends to have an inverse relationship with the economy, producing positive enrollment trends during a recession as unemployed individuals seek skill training (St. Amour, 2020). Likewise, negative enrollment trends typically occur during periods of economic recovery and growth. According to the American Association of Community Colleges (n.d.), community college enrollment declined by 14.4% between 2010 and 2017, correlating with economic recovery and lowered unemployment rates following the Great Recession of 2008. Unlike community colleges, four-year public institutions did not experience declining enrollment during the same timeframe (AACC, n.d.). As four-year college and university enrollment remains stable while community college enrollment declines, fewer

students exist in the recruitment pool, magnifying community college institutional strategy directed toward enrollment growth.

In March 2020, colleges and universities across the country suspended campus activities, moving instruction online to reduce spread of the novel coronavirus (COVID-19) amid a global pandemic (Burke, 2020). State and local governments issued stay-at-home orders discouraging citizens from assembling in public areas to limit virus exposure (Wu et al., 2020). In doing so, the economy stalled as a result of the stay-at-home order causing businesses to suffer financially (Ip, 2020). The unemployment rate soared from 3.5% in February to 14.7% in April (Bureau of Labor Statistics [BLS], 2022). The projected lack of commerce as a result of stay-at-home orders prevented some states from actualizing budgeted tax revenue (Burke & Gordon, 2020). As a result of projected state revenue shortfalls, many governors reduced budgeted expenditures for higher education including funding cuts for community colleges (Burke & Gordon, 2020). In California, Governor Gavin Newsom reduced state funding for higher education by 10% during the 2020-2021 fiscal year, which represented nearly \$1 billion for the California Community College system (Burke & Gordon, 2020).

Unlike times of enrollment growth during economic recessions, concern related to the spread of coronavirus infection caused community college enrollment to decrease 14.8% between the 2019 fall semester and the 2021 fall semester (National Student Clearinghouse [NSC], 2021). During this time period, community college enrollment dropped three to four times the rate of other sectors within higher education. The biggest community college enrollment decline occurred within non-traditional students, as students aged 24 and older declined 14.2% between the fall 2019 and fall 2021 semesters (NSC, 2021).

Factoring into the enrollment decline for community colleges is the low unemployment rate. Since the unemployment spike of 14.7% in April 2022, the unemployment rate steadily lowered to a pre-pandemic level (BLS, 2022). According to the Bureau of Labor Statistics (2022), the unemployment rate was between 3.6 and 4.0% for early 2022. Individuals finding steady employment means fewer enrollees for community colleges, especially among non-traditional students. When students are unemployed, community colleges are a common destination for career training programs, in order to boost job prospects (AACC, n.d.).

Concerns about higher education enrollment also come from the looming enrollment cliff, an issue often discussed among college and university officials (Barshay, 2018; Kline, 2019). Originating from Nathan Grawe, an economist at Minnesota's Carleton College, the concept of the enrollment cliff stems from sharp declines to the birthrate following the Great Recession of 2008, while continuing to decline through 2013 (Barshay, 2018). This population will reach college-age as soon as 2025. Some colleges and universities are expected to lose 15% of their enrollment between 2025 and 2029, although the population decline will not be consistent across geographic regions with some portions of the country not experiencing as sharp of a decline to birthrates as others (Barshay, 2018; Kline, 2019). The higher education enrollment cliff is expected to put further strain on colleges and universities enrollment efforts and financial solvency, while even causing some institutions to close (Barshay, 2018).

Prior to the coronavirus pandemic, state funding for higher education was down 18% nationwide, going back to the turn of the 21st century (Whitford, 2020). Between 2009 and 2016, community colleges faced greater reductions in state funding than four-year public institutions (Lorenzo, 2018). According to Lorenzo (2018), community colleges received 36% less funding per student in comparison to four-year public institutions in the 2013-2014 fiscal year. The

combination of reduced state funding and negative enrollment trends leave community colleges scrambling for institutional strategy to reduce costs and increase revenue, in an effort to remain financially solvent.

The four-day schedule has been used by a number of community colleges and four-year colleges as an institutional strategy to reduce costs (Cardinale, 2013; Chen, 2020; Moltz, 2008), improve employee morale (Ellen, 2011; Toppo, 2018; Wallace, 1981), and increase productivity (Bothwell, 2019; Ellen, 2011). Some institutions have adopted the four-day schedule believing it would provide a competitive advantage in student recruitment (Bothwell, 2019; Zarrella, 2008). Wallace (1981) and Cardinale (2013) provided case studies of the four-day schedule used in a community college setting. Wallace (1981) studied a pilot of the four-day week throughout a summer semester while analyzing student success and stakeholder perceptions. Cardinale (2013) conducted research of a community college implementing the four-day schedule by analyzing the implementation process and organizational change.

While the four-day schedule has grown in popularity within the P-12 sector (Heyward, 2018), little exploration of the scheduling strategy has occurred for higher education. Specifically, a current gap in research exists for the four-day schedule's use as an institutional strategy by community colleges. Research is needed to investigate whether the four-day schedule is perceived to create a competitive advantage leading to increased student enrollment.

Purpose of the Study

The purpose of this study was to investigate community college employee perceptions of the four-day schedule as an institutional strategy for community colleges. This study examined Missouri community college employees' attitudes toward the four-day schedule, while exploring

perceived enrollment growth opportunities through the institutional strategy that are not commonly practiced.

Theoretical Framework

State funding for community colleges decreased nationwide for over a decade beginning in the early 2000s (Lorenzo, 2018). Community college enrollment declined 14.4% between 2010 and 2017, while four-year public institutions maintained enrollment (AACC, n.d.), meaning fewer students exist in the recruitment pool, magnifying institutional strategy directed toward enrollment growth. During the 2020 fall semester, community college enrollment decreased 9.5% from the previous year as a result of COVID-19 pandemic concerns (National Student Clearinghouse, 2021).

According to Lorenzo (2018), student enrollment strategies are an obvious source of revenue generation with accompanying tuition, as it represents 50% of total revenue across half the states in the country. Most community colleges rely upon generated tuition and fees for a significant portion of the budget, meaning enrollment growth is vital to an institution's operational viability (Chen, 2020). Institutional strategies leading to enrollment growth are major priorities for many community colleges (Chen, 2020). Attempting to use institutional strategy for the purpose of overcoming operational deficits, the four-day schedule has been piloted at a number of community colleges in recent years, with each institution having unique motives for exploring the model (Chen, 2020). A community college and four-year private college have adopted the four-day schedule year round believing the institutional strategy improves recruitment efforts (Alsup, 2019; Ellen, 2011; Toppo, 2018). However, no evidence was discovered to support this claim. Therefore, the problem driving this study was the lack of

research involving the four-day schedule to improve student recruitment efforts for community colleges.

Research Questions

This study addressed two research questions:

1. According to community college employees' perceptions, how would the four-day schedule fare as an institutional strategy creating competitive advantages in student recruitment for the community college in which they work?
2. Considering increased adoption rates of the four-day schedule in P-12, what changes are being made, if any, to student recruitment by community colleges?

Significance of the Study

Community colleges nationwide face disinvestment from state government (Lorenzo, 2018). The COVID-19 pandemic caused an economic crisis projected to have long-lasting effects on government budgets, subsequently causing community college funding decline for the foreseeable future (Burke & Gordon, 2020). Compounding issues for community colleges is the fact enrollment has declined 14.4% between 2010 and 2017 (AACC, n.d.). Due to the COVID-19 pandemic, community college enrollment was down 9.5% in the 2020 fall semester compared to the previous year (National Student Clearinghouse, 2021).

Given budgetary constraints and the need for enrollment, community colleges have explored the idea of using a four-day schedule for various reasons (Bothwell, 2019; Cardinale, 2013; Chen, 2020; Ellen, 2011; Moltz, 2008; Toppo, 2018; Wallace, 1981). The accelerated rate of adoption within the P-12 sector (Heyward, 2018) causes the need for further investigation of the four-day schedule within higher education. Since research has not been located on this topic,

this research study proposes to investigate community college employee perceptions of the four-day schedule as an institutional strategy for community colleges.

Definitions

The following terms and definitions were used for this study.

Alternative work schedule. “Both flexible work schedules and compressed work schedules”

(U.S. Office of Personnel Management [OPM], n.d.-c, Definitions section).

Compressed work schedule. A work arrangement allowing full-time employees to complete 40 hours per week in less than 5 workdays (OPM, n.d.-c).

Flexible work schedule. A work arrangement allowing full-time employees to determine their own schedule within limits established by a workplace (OPM, n.d.-c).

Food insecurity. “A household-level economic and social condition of limited or uncertain access to adequate food” (United States Department of Agriculture, 2020, para. 2).

Four-day schedule. A full-time employee working more hours per day to fulfill 40 hours per week in four days (OPM, n.d.-c).

Four-day school week. A school schedule operating Monday through Thursday or Tuesday through Friday; the same amount of instruction is provided over fewer days (National Conference of State Legislatures, 2020).

Institutional strategy. A strategic initiative addressing competitive and fiscal challenges (Fretwell, 2019).

Non-traditional student. A student age 20 or older when first enrolled in undergraduate higher education programs (National Center for Education Statistics, n.d.).

Operational viability. The ability to sustain organizational operations (“Determine Operational Viability,” n.d.).

P-12. An educational system teaching prekindergarten through grade 12 students in a school setting (Meyer, 2016).

P-20. “The seamless development of all learners, prenatal through adulthood” and graduate coursework (Michigan Department of Education, n.d., para. 2).

Remote work. A work arrangement allowing an employee to work offsite for a specified period of time (University of California-Davis, 2020).

Student Support Services. A federal TRIO program where “funds are awarded to institutions of higher education to provide opportunities for academic development, assist students with basic college requirements, and to motivate students toward the successful completion of their postsecondary education” (U.S. Department of Education, 2022-b, para. 1).

Traditional school week. A school schedule operating five-days per week (Anglum & Park, 2019).

Traditional student. A student age 19 or younger when first enrolled in undergraduate higher education programs (National Center for Education Statistics, n.d.).

TRIO. “Federal outreach and student services programs designed to identify and provide services for individuals from disadvantaged backgrounds” (U.S. Department of Education, 2022-a, para. 1).

Work-life balance. The nature in which employees manage time inside and outside of work (“Defining Work-Life Balance,” n.d.).

Summary of the Introduction

State funding cuts (Burke & Gordon, 2020; Lorenzo, 2018; Whitford, 2020) and enrollment declines (AACC, n.d.; Barrington, 2020; National Student Clearinghouse, 2021; Schwartz, 2020) create the need for community colleges to utilize institutional strategy for

revenue generation through increased student enrollment. The four-day schedule has been adopted and explored at a number of higher education institutions, specifically community colleges (Bothwell, 2019; Cardinale, 2013; Chen, 2020; Ellen, 2011; Moltz, 2008; Toppo, 2018; Wallace, 1981). The growing popularity of the four-day school week within P-12 (Heyward, 2018; Walker, 2019) has created unknown implications for community colleges. With little research found regarding four-day schedules in higher education, this study investigated community college employee perceptions of the four-day schedule as an institutional strategy for community colleges.

CHAPTER II: LITERATURE REVIEW

This study investigated community college employee perceptions of the four-day schedule as an institutional strategy for community colleges. Presented within this chapter are findings from literature about flexible and compressed work schedules, remote work, an examination of four-day schedules used across P-20, and analysis of the benefits and drawbacks to four-day schedules. The reviewed literature provided the foundation for research.

Flexible and Compressed Work Schedules

Beginning in the 1960s, demographic changes within the labor market resulted in a workplace structure shift resulting in the creation of alternative work schedules (Fottler, 1997; Kleeman et al. 1992; U.S. Office of Personnel Management [OPM], n.d.-a). Federal agencies studied workforce dynamics involving employees' work and family responsibilities, along with employer efforts to recruit hard-to-fill jobs, reduce employee turnover, and retain qualified employees (OPM, n.d.-a; U.S. Office of Personnel Management [OPM], n.d.-b). A greater percentage of women in the workforce, along with recognition of dependent care responsibilities, drove the need for increased flexibility with work schedules (Kleeman et al., 1992; OPM, n.d.-a). Anticipated labor shortages and skill gaps further necessitated employers' willingness to accommodate qualified employees with creative work arrangements, as employees balanced work and personal life responsibilities (Kleeman et al., 1992). As a result of these workforce dynamics, the Federal Employees Flexible and Compressed Work Schedules Act of 1982 was passed into law, providing the framework for versatile and creative work arrangements, as federal employers sought to recruit and retain qualified workers while meeting diverse workforce needs ("Federal Employees," 1982; OPM, n.d.-a; OPM, n.d.-b).

Two types of alternative work schedules are flexible and compressed. According to the U.S. Office of Personnel Management (n.d.-c), flexible work schedules require employees' physical presence for established core hours while having the ability to deviate from arrival and departure times during designated time periods. Compressed work schedules allow employees to work an established number of hours in a reduced number of days (OPM, n.d.-c). Government agencies (Facer & Wadsworth, 2010), law enforcement (Cunningham, 1982), and health care (Fottler, 1977) commonly operate with compressed work schedules in an effort to improve work conditions.

Remote Work

Working remotely is an important factor for employers using flexible work schedules, as technology allows employees to work from anywhere (Owl Labs, 2019). According to Owl Labs (2019), remote work can improve organizational outcomes by improving productivity levels, increasing employee retention, and enhancing work and life responsibilities. Video-conferencing tools such as Zoom, Slack, Microsoft Teams, and Google Meet enable remote working arrangements, allowing employers to maintain communication and business continuity (Harper, 2020; Molla, 2020b). Remote work cannot be defined as all-or-nothing arrangements, but instead use varying frequencies: full-time, three days each week, once per week, once per month, and many more (Owl Labs, 2019). In a report titled *State of Remote Work: 2019*, Owl Labs (2019) found employees with the ability to work remotely are 13% more likely to stay in their jobs than employees working onsite.

Coronavirus Pandemic

The novel coronavirus (COVID-19) pandemic caused employers to implement flexible work schedules in an effort to remain operational during government-mandated, stay-at-home

orders issued to reduce spread of the virus (Gartner, 2020; Harper, 2020; OPM, n.d.-a). Through the pandemic, video-conferencing tools became a business necessity as employees worked-from-home to avoid mass gatherings and maintain social distancing (Molla, 2020a; Molla, 2020b; U.S. Office of Personnel Management, 2020). Employers devised flexible work schedules with alternating work shifts to reduce the number of people in a workspace at any given time (Molla, 2020a). The nature of workspaces changed as employers automated building plans to reduce common touch points on doors and elevators (Molla, 2020a). Commonly used open floor plans had dividers installed and workstations spaced apart to encourage social distancing (Molla, 2020a.) More attention was given to disinfecting procedures and the frequency of sanitation efforts (J. Hale, personal communication, April 2, 2020).

The coronavirus pandemic will shape work arrangements moving forward as attitudinal changes occurred in the workplace as a result of flexible work schedules, remote work, and collaborative technology (Harper, 2020; Molla, 2020b). Many influencers in the workforce are considering flexible work schedules as a long-term solution in order to allow for greater work-life balance through work-from-home arrangements (Harper, 2020). According to survey results from Gartner (2020), 74% of chief financial officers (CFOs) planned to move some full-time employees to permanent work-from-home arrangements following the coronavirus pandemic. Facebook chief executive officer, Mark Zuckerberg, intends to shift employment strategies toward working remotely for the long-term predicting half of the company's employees will work remotely within five to 10 years (Harper, 2020). As a result of flexible work schedules during the global pandemic, other tech firms in California-based Silicon Valley announced employees can choose to work-from-home indefinitely if they desire (Harper, 2020; Molla, 2020b). Gartner (2020) indicates 81% of CFOs are using remote working arrangements to reduce

costs, while avoiding more severe budgetary cuts and minimizing the impact to business operations. Some employers, such as Mastercard and Facebook, are viewing flexible work schedules as a cost-savings tool as they consider consolidating expensive office space (Gartner, 2020; Harper, 2020). Employers are adjusting their financial approach to reduce onsite technology and real estate expenses in favor of investment in remote work technology (Gartner, 2020; Molla, 2020a).

Four-Day Work Weeks

New Zealand's prime minister, Jacinda Ardern, promoted compressed work schedules through four-day work weeks as a means to offer greater work-life balance and provide a boost to the economy (Harper, 2020; Toh, 2020). The four-day work week offers the possibility of an extended weekend allowing families to travel domestically in New Zealand, which could stimulate the tourism industry as locals represent 60% of travelers (Harper, 2020; Toh, 2020). A New Zealand company, Perpetual Guardian, tried the four-day work week, having such high levels of success, the compressed work schedule is being permanently adopted (Yueng, 2018). Perpetual Guardian employees were surveyed prior to four-day work week implementation indicating 54% felt they successfully managed work-life responsibilities with a normal five-day work week; whereas, the number jumped to 78% after experiencing the shortened work week (Yueng, 2018). Those employees with dependent care responsibilities experience greater stress from work-life demands, while being the population who may benefit the most from a weekly day-off in order to schedule appointments and tend to necessary tasks (Ministry of Women's Affairs, 2013; OPM, n.d.-a).

In 2019, Microsoft explored four-day work weeks through a summer trial program in Japan where offices closed Friday, while the company encouraged employees to cut down on the

time spent in meetings and responding to emails (Harper, 2020; Toh & Wakatsuki, 2019). In place of long meetings, employees were encouraged to use Microsoft's own Teams platform, which allows for direct messaging through online collaboration. The program drew favorable responses from employees, while productivity measures indicate the work arrangement was successful (Harper, 2020; Toh & Wakatsuki, 2019). Results of the four-day work week experiment revealed sales per employee improved nearly 40% compared to the previous year (Toh, 2020; Toh & Wakatsuki, 2019). In addition to improved employee productivity, Microsoft saved on costs, including electricity, as a result of the shortened work week (Toh & Wakatsuki, 2018). Company leaders for Perpetual Guardian and Microsoft decided to pay employees for output, regardless of how many days they worked onsite, resulting in a more effective approach to measuring productivity.

Shake Shack, a popular nation-wide restaurant chain, experimented with four-day work weeks in Las Vegas-based locations to determine the viability of the compressed work schedule (Eadicicco, 2019). While struggling to find reliable and qualified applicants, Shake Shack turned to the four-day work week in an effort to reduce employee turnover through an improved work-life balance for current employees. The labor market has led other businesses to make similar changes. The four-day work week received such positive reviews from Shake Shack employees, nearly one-third of the restaurant chain's locations implemented the model (Eadicicco, 2019).

Work-Life Balance

Microsoft's initiative is fitting for Japan, as the country has experienced stress-induced illnesses, severe depression, and even suicide due to overwork (Jozuka & Wakatsuki, 2016; Toh & Wakatsuki, 2019). Japanese workers encounter such imbalance in workplace demands that a government study shows one in five workers are at risk of committing suicide due to overwork

(Jozuka & Wakatsuki, 2016). Haar (2018) asserts four-day work weeks reduced employee stress levels and mental health, creating a better work-life balance while maintaining productivity. Organizational culture improves as employee stress levels are reduced through improved job satisfaction, leading to improved employee retention rates.

Negative Perceptions of the Four-Day Work Week

Goff (2020) suggests the four-day work week is not entirely positive, nor is it a great fit for everyone. Employers, along with employees, should consider the nature of their work environment when exploring the idea of adopting the four-day work week. Customer-service oriented businesses may experience more challenges in creating a four-day work environment, depending on client expectations for providing services (Goff, 2020). Businesses staying open for regular hours, while providing four-day work arrangements, may need to stagger employee work schedules creating bottlenecks within the organization, which limits production and workplace efficiency (Goff, 2020)

According to Goff (2020) and Katepoo (n.d.), employees need to have a solid plan to utilize time on the extra day off, otherwise the longer work days can become physically and mentally draining. The extended work days could cause chronic fatigue unable to be offset by the regular day off (Katepoo, n.d.). In customer-service areas, employees may continue to be contacted for work purposes on the scheduled day off, which may blur the lines between work and life (Forsey, 2020). The four-day work week may reduce commutes for some employees, as the longer work day means commuting to work outside of the typical peak hours; however, creating significant challenges for child care drop-off and pick-up (Goff, 2020). Managing the four-day work week requires good time management skills and communication with co-workers

in order to avoid letdown on workplace responsibilities. Failure to effectively address these concerns could cause issues with co-workers (Forsey, 2020).

While flexible and compressed work schedules have been extensively studied and utilized within the corporate setting, workforce needs may rely upon these types of work arrangements more than ever in a post-coronavirus pandemic world. Research for flexible and compressed work schedules within P-20 are less common. Growth of the four-day school model in P-12 has resulted in recent investigation to better understand outcomes related to the movement.

Four-Day School Week in P-12

In 2019, the number of P-12 school districts adopting the four-day school week grew to 662 across 24 states (Thompson et al., 2020). This represented a significant increase since 2016 when approximately 120 districts across 21 states adopted the four-day school week (Walker, 2019). States experiencing significant adoption rates were Colorado, Idaho, New Mexico, Missouri, Montana, Oklahoma, Oregon, and South Dakota (Mulvahill, 2019; Ordway, 2019; Thompson et al., 2020; Walker, 2019). In Colorado, 111 of 178 school districts adopted the four-day week, as of the 2019-2020 school year (Brown, 2019). The biggest school district in the country to adopt the four-day school week is also from Colorado. Based in the suburban community of Brighton, Colorado, 27J Schools has a student population of 19,000 spread across 26 school buildings (Brown, 2019). The change to four-day weeks for 27J Schools is significant as rural school districts have historically been the primary adopter (Brown, 2019; Walker, 2019). Including 27J, districts using the four-day week represent less than 20% of Colorado's P-12 student population (National Conference of State Legislatures [NCSL], 2020; Walker, 2019).

Historical Use of the Model

Primarily viewed as a cost-savings tool, four-day school weeks have been sporadically adopted within many states west of the Mississippi River, with the majority of school districts being smaller and located in rural areas (Delisio, 2019; Donis & Silvernail, 2009; Griffith, 2011; Heyward, 2017; Heyward, 2018; NCSL, 2020; Reichert, 2016; Turner et al., 2018; Walker, 2019). Historically, the model finds prominence during times of economic crises where school leaders are searching for annual cost savings as they manage reduced government funding (Heyward, 2017). Dating back to the 1930s, South Dakota had the first school district utilizing the four-day week (Donis & Silvernail, 2009; Heyward, 2017). Budget constraints amid the energy crisis in the 1970s led a number of states to pilot the four-day week. The 1971-1972 school year led the Maine School Administrative District 3 to adopt the model for three years as the operational budget was reduced by 10% (Donis & Silvernail, 2009). The district returned to a five-day school week after the three-year pilot, when a request to continue the four-day week was denied by the state education commissioner. Massachusetts and New Jersey also piloted the four-day week in the 1970s amid budgetary constraints, but returned to the five-day school week as soon as the economy recovered (Heyward, 2017). This has been a common approach for many school districts as the model is utilized during years of financial hardship only to return to the traditional five-day school week when budget relief arrives. Cimarron School District in New Mexico adopted the four-day school week during the 1973-1974 school year and never moved away from the model (Donis & Silvernail, 2009; Heyward, 2017).

The 1980s, 1990s, and early 2000s saw occasional exploration into four-day school weeks. The model gained popularity in connection with the 2008 economic crisis and unlike past adoption cases, school districts continued to use the four-day week when economic recovery

eased budgetary strain (Heyward, 2017). Pockets of growth occurred in states west of the Mississippi River between 2006 and 2013, with school leaders mirroring operational efforts of neighboring districts when looking for cost savings (Heyward, 2017).

Substantial growth occurred in four-day school week adoption between 2016 and 2019 (Walker, 2019). Each school district has their own motives for adopting such a policy, but the most common justifications for adopting the model are cost-savings (Donis & Silvernail, 2009; Griffith, 2011), improved morale (Donis & Silvernail, 2009), teacher retention (Walker, 2019), teacher recruitment (Heyward, 2017), and reduced absenteeism (Heyward, 2017). Academic achievement implications are unclear with studies providing mixed results. The model received scrutiny from lawmakers with increased levels of accountability for schools adopting four-day weeks (Heyward, 2018; Hofmeister, 2020; Walker, 2019). Unintended consequences may occur as a result of the model as juvenile crime increases in communities using the four-day school week has been implemented (Fischer & Argyle, 2018). Some believe four-day school weeks are inequitable for low-income families due to child care needs and food insecurity (Mulvahill, 2019). Many attributes of the model have not been studied and are only beginning to be understood, yet many school districts continue to convert.

Four-Day School Week Design

Most school districts adopting the four-day school week choose not to have school on Monday. Colorado's 27J Schools believed having Mondays off allowed teachers to prepare for the instructional week (NCSL, 2020; Walker, 2019). By reducing the number of school days each week, school districts add, on average, 75 minutes to the school day (Ryan, 2009). In an effort to accommodate school districts adopting the four-day school week, some states changed school year requirements to hours-per-year instead of days-per year (Ryan, 2009). As of 2009, in

the state of Missouri, school districts must satisfy 1,044 instructional hours for a school year instead of the old requirement of approximately 174 school days (Missouri DESE, 2020; Turner et al., 2019). This legislative change in the state of Missouri gave school districts control to select the school day calendar that best accommodated local needs. The four-day schedule has grown in popularity among P-12 school districts in Missouri, as 128 districts have adopted the schedule for the 2022-2023 school year (Riley, 2022). In 2020, the Oklahoma State Department of Education revised school year requirements to include 1,080 instructional hours with no less than 165 days of instruction (Hofmeister, 2020). Some educators in Oklahoma have expressed dissatisfaction by this legislative change, referencing positive results the four-day week has on cost savings, teacher recruitment, and reducing student absenteeism (Walker, 2019).

Campo School District, located in Colorado, is a very small school district with 42 students enrolled, where conversion to the four-day school week created new opportunities for students (Simonton, 2019). The district implemented “enrichment Fridays” to provide unique academic programming not normally offered in a traditional school day (Simonton, 2019). The school district involved students in the planning process, producing ideas for which enrichment activities would be most effective. Student involvement produced interest in unexpected topics involving many fine art topics not normally provided by a small public school district. Interest areas included ballroom dancing, square dancing, art, ceramics, painting, photography, and rock band (Simonton, 2019). As a result of the new approach, students participated in theater and produced a play while also holding an art gala (Simonton, 2019).

In South Dakota, the Custer School District has been using the four-day school week since 1995 (Delisio, 2019). Students use the fifth day for catching up on projects and assignments while the majority of school activities shift to Thursdays, Fridays, and Saturdays

(Delisio, 2019). Extracurricular activities are required to end by 8:00 p.m. on Monday and Tuesday evenings while Wednesday's activities end at 6:00 p.m. These changes have led to increased participation in school activities from 56% to 80% of students (Delisio, 2019).

Rationale for Four-Day School Weeks

The four-day school week model is purported to produce annual cost savings through increased operational efficiency involving employee compensation, building operations and maintenance, transportation, and food service (Griffith, 2011; Mulvahill, 2019). Most school districts adopting the four-day school week save between 0.4 and 2.5% annually (Griffith, 2011). While seemingly a small percentage, for districts with larger budgets, a 2.5% annual savings could translate to millions of dollars being reinvested in additional classroom teachers, increasing teacher salaries, or classroom enhancements (Ordway, 2019). For 27J Schools, the largest district in the country to adopt the four-day school week (Brown, 2019), the model projected a savings of \$1 million annually (Walker, 2019). For Michigan's Republic-Michigamme Schools, the district has saved more than \$1 million between 2004 and 2018 (Bao, 2018). In some cases, school districts turn to the unconventional school week schedule to reduce costs after local taxpayers' reject levy increases to provide additional school funding (Richard, 2002).

Employee compensation is the biggest budgetary expense for school districts representing nearly 80% of educational spending (Griffith, 2011). Moving to a four-day week does not significantly lower compensation expenses, as most employees work the same number of hours each week, but within a compressed time frame. Compensation expenses slightly decrease for bus drivers and food service workers as they work one less day (Griffith, 2011). Substitute teacher costs could potentially be reduced as a result of less teacher absenteeism due to

scheduled appointments occurring on their day off (Delisio, 2019). According to Brown (2019), Colorado-based North Conejos School District reduced substitute teacher costs by 50% through improved teacher attendance. In most cases, substitute teacher costs are not as dramatically lowered as the pay per day is increased due to working longer hours (Griffith, 2011). School administration may experience a savings of 1.06% through reduced hours worked by support staff, however, administrative leadership positions did not have reduced compensation (Griffith, 2011). While most school employees do not see a significant difference in compensation, some employees will experience savings through reduced travel expenses when they are not traveling to school as many days per week (Heyward, 2017). For the school district, the best case scenario for savings related to employee compensation is 0.03% (Griffith, 2011).

Building operations and maintenance costs represent a significant portion of a district's budget. This includes heating and cooling costs, janitorial services and supplies, along with general building maintenance (Griffith, 2011). For 27J Schools with 26 school buildings in the district, millions are expended annually in building upkeep (Walker, 2019). According to Griffith (2011), schools using the four-day school week could potentially save up to 1.36% of the overall budget, assuming schools were not open on the non-school day to reduce heating and cooling, along with not scheduling work shifts for maintenance staff. The reality is, schools remain open for student support, enrichment activities, or extracurricular activities, requiring the district to incur heating and cooling expenses along with electricity usage (Griffith, 2011).

Transportation costs commonly represent a significant percentage of a school district's budget. Reducing the number of weekly days from five to four carries an allure for school leaders attempting to balance the budget as a bus fleet traveling fewer miles over the course of a school year should result in reduced fuel and bus maintenance expenses (Delisio, 2019). Griffith

(2011) found school districts did not typically eliminate transportation costs on the non-school day, as districts continued to run bus routes for remedial services and extracurricular activities. Considering these transportation needs, a school district could possibly save 0.43% from the overall budget (Griffith, 2011).

Food service costs carry notable variance between school districts with government subsidies offsetting costs for students qualifying for free and reduced lunches (Griffith, 2011). The qualifying number of free and reduced lunch participants will vary according to the socio-economic demographics of the school district. School districts using the four-day week have made efforts to reduce food insecurity among their student population by using food services for the non-school day (Griffith, 2011; Walker, 2019). These factors result in lowered potential savings for food service with a potential savings of 0.76% (Griffith, 2011).

Rural Districts

Most of the 25 states experiencing widespread adoption of the four-day school week are described as small, rural, and isolated (NCSL, 2020; Richert, 2016). School districts in western mountain states have especially experienced high adoption rates of the model, as the region has many isolated schools (Richert, 2016). Over half of Colorado's public schools have adopted the model, while impacting only 20% or less of the student population within the state (NCSL, 2020; Walker, 2019). In Idaho, 42 of 115 public school districts attend four-day school weeks, representing over 9% of the student population (Richert, 2016).

According to Richard (2002), rural school districts adopt the model out of necessity as a result of dire budgetary conditions caused by rural population decline. School funding is regularly tied to student enrollment and declining enrollment equates to less government support. For transportation costs, rural districts serve significantly less students per square mile than

urban and suburban districts, resulting in greater inefficiency. Lack of school funding and failure to gain taxpayer support often leaves rural districts with more building maintenance costs as they rely upon buildings having exceeded their useful life.

Teacher Recruitment

Beyond financial savings, another driving force in adopting four-day school weeks was the need to attract qualified teachers to the school district (Heyward, 2017; Mulvahill, 2019; NCSL, 2020; Study International, 2019; Walker, 2019). Prior to adopting the four-day week, Colorado's 27J Schools had trouble retaining talented teachers as many would leave each year for better funded and more lucrative neighboring districts (Walker, 2019). After switching to the four-day model, Mulvahill (2019) reported 27J Schools had over 100 applicants per opening, whereas, the district had only a handful of applicants prior to adopting the model. District officials reported teacher turnover dropped from 21% to 13% and when new hires are needed, the applicant pool includes more highly qualified applicants along with more applicants for hard-to-fill vacancies such as special education and secondary math teachers (Mulahill, 2019).

Districts adopting the four-day school week typically do not require teachers to work the non-school day unless they have extra duty responsibilities, yet many teachers voluntarily work in the school building on their day off (Delisio, 2019). When districts require professional development activities on the non-school day, teachers are paid for the extra day of work (Delisio, 2019). The non-school day allows professional development through teacher collaboration without interfering with instructional days.

Teacher Support

Turner et al. (2018) report teachers having experienced the four-day school week find the non-school day provides better opportunities for teacher planning and collaboration than five-day

school weeks. For districts such as 27J Schools (Mulvahill, 2019; Walker, 2019), enhanced professional growth opportunities may reduce teacher turnover along with decreasing burnout (Edelman, 2019; Turner et al., 2018). The four-day week model in 27J Schools allowed the district to implement required professional development activities for teachers to attend once a month and school administrators attend twice a month (Edelman, 2019).

Enhanced teacher support through professional development may lead to improved teacher retention through lower turnover rates resulting in a more consistent curricular and instructional approach. The need to restructure lessons in order to accommodate the shift to a four-day school week requires planning and reflection as teachers have fewer days in the school year to meet curricular objectives (Brown, 2019). The move to a four-day school week provides additional support for teachers to lesson plan, collaborate with peers, and grade student work (Mulvahill, 2019; Pesce, 2019; Turner et al., 2018).

For some, four-day school weeks positively changed attitudes about curriculum and instruction while placing more focus on academics (Delisio, 2019). The four-day week model encourages teachers to refine their instructional approach by analyzing curriculum to discard learning activities not directly aligned to the most essential curricular objectives (Brown, 2019; Turner et al., 2018). Reports from districts adopting the model indicate staff members were more intentional to avoid unproductive tasks (Brown, 2019).

Decreased Absenteeism

The four-day school week also caused school leaders to be more protective of classroom learning by encouraging teachers and students to schedule medical appointments and other personal errands on the scheduled day off in an effort to maximize instructional time (Delisio, 2019). Reduced absenteeism among teachers and students created more continuity in the

instructional delivery while avoiding downtime or unnecessary activities, which may not be most impactful for learning outcomes. More time with qualified teachers trained in subject matter has the potential to optimize learning outcomes instead of relying upon substitute teachers who may not possess the same level of training (Delisio, 2019). School leaders also minimized classroom interruptions by reducing the number of school assemblies and other activities that may interfere with classroom learning (Delisio, 2019).

Improved Teacher Morale

Walker (2018) discusses demoralization occurring across the teaching profession as a result of high-stakes testing, standardization, loss of teacher autonomy, and added social programs. As a result of these ever-increasing challenges, each year many qualified teachers leave the profession. Recognizing these challenges, school districts are searching for ways to improve teacher support as a way to increase teacher retention. For teachers, the allure of the four-day school week comes with the possibility of greater work-life balance along with enhanced professional support (Turner et al., 2018).

According to Heyward (2017) and Turner et al. (2018), teachers believe morale increased by using the non-school day to work on lesson plans and grading instead of taking away weekend time from family activities. Teachers reported working the same number of hours each school day when moving from five-day to four-day weeks (Edelman, 2019). However, with the four-day week, teachers gained much-needed time for rest and relaxation through extended weekends allowing them to be more rejuvenated when returning to the classroom (Mulvahill, 2019; Study International, 2019).

Student Experience

Going back to the 1980s, school districts adopting the four-day school week hoped to utilize the non-school day for additional programming to enrich student learning (Heyward, 2017; Heyward, 2018). The programs typically provided opportunities for advanced learning, remediation, and student internships (Heyward, 2018). According to Heyward (2018), select school districts, typically rural, have successfully implemented enrichment activities for their student population although the majority of schools fail to sustain the additional programming. Campo School District, based in rural Colorado, implemented enrichment activities on the non-school day, which allowed students to develop unique interests not normally offered in rural public schools (Simonton, 2019). Simonton (2019) described high school students offering guitar lessons to younger students, while other students are able to participate in acting classes. The enrichment activities provided an element of career interest and discovery not possible with the five-day school week (Simonton, 2019).

According to Hill and Heyward (2015), the four-day school week provides students' opportunity to engage with advisers, use online resources, and pursue dual-enrollment coursework through college programs. Longer class periods can allow students to complete assignments, while receiving feedback from the teacher, leading to improved student achievement. The extra day provides an opportunity for students to pursue ACT or SAT preparation workshops (Hill & Heyward, 2015).

In Colorado's 27J Schools, some working parents formed co-ops to coordinate days off for the purpose of taking their children on field trips and other extracurricular activities outside of the school setting (Brown, 2019). An elementary parent scheduled a variety of activities for the non-school day, including museum and aquarium visits, piano lessons, medical

appointments, and supplemental curricular activities (Brown, 2019). As a result of the non-school day providing opportunities to explore enrichment activities, more individuals in the Brighton community, where 27J Schools are located, offered music lessons along with art and science clubs (Brown, 2019).

According to Edelman (2019), some high school students used the non-school day to work extra shifts at part-time jobs, which provided a chance to earn money for college. Students also used the extra time to volunteer in community-based organizations. These experiences made possible through the four-day school week, allowed students to develop interest areas, while also building their resumes toward future employment (Brown, 2019; Edelman, 2019). For some elementary-aged students, the four-day week provided benefits less long-ranging, as it provided an opportunity to simply play outdoors (Edelman, 2019).

Improved School Participation

Some school districts report improved student attendance with fewer discipline referrals in connection to the four-day school week (Delisio, 2019; NCSL, 2020). According to Bradley (n.d.), Melstone School District, located in Montana, reported student attendance improved as much as 20% over a two-year period. Fewer school days throughout the school year means more instruction occurs within a four-week school day compared to five-week school days. This caused school districts to encourage students to schedule personal appointments during the non-school day in an effort to reduce classroom interruptions (Delisio, 2019). Students participating on school athletic teams often leave school early, or miss entire school days, leading to lost time in the classroom. Districts scheduled athletic events on the non-school day to reduce the amount of time missed from school, while also minimizing the effect of late nights caused by travel (Bradley, n.d.; Brown, 2019; Edelman, 2019).

In addition to providing a better work-life balance for teachers, the four-day week allowed students to have more time outside of school activities, leading to an improved school-life balance. As a result, many districts reported an improved school culture through fewer discipline referrals and higher levels of student engagement in the classroom (Bradley, n.d.; Delisio, 2019; Donis & Silvernail, 2009; NCSL, 2020). In Georgia, Chattooga County School District had 73% fewer discipline referrals in the first year of implementing the four-day school week (Bradley, n.d.). For some schools, the improved school-life balance has reduced high school dropout rates (Donis & Silvernail, 2009).

Mixed Reviews on Student Achievement

Measurement of student achievement within schools using the four-day school week model is relatively a new discovery, as research has only occurred within the last 10 years of a model that has been around since the 1930s. Overall, research findings have provided mixed reviews on the model's effect on student achievement. Hewitt and Denny (2011) first explored the relationship between four-day school weeks and student achievement in Colorado schools for third-grade through tenth-grade when comparing data to school districts using the traditional five-day school week. The study analyzed standardized test scores through the state assessment called Colorado Student Assessment Program (CSAP) in the areas of reading, writing, and mathematics (Hewitt & Denny, 2011). Research findings showed schools using the five-day school week have slightly higher scores than four-day districts across every grade level, with the greatest margins occurring in elementary grades (Hewitt & Denny, 2011). Student achievement in the area of writing was substantially higher in schools using the five-day school week (Hewitt & Denny, 2011). The study concluded the change to four-day school weeks should occur for reasons other than academic achievement (Hewitt & Denny, 2011).

Anderson and Walker (2015) also studied school-level data in Colorado's elementary schools to determine the relationship between the four-day school week and academic achievement. The study analyzed student achievement on the CSAP in the areas of fourth-grade reading and fifth-grade mathematics (Anderson & Walker, 2015). The four-day school week might provide instructional improvement by giving teachers more flexibility to organize lessons along with incorporating various types of learning strategies (Anderson & Walker, 2015). As a result of the four-day week model, improved attendance may lead to increased student achievement, although extended school days' pose problems by fatiguing younger students through longer periods of focus and attention (Anderson & Walker, 2015). According to Anderson and Walker (2015), the research findings suggest a positive correlation between the four-day school week model and student achievement on the CSAP in the areas of fourth-grade reading and fifth-grade mathematics.

Hill and Heyward (2015) investigated student achievement relating to the four-day school week model within rural Idaho schools. During the discovery process, it was determined school districts implementing the model, nor state education officials, were not analyzing student achievement to measure the effects of the four-day school week (Hill & Heyward, 2015). General observations were noted by district officials asserting teacher and student attendance had improved. Formal data collection and analyses were not completed to validate these assumptions. Based on Hill and Heyward's (2015) interactions, some educators were concerned about the model's negative effects for disadvantaged populations along with the belief younger students would not benefit from four-day weeks. These concerns were not measured to better understand the model's effect.

Thompson (2019) conducted a research study involving Oregon schools using the four-day school week to measure the model's effect on student achievement. In contrast to Anderson and Walker's (2015) study, the focus was on student-level data between 2007 and 2015 in order to measure academic achievement across subgroups (Thompson, 2019). In doing so, research findings provided better understanding of the model's effect on student achievement among subgroups to determine if compressed school schedules mitigated or exacerbated achievement gaps (Thompson, 2019). The study concluded four-day school weeks have detrimental effects on student achievement, particularly for reading achievement among males and low-income students (Thompson, 2019).

Criticism of the Four-Day School Week

Increased popularity of the four-day school week has not prevented criticism. Recently, stricter standards of accountability have been legislated in California, Minnesota, Oklahoma, and New Mexico (Heyward, 2018). According to Heyward (2018), 43% of New Mexico school districts adopted the four-day school week until state lawmakers placed a moratorium on four-day school weeks, preventing further adoption until long-term implications are better understood by state leaders. New Mexico lawmakers cited concerns over inequitable burdens placed on low-income families needing child care from the added day off, while also requesting long-term studies on academic achievement and economic impact (Walker, 2019).

Exhibiting the same concerns from New Mexico lawmakers, the Oklahoma State Board of Education voted in support of school year changes requiring a minimum of 165 school days and 1,080 hours beginning the 2021-2022 academic year (Hofmeister, 2020). A school calendar waiver is available for eligible schools meeting established criteria involving: sufficient student achievement in Math and English Language Arts, not identified by the state department for

school improvement, and maintaining an acceptable graduation rate (Hofmeister, 2020). Prior to this change in policy, Oklahoma had 96 of 547 school districts using the four-day school week (Heyward, 2018). The ruling effectively reduced use of the four-day school model to a few school districts in the state.

Oklahoma Governor, Mary Fallin, claimed the prevalence of the four-day school model created economic hardships for the state by making it difficult to recruit businesses (Hardiman, 2018). Some local businesses closed on the non-school day, typically Friday, in response to the four-day school week, as parents may be unable to arrange child care or families used the non-school day for family day trips (Heyward, 2017). According to Heyward (2017), the increase in families taking day trips resulted in a decrease in longer vacations, which has the potential to negatively impact the state's tourism industry.

Inequitable Outcomes. Those having worked closely with the four-day school model raise concerns of inequitable outcomes for younger students, minority students, students needing remedial services, low-income families, and families relying on child care (Brown, 2019; Donis & Silvernail, 2009; Heyward, 2017; Heyward, 2018; Hill & Heyward, 2015; Pesce, 2019; Thompson, 2017; Turner et al., 2019; Walker, 2019). Thompson's (2019) analysis of student-level data reveals low-income and minority students scored worse on Oregon's standardized test, between 2007 and 2015, in the areas of math and reading. Additionally, female students performed better than male students in math and reading (Thompson, 2019). Students needing remedial services, such as English language learners (ELL) or special education, performed lower on reading test scores in comparison to five-day schools (Thompson, 2019). These types of services, along with substandard achievement among minority populations, could be attributed to reduced access to academic support mechanisms within school districts. In a survey of parents in

four-day school districts, those with children receiving special education services were not as positive about the model compared to parents with children not receiving these services (Turner et al., 2019).

Proponents of the four-day school model reference academic enrichment opportunities occurring outside the school setting on the non-school day. Low-income families and minorities tend to rely on school-sponsored activities for the non-school day due to affordability concerns, which may prevent these students from experiencing enrichment opportunities that more affluent families provide their children (Hill & Heyward, 2015). Students from a more privileged family may experience opportunities low-income families are unable to provide, such as dual-enrollment in college coursework, college visits, or ACT and SAT preparation workshops (Glatter, 2017; Hill & Heyward, 2015).

Lower Grade-Levels. Longer school days may negatively affect lower grade-levels the most causing academic achievement to be diminished (Mulvahill, 2019). An average of 75 minutes is added to the school day through four-day school weeks (Ryan, 2009). In school districts using the model, concerns have been raised for pre-kindergartners through lower elementary grade levels where students have shorter attention spans and may experience cognitive fatigue, as a result of the longer school day (Donis & Silvernail, 2009; Hill & Heyward, 2015). While achievement data has not been collected to verify these claims, many school officials using the four-day school model, or exploring it, acknowledge the negative impact on younger students within the school district.

Food Insecurity. The four-day school week creates an extra day for low-income students to potentially go without a reliable meal (Heyward, 2018; Oklahoma State Department of Health, 2017). The majority of school districts adopting the model in Colorado typically have a high

number of students qualifying for free or reduced meals, signifying the potential for many students to suffer from food insecurity, as a result of the four-day school week (Brown, 2019). In Oklahoma, nearly two out of every three students qualified for free or reduced school meals, which equates to roughly 400,000 students (Oklahoma State Department of Health, 2017). While this number does not represent the number of students experiencing food insecurity, thousands of families in Oklahoma rely on school meals for their children.

School officials report many students are without sources of food throughout the weekend, leaving children hungry and lacking nutritional value for up to 72 hours (Oklahoma State Department of Health, 2017). Many school districts, like 27J Schools in Colorado, provide students with meals over the extended weekend to reduce hunger caused by food insecurity (Walker, 2019). In many communities using the four-day school model, community partners provide programs in an effort to help students while also providing a reliable meal (Walker, 2019).

According to the Oklahoma State Department of Health (2017), the state uses the Backpack Program to combat food insecurity within the statewide student population. The program has 267 sites across the state to provide meals of nutritional value and kid-friendly snacks to students experiencing food insecurity (Oklahoma State Department of Health, 2017). In 2016, the program delivered 10,100 backpacks of food each week for a total of 290,315 backpacks provided throughout the school year (Oklahoma State Department of Health, 2017). Programs similar to the Backpack program are found across the country to reduce food insecurity concerns among P-12 students.

Child-Care Issues. Lower-income families can be negatively affected by the four-day school model due to child-care costs when school is not in session (Mulvahill, 2019; Ordway,

2019; Walker, 2019). According to Mulvahill (2019), child-care for one day each week can be difficult to find and costly. In an effort to overcome these concerns, some school districts offer child-care to families residing in their district. Colorado's 27J Schools, provided child-care for roughly 350 of the 19,000 students attending the school district (Brown, 2019; Walker, 2019). These types of district-sponsored services diminish the argument for cost savings realized through the four-day school model, as buildings remain occupied on the non-school day resulting in utility usage.

While Mulvahill (2019) asserts child-care can be difficult to find, Turner et al. (2019) surveyed parents in four-day school districts and the feedback did not support the claim, as parents decidedly rejected the notion that finding child-care was an issue. Over 70% of survey respondents indicated they did not struggle to make child-care arrangements (Turner et al., 2019). For parents with middle school or high school-aged students, making child-care arrangements for an elementary-aged student was not a significant concern (Turner et al., 2019).

Where school-sponsored child-care is not available, community organizations, both faith-based and civic (Hill & Heyward, 2015), developed programs to occupy students' time while encouraging physical activity, character building education, and community involvement (Walker, 2019). More populated communities commonly partnered through public libraries, the Boys and Girls Clubs of America, YMCA, and similar service-oriented organizations (Walker, 2019). Less populated communities seldom experienced program development for the non-school day.

Increase in Juvenile Crime. The four-day school model causes some students to go without adult supervision for increased periods, while having less structure, and creating more opportunities to commit crime. Fischer and Argyle (2018) examined the link between Colorado

school districts adopting the four-day school week and juvenile crime in related communities over the period of 1997 to 2014. The Federal Office of Juvenile Justice and Delinquency Prevention identified the majority of juvenile crimes occurred during unsupervised, non-school hours, from 3:00 p.m. to 6:00 p.m. (Snyder & Sickmund, 2006). The four-day school week extends the length of school days on average 75 minutes, while reducing the amount of time students are unsupervised at home and limiting opportunity for crime (Fischer & Argyle, 2018; Ryan, 2009).

Most school districts using the four-day model operate on a Monday through Thursday schedule. Students gain an extra weekend night, as Thursday becomes the end of the school week, while creating more weekend time for social events and the potential for unsupervised youth (Fischer & Argyle, 2018). This schedule makes Friday the non-school day, presenting challenges for working parents whose children may be unsupervised for portions of the day.

Fischer and Argyle (2018) analyzed aggregated data from law enforcement agencies serving communities using the four-day school week to discover overall crime involving high school-aged individuals increased 19.6%, while property crimes increased 26.6%. While juvenile crime substantially increased, Fischer and Argyle (2018) reported the likelihood of juvenile violent crime did not increase. A U.S. Department of Justice report shows larceny-theft as 76% of all juvenile crimes (Puzzanchera, 2013). Evidence suggests the four-day school week leads to an increase in juvenile crime as a result of more time where students are unsupervised (Fischer & Argyle, 2018).

Return to Five-Day School Weeks. Some school districts using the four-day school model abandoned the approach in order to reinstate five-day school weeks (Heyward, 2018). School leaders describe different motivating factors for returning to the five-day schedule. In

Michigan, several school districts tried the four-day school model but reverted back to the five-day school week after parents expressed dissatisfaction (Bao, 2018). Donna McGee, superintendent of Lake Arthur School District in New Mexico, expressed concern that staff and students were too drained at the end of long school days when using the four-day school model (Delisio, 2019). McGee anticipated a return of the five-day school week after initial reasons for implementing the four-day school model were not observed over time. Despite the four-day school week, students were on school grounds during non-school days, whether attending school-related activities or the school playground (Delisio, 2019). The school district anticipates additional costs of \$30,000 annually by reverting to the five-day school week (Delisio, 2019).

Heyward (2018) describes Kentucky's Webster County Schools returning to five-day school weeks after using the four-day school model for 10 years. Despite changing back to the traditional school schedule, district officials reported four-day weeks worked for many years by saving the district money through reduced transportation costs (Coldiron, n.d.). Student achievement also improved within the first five years of the four-day school model. However, the four-day week lost momentum within the district causing declining test scores and raising concerns the model was not preparing students for a successful transition to the workforce (Coldiron, n.d.; Heyward, 2018).

Saratoga School District, located in Arkansas, used the four-day school week for six years before returning to the five-day school week in 2002 (Delisio, 2019). The school district was an early adopter of four-day school weeks in Arkansas, but results diminished over time. In the first year of using four-day school weeks, district leaders reported a 50% decrease in teacher absenteeism and 20% reduction in student absences (Delisio, 2019). Change in district leadership, along with continued evaluation of the model, resulted in the switch to the traditional

five-day school week. For Saratoga, cost savings were the initial motivating factor in using four-day school weeks. However, the new superintendent, Kenneth Muldrew, stated the financial outlook improved and cost savings were not substantial to continue the model (Delisio, 2019).

Other school leaders shared similar sentiments relating to using the four-day school week for cost savings. In Oklahoma, superintendent Vol Woods referenced the need for the four-day model primarily for cost savings purposes, but expressed intent to return to the five-day school model once the financial outlook improved (Hardiman, 2018). For districts using the four-day model a number of years, the novelty wore off leading to complacency among stakeholders and the return of old problems (Delisio, 2019). Districts in the beginning stages of adoption tended to view the model as a permanent solution.

In contrast to the accelerated adoption rate of the four-day school model in the P-12 sector, very few higher education institutions have implemented the compressed schedule. While growth of the four-day school model has led to more longitudinal studies within the P-12 sector, implications for higher education are relatively unexplored.

Four-Day Schedule in Higher Education

The four-day school week has not been historically used within higher education. Some universities and community colleges implemented four-day schedules for reasons ranging from cost savings strategy to improved efforts for student recruiting (Bothwell, 2019; Cardinale, 2013; Moltz, 2008; Toppo, 2018; Zarella, 2008). Hesitant to adopt the four-day work week as a permanent policy, some institutions have piloted the model during the summer semester to determine viability. Delta College, a community college located in Michigan, implemented a pilot program using four-day weeks during the summer semester to reduce carbon emissions while saving on utility costs (Moltz, 2008). Northwest Florida State College attempted the four-

day week over the summer semester to improve work-life balance for employees, while also trying to reduce travel expenses for staff members, as the average commute to and from work was 40 miles (Moltz, 2008). While both Delta College and Northwest Florida State College explored use of the four-day week, neither institution adopted the model as a permanent schedule.

Universities

The University of Mobile adopted four-day weeks in 2017 to mirror work arrangements occurring in the corporate sector, such as Google's innovative approach, allowing employees to have flexibility (Toppo, 2018). Provost Chris McCaghren proposed the model to university leadership, suggesting cost savings were not the primary influencer of the schedule adoption, although small savings may be experienced through reduced utility consumption and less training costs, as a result of lower employee turnover (Toppo, 2018). McCaghren also suggested their adoption of the four-day school week should not be confused with the growing adoption of the four-day school week within the P-12 sector (Toppo, 2018).

University employees work 35-hour weeks with course scheduling occurring Monday through Thursday, and Friday serving the equivalent of a day off (Toppo, 2018). Non-faculty employees partake in four-day work weeks, but must rotate days off in order to maintain support services for the student population. McCaghren suggests many employees save money on travel expenses, as most live in nearby communities causing a daily commute (Toppo, 2018). Employees reinforce the reason for adopting the model by describing a better work-life balance. One employee describes the opportunity to work part-time as a tour guide, while another suggests they are able to enjoy more leisurely reading (Toppo, 2018). University president, Fred

Wilson, attributes the four-day model for increased employee productivity and a recruiting benefit for prospective students (Bothwell, 2019).

According to Toppo (2018), the university encourages “Focus Fridays” as a day of volunteering, mentoring, or participating in work-based experiences. Students indicate through surveys they use Fridays to study course materials, explore local landmarks, while also spending time with friends (Toppo, 2018). University officials analyzed student meal consumption on Fridays, determining most students typically stay on campus to take advantage of campus activities. Unexpected benefits developed through enhanced efforts for improved campus activities, as evidenced by the addition of a disc golf course and tournament, which has become popular. The University of Mobile also partnered with area businesses to provide student’s discounts on “Focus Fridays” (Toppo, 2018).

President Matthew Wilson led efforts for the University of Akron to adopt the four-day schedule, referring to “Five-Star Friday” as an opportunity for students to focus on career-development activities (The University of Akron, 2018). Students attend class Monday through Thursday throughout the semester, while Friday is utilized for cooperative education, practical work experiences, hands-on learning, volunteering, tutoring, research, co-curricular activities, and community service (The University of Akron, 2018). The university encourages students to utilize academic services on Fridays, in an effort to improve student achievement. For the University of Akron, the shift to the four-day schedule aligned with growing workplace flexibility trends.

After implementing “Five-Star Friday” and the four-day schedule for the University of Akron, President Wilson left the university to take the same role for Missouri Western State University. Within a year of serving as university president for Missouri Western State

University, Wilson led the same efforts to move the university to a four-day schedule, while coining “Gold Friday” as a day for students to pursue career-development activities (Maples, 2019), identical to the initiative at the University of Akron. Wilson described “Gold Friday” as a day for experience-based learning opportunities and community involvement, not a day off from school (Maples, 2019). Unlike the adoption of the four-day schedule with the University of Akron, implementation of the compressed schedule for Missouri Western State University appeared to be with cost saving efforts in mind, as the university also eliminated nearly 60 faculty positions and numerous academic programs (Anderson, 2020). During implementation of the four-day schedule for both universities, Wilson suggested the model was a strategic advantage as no other universities in either region were using the compressed schedule (Maples, 2019; The University of Akron, 2018).

Community Colleges

Chen (2020) discussed the growing trend of community colleges utilizing the four-day week to reduce expenses amid budget constraints. Community college officials have been inspired by adoption of compressed work schedules within the corporate setting to reduce expenses amid economic fluctuations (Chen, 2020). Some community colleges explored use of the four-day schedule through the summer semester to better understand the effects of the compressed schedule on student success and stakeholder reactions. Results led some college officials to adopt the four-day schedule for the entire academic year.

Wallace (1981) conducted research for the College of DuPage, an Illinois community college, where the four-day schedule was piloted during the 12-week summer semester in 1980. The college scheduled on-campus classes Monday through Thursday, while closing campus on Friday. The college’s Office of Institutional Research investigated the four-day schedule’s effect

on “student registration, class enrollment, student success rates, and instructional quality” (Wallace, 1981, p. 4). College officials also wanted to understand operational cost savings along with any personal savings for employees.

Survey data collected by the Office of Institutional Research indicated students participating in the four-day schedule pilot experienced less difficulty than they anticipated, as a result of having one less day of campus access and class activity (Wallace, 1981). Some students expressed frustration by not having access to computer labs on Friday, along with some class sessions being too long, as a result of the compressed schedule. Student enrollment was not significantly different compared to prior semesters while students enrolled in more credit hours generally reported more negative reactions to the four-day week (Wallace, 1981). Student success measures did not reveal significantly different outcomes, in comparison to semesters using the traditional schedule. Courses requiring a lab component, as with Science, received more negative feedback than other course types, mostly due to longer class sessions.

Concerning students participating in the College of DuPage’s exploration of the four-day schedule, 71% preferred it compared to the traditional five-day schedule (Wallace, 1981). Faculty also responded favorably to the four-day schedule with 85% expressing an interest in continuing the model for future summer semesters (Wallace, 1981). Non-faculty employees viewed the compressed schedule less favorably than faculty and students, although they still viewed the model moderately positive. When asked if they were interested in adopting the four-day schedule in future summer semesters, 87% of employees responded favorably, while 71% of students expressed support (Wallace, 1981). The idea of using the four-day schedule throughout the entire academic year was perceived less favorably, as 69% of employees and 58% of students expressed support (Wallace, 1981).

During the 12-week summer semester in 1980, the College of DuPage saved \$23,136 in utility savings by using the four-day schedule by closing the academic building where classes were held on Fridays (Wallace, 1981). While saving money for the college, students expressed dissatisfaction with a lack of access to computer labs through this closure, as a result of the compressed schedule. The college's Office of Institutional Research also tracked reduced spending for employees by traveling to campus one fewer day per week. Using the Internal Revenue Service (IRS) mileage reimbursement rate of 20-cents per mile, college employees collectively saved \$5,671.20 in commuting costs over the course of 12-weeks, while students experienced a combined savings of \$25,432.20 (Wallace, 1981). Economic inflation should be considered when comparing aforementioned cost savings to present day.

According to Ellen (2011), Southeastern Community College (SCC), located in Iowa, explored viability of the four-day schedule by piloting the model during the summer semester in 2011. To better understand stakeholder perceptions, the college administered an employee survey through the Office of Institutional Research. Based on an overall evaluation of the four-day schedule, the majority of college employees indicated the compressed work week served them well (Ellen, 2011). Among the effects experienced by the four-day week, employees generally indicated the schedule allowed more time for family and personal interests, while also saving money on commuting costs and improved work-life balance (Ellen, 2011). The majority of SCC's employees indicated the four-day schedule should be utilized in future summer semesters, while some suggested the model should be adopted year-round (Ellen, 2011).

The employee survey asked respondents about their perceptions regarding student experiences with the college's four-day week experiment. The three most common responses were: "students were glad not to attend classes on Fridays", "students appreciated commuting

one less day”, and “students were glad to have another day to earn money” (Ellen, 2011, p. 3). The majority of employee responses indicated they did not have a good understanding of how the four-day schedule affected students or they felt like students were served better, as a result of the model (Ellen, 2011).

According to Chen (2020), Durham Technical Community College (DTCC), located in North Carolina, implemented the four-day schedule as a cost savings measure in response to county and state revenue cuts forcing the school to lose \$140,000 from the annual budget. Left with few alternatives, DTCC president Will Ingram, acknowledged frustration felt by faculty and staff concerned with longer work days, believing they will ultimately become exhausting and arduous (Chen, 2020). Ingram indicated employees would experience savings through reduced travel expenses by traveling to campus one fewer day each week. College officials projected to save \$30,000 in utility expenses alone (Chen, 2020).

In Florida, Brevard Community College (BCC), now known as Eastern Florida State College (Eastern Florida State College, 2020), adopted the four-day schedule year-round after successfully piloting the model throughout the summer semester for two years in a row (Moltz, 2008). Facing state funding cuts of \$2.3 million, the four-day schedule allowed BCC to save \$268,000 in utility expenses in one summer, while also experiencing a 24.5% enrollment increase in online courses (Moltz, 2008). After implementing the model over the course of an entire year, BCC lowered utility costs by \$474,000 (Moltz, 2008). College officials report employee turnover decreased 44% while employees used fewer sick days than previous years (Zarrella, 2008). Experiencing significant funding cuts, the college was able to add 10 full-time faculty members (Zarrella, 2008) and academic support personnel in an effort to improve student achievement through the savings coming from the four-day schedule (Moltz, 2008).

BCC's college president, James Drake, credits the model for being able to attract and retain more students (Zarrella, 2008). Students and staff described improved work-life balance as the extra day off allows for errand running and reduced child-care costs. Drake reports receiving inquiries from college leaders at other institutions interested in Brevard Community College's success with the four-day week (Zarrella, 2008).

Cardinale (2013) conducted a research study of a community college in south Florida, matching the description of Brevard Community College, which adopted the four-day schedule amid state funding cuts and rising energy costs. Cardinale used a pseudonym of "Atlantic Coast Community College" within the study, in an effort to protect the institution's identity, after the college received national attention in media outlets for adopting the four-day schedule. The study analyzed decisions made by college administrators for Atlantic Coast Community College when implementing the four-day schedule along with investigating post-adoption work-life balance of college employees (Cardinale, 2013). Effects of the four-day schedule on the student experience was explicitly not addressed within the study.

Atlantic Ocean Community College is described as a commuter-based institution not having on-campus student housing and campus services close for weekend hours (Cardinale, 2013). According to Cardinale (2013), these factors make the college well-suited for changing to the four-day schedule. Through numerous data collection points, including surveys, Cardinale (2013) analyzes the adoption process by college administrators, making note organizational change strategies were not used throughout the implementation process. As a result, college employees perceived the process of changing to the four-day schedule was not particularly effective, as segments of the employee population were not included in discussions.

In Cardinale's (2013) survey of employees, particular concerns were raised about employee child-care needs and length of work days. College administrators implemented child care options to alleviate this concern for employees, but Cardinale (2013) asserts employee buy-in of the four-day schedule may have improved, if issues such as child-care, would have been addressed during the pre-adoption process. The college implemented four 10-hour work days, which led to many exhausted employees after transitioning to longer work days. The longer work days also caused disruption for some employees by negatively affecting the work-life balance.

Washington's Walla Walla Community College (WWCC) faced a financial crisis in 2019 resulting from declining enrollment and reductions in state funding (Nanfria, 2019). WWCC president, Derek Brandes, describes enrollment falling from 6,670 to 4,500 in a matter of a few years (Nanfria, 2019). According to Hagar (2020), in the first round of cuts 24 employees lost their jobs, as college officials performed budget cuts in an effort to remedy the financial crisis at WWCC. In 2019, the college adopted the four-day week to provide students additional time to study and complete coursework, as Wednesday will serve as the day off ("Walla Walla," 2019). College officials believe the four-day schedule will improve students' schedules between work and family, while also saving gas money and time ("Walla Walla," 2019). Furthermore, students will still have access to campus services on the day off. Career education programs were not included in the adoption of the four-day schedule. Through the compressed schedule, WWCC aims to improve course scheduling efficiency while also using the model to serve as a cost savings tool (Nanfria, 2019).

Itawamba Community College, located in Mississippi, implemented the four-day schedule in 2019, as a result of year-long discussions and extensive research (Alsup, 2019). A number of community colleges within Itawamba's region have also adopted the four-day week

including Northeast Mississippi, East Mississippi, Mississippi Delta, Holmes, and Meridian (Alsup, 2019). College officials believe the schedule allows students to have more time for work and personal time, while also gaining the ability to meet one-on-one with faculty and staff on Fridays, the designated non-school day. College president, Jay Allen, believes the model can attract new students to Itawamba, in addition to helping the college retain current students struggle with work-life-school balance (Alsup, 2019).

Summary of the Literature Review

The nature of the workplace setting is shifting toward flexible arrangements and compressed work schedules. Compressed work schedules allow employees to work an established number of hours in a reduced number of days (Office of Human Resources Management, 2000). The novel coronavirus (COVID-19) pandemic caused employers to implement flexible work schedules in effort to remain operational during government mandated stay-at-home orders issued to reduce spread of the virus (Gartner, 2020; Harper, 2020; U.S. Office of Personnel Management, 2020). As a result of the pandemic, video-conferencing tools became a business necessity while employees worked-from-home to avoid mass gatherings and maintain social distancing (Molla, 2020a; Molla, 2020b; U.S. Office of Personnel Management, 2020). The coronavirus pandemic will shape work arrangements moving forward as attitudinal changes occurred in the workplace as a result of flexible work schedules, remote work, and collaborative technology (Harper, 2020; Molla, 2020b). The corporate sector, such as California-based Silicon Valley, is shifting to work-from-home arrangements indefinitely, if employees desire, as a result of the coronavirus pandemic (Harper, 2020; Molla, 2020b). Gartner (2020) indicates 81% of CFOs are using remote working arrangements to reduce costs while avoiding more severe budgetary cuts and minimizing the impact to business operations.

New Zealand company, Perpetual Guardian, tried the four-day work week, having such high levels of success, the compressed work schedule is being permanently adopted (Yueng, 2018). Perpetual Guardian employees were surveyed prior to four-day work week implementation indicating 54% felt they successfully managed work-life responsibilities with a normal five-day work week; whereas, the number jumped to 78% after experiencing the shortened work week (Yueng, 2018). Tech giant, Microsoft, even piloted the four-day work week in Japan during the summer of 2019 (Toh & Wakatsuki, 2019). Results of the four-day work week experiment revealed sales per employee improved nearly 40% compared to the previous year (Toh, 2020; Toh & Wakatsuki, 2019). Microsoft's initiative is fitting for Japan, as the country has experienced stress-induced illnesses, severe depression, and even suicide due to overwork (Jozuka & Wakatsuki, 2016; Toh & Wakatsuki, 2019). Haar (2018) suggests four-day work weeks reduced employee stress levels and mental health, creating a better work-life balance while maintaining productivity. Goff (2020) suggests the four-day work week is not entirely positive, nor is it a great fit for everyone. According to Katepoo (n.d.), longer work days can become physically and mentally draining, leading to chronic fatigue which is unable to be offset by the regular day off.

In 2019, the number of P-12 school districts adopting the four-day school week grew to 560 across 25 states (NCSL, 2020). This represented a significant increase since 2016 when approximately 120 districts across 21 states had adopted the four-day school week (Walker, 2019). Rural school districts have historically been the primary adopter of the compressed school schedule (Brown, 2019; Walker, 2019). Primarily viewed as a cost-savings tool, four-day school weeks have been sporadically adopted within many states west of the Mississippi River, with the majority of school districts being smaller and located in rural areas (Delisio, 2019; Donis &

Silvernail, 2009; Griffith, 2011; Heyward, 2017; Heyward, 2018; NCSL, 2020; Reichert, 2015; Turner et al., 2018; Walker, 2019).

Each school district has their own motives for adopting such a policy, but the most common justifications for adopting the four-day school week are cost-savings (Donis & Silvernail, 2009; Griffith, 2011), improved morale (Donis & Silvernail, 2009), teacher retention (Walker, 2019), teacher recruitment (Heyward, 2017), and reduced absenteeism (Heyward, 2017). Increased popularity of the four-day school week has not prevented criticism. Particular areas of concern exist around inequitable outcomes for students, challenges for lowest grade levels, child care issues, food insecurity, mixed results for academic achievement, and increased juvenile crime.

Some universities and community colleges implemented four-day schedules for reasons ranging from cost savings strategy to improved efforts for student recruiting (Bothwell, 2019; Cardinale, 2013; Moltz, 2008; Toppo, 2018; Zarella, 2008). A number of colleges have experimented with the four-day schedule over the summer semester, in order to evaluate effects of the compressed schedule, along with getting feedback from stakeholders. According to Toppo (2018), the University of Mobile encourages students to use the non-school day, known as “Focus Fridays,” as a day of volunteering, mentoring, or participating in work-based experiences. After implementing the four-day schedule over the course of an academic year, Brevard Community College lowered utility costs by \$474,000 (Moltz, 2008).

CHAPTER III: RESEARCH METHODOLOGY

This chapter provides the research methodology for a qualitative study investigating community college employee perceptions of the four-day schedule as an institutional strategy for community colleges. The study examined Missouri community college employees' attitudes toward the four-day schedule, while exploring perceived enrollment growth opportunities through the institutional strategy that are not commonly utilized. Provided within this chapter are the research design, purpose of the study, research questions, population, sampling procedures, participants, risk, voluntary participation, confidentiality and anonymity, data collection and instrumentation, and variables in the study.

Research Design

This study utilized qualitative research to investigate community college employee perceptions of the four-day schedule as an institutional strategy for community colleges. Qualitative research methods are useful “when little information exists on a topic” and “when a theory is inadequate or missing” (Leedy & Ormrod, 2010, p. 135). In the case of this study, the researcher found little information relating to four-day schedule usage as an institutional strategy for community colleges. A qualitative study allowed exploration into theories related to community colleges using four-day schedules for competitive advantages. According to Peshkin (1993), qualitative research studies serve at least one purpose relating to the description, interpretation, verification, and evaluation of the research topic. Elements of interpretation and verification were provided within this study, as the researcher sought theoretical perspectives, and testing the validity of assumptions relating to community colleges using four-day schedules as an institutional strategy.

Grounded theory studies seek to construct a theoretical framework in connection with data collected within the field of study (Leedy & Ormrod, 2010). The nature of grounded theory studies is useful when theories related to the research topic are inadequate or nonexistent (Leedy & Ormrod, 2010), which was the case of this study. Interviews are the primary source of data collection methods for grounded theory studies, providing opportunities to capture “perspectives and voices of the people being studied” (Leedy & Ormrod, 2010, p. 142). Data collection was needed to learn as much as possible from the research participants in order to saturate necessary categories related to the study (Leedy & Ormrod, 2010).

A survey was distributed to Missouri community college employees for the purpose of obtaining demographic information in order to identify participants for the study. Demographic categories included age range, position title, employer, years of service in current position, years of total service in community colleges, other positions held in higher education, and email address. Leedy and Ormrod (2010) describe interviews as a way to collect useful information for qualitative research, particularly “facts, beliefs, perspectives, feelings, motives, present and past behaviors, standards for behavior, and conscious reasons for actions or feelings” (p. 148). Qualitative research interviews are “rarely as structured as the interviews conducted in a quantitative study” (Leedy & Ormrod, 2010, p. 148). To produce comparative data, semi-structured interviews were utilized involving central questions while also providing participants opportunity to share information not prompted from interview questions (Leedy & Ormrod, 2010).

Purpose of the Study

This study investigated community college employee perceptions of the four-day schedule as an institutional strategy for community colleges. The study examined Missouri

community college employees' attitudes toward the four-day schedule, while exploring perceived enrollment growth opportunities through the institutional strategy that are not commonly practiced.

Research Questions

This study addressed two research questions:

1. According to community college employees' perceptions, how would the four-day schedule fare as an institutional strategy creating competitive advantages in student recruitment for the community college in which they work?
2. Considering increased adoption rates of the four-day schedule in P-12, what changes are being made, if any, to student recruitment by community colleges?

Population

Twelve community colleges exist in the state of Missouri with established geographical boundaries for the purpose of serving diverse regional needs (Missouri Community College Association [MCCA], n.d.). According to the Missouri Department of Higher Education and Workforce Development [Missouri DHEWD] (n.d.), St. Louis Community College was the largest community college in the state based on full-time equivalent (FTE) student data for 2020, showing enrollment of 8,935. In contrast, North Central Missouri College was the smallest community college in Missouri with FTE student enrollment of 1,014 in 2020 (Missouri DHEWD, n.d.). Average enrollment between Missouri community colleges in 2020 was 3,848 (Missouri DHEWD, n.d.). The dissimilarity in enrollment between Missouri community colleges caused significant variance in the number of employees between the largest and smallest institutions. Each community college in the state of Missouri employs an CFO, whereas the number of employees in each organizational department will vary according to the size of the

institution, translating to inconsistencies in the number of participants from each community college. Collectively, Missouri community colleges employ approximately 5,000 individuals (B. Millner, personal communication, March 6, 2021), which represents the population for this study.

Sampling Procedures

The researcher used purposeful sampling techniques yielding the most information about the topic under investigation (Leedy & Ormrod, 2010). Theoretical sampling was utilized to identify data sources developing a theory related to this study's research questions (Leedy & Ormrod, 2010). To reinforce the study's theory development, the researcher utilized discriminate sampling to validate a theoretical concept (Leedy & Ormrod, 2010). Saunders et al. (2018) describes saturation for qualitative studies as "the point where further data collection becomes counterproductive, while not necessarily adding anything to the overall story or theory" (p. 1900). Saturation for this study was expected to occur between 15 to 20 study participants.

Validity

Internal and external validity were considered in the study's research design. According to Leedy & Ormrod (2010), internal validity describes the extent to which a research study's design allows the researcher to draw accurate conclusions. The use of theoretical and discriminate sampling techniques caused threats to the internal validity for this study. External validity describes the extent to which a research study's conclusions can be generalized to other contexts (Leedy & Ormrod, 2010). This study involved participants from Missouri community colleges, consisting primarily of institutions from rural areas, which may provide a threat to the external validity.

Participants

This study sought participation from each Missouri community college in the areas of chief financial officer (CFO), admissions, and federal TRIO programs. The researcher utilized his professional network to recruit participants through email communication (Appendix B), which included a survey invitation, along with a request to participate in a 15- to 20-minute Zoom interview. Four individuals from the researcher's professional network forwarded the email to co-workers, encouraging participation in the study. Subsequently, the number of responses were higher from these community colleges than others where the study was not promoted.

Fifty-one emails were sent with an invitation to participate in the study with 26 survey responses collected, providing a response rate of 50.9%. Emails were sent between December 8, 2021 and March 22, 2022. Two survey responses indicated the individuals did not want to participate in the study. One individual submitted a duplicate of their survey response. Three individuals did not respond to the researcher's attempts to schedule a Zoom interview after submitting a survey response and expressing willingness to participate in an interview. Twenty participants were interviewed for this study. Interviews were scheduled between February 11, 2022 and April 1, 2022.

Risk

Participants in this study were asked to complete a survey (Appendix G), while also agreeing to be interviewed. As a result, study participants were exposed to no more than minimal risk, as described by Murray State University's Institutional Review Board (IRB). The survey and interview were conducted online, meaning participants faced no greater risk than typically encountered in the routine of daily life. The researcher made every effort to protect the

anonymity of study participants. However, the topic of the study did not involve controversial subject matter nor did the study place participants in compromising circumstances.

Voluntary Participation

Participation in this study was voluntary and withdrawal from the study could occur any time without penalty. This information was conveyed within the “Informed Consent Form” (Appendix F) of the study’s survey. Direct benefits were not provided for study participation. General benefits came from involvement in a research study while findings and opinions from this study will be shared with participants.

Confidentiality and Anonymity

The researcher protected the integrity of the study by ensuring data security maintains the confidentiality and anonymity of study participants. The survey was administered through Survey Monkey (Appendix A), which uses industry-recognized data security standards to protect users’ information (“Data Security and Compliance,” n.d.). Interviews were conducted through the researcher’s password protected Zoom account. To ensure the accuracy of data, the researcher requested permission from the study participant to record the interview session. Recorded interviews were stored on a secured network, accessible to the researcher through password protection. Efforts of anonymity took place by removing personally identifiable information from the study. All artifacts related to the study will be destroyed after three years to minimize any potential risk relating to confidentiality and anonymity.

Data Collection and Instrumentation

This study was approved for a Level One categorical review by Murray State University’s IRB (Appendix D), as the study involved “no more than minimal risk to participants”, while using survey and interview procedures for data collection (“Procedures and

Guidelines,” n.d., Section 6.1). Upon receiving approval from Murray State University’s IRB, the researcher’s professional network was utilized to recruit study participants. Prospective study participants were sent an email (Appendix B) with a description of the research study, along with an invitation to participate through the survey hyperlink. The survey (Appendix G) provided the informed consent form (Appendix F) within the first section. Participants were required to express their willingness to participate in the study in order to advance onto subsequent survey questions. If a participant indicated they were not interested in participating in the study, the survey redirected to a closing page or the participant could close the survey webpage. The survey also included questions regarding demographic information in an effort to gain more insight into participant’s experiences. These questions (Appendix G) included age range, position title, employer, years of service in current position, years of total service in community colleges, other positions held in higher education, and email address.

After the initial email invitation, the researcher sent a follow up email (Appendix C) inviting participation in the study to prospective participants who did not respond after two weeks. Participants acknowledging consent and expressing a willingness to be involved in the study were contacted by the researcher through email. Upon contacting the study participant, the researcher scheduled an interview at an agreeable date and time for both parties. Initial IRB approval allowed data collection through March 6, 2022. When scheduling interviews with study participants, the researcher requested, and was approved, an amendment (Appendix E) to the IRB approval, allowing data collection to be extended until December 5, 2022. Providing convenience for the study participant, the researcher facilitated the interview through Zoom, allowing the participant to remain in the comfort of their workspace or home during the

interview. The researcher requested permission to record each interview session in an effort to ensure the accuracy of collected data.

To provide consistency when facilitating the interviews, a semi-structured interview approach was utilized by asking central questions (Appendix H), while allowing the study participant to share their experiences and insights through a discussion-based approach. This allowed the interviews to be more information-rich without feeling constrained by a rigid interview format.

Variables in the Study

Through a qualitative research study, the researcher used interviews to collect data based on “facts, beliefs, perspectives, feelings, motives, present and past behaviors, standards for behavior, and conscious reasons for actions or feelings” (Leedy & Ormrod, 2010, p. 148). Based on the human element involved in the study, responses varied due to the different experiences and beliefs held by the study’s participants.

In the state of Missouri, school districts adopting the four-day school week varies according to geographic region. The eastern region of Missouri, particularly central and southern areas, have not experienced significant adoption of the four-day school week among local school districts (Turner, 2022). Furthermore, rural school districts tend to adopt the four-day school week at higher rates than urban school districts (Turner, 2022). Subsequently, participant responses may vary depending on their experiences, or lack thereof, in working with school districts using the four-day school schedule.

Summary of the Methodology

This study utilized qualitative research to investigate community college employee perceptions of the four-day schedule as an institutional strategy for community colleges.

Qualitative research methods are useful “when little information exists on a topic” and “when a theory is inadequate or missing” (Leedy & Ormrod, 2010, p. 135). The study was approved for a Level One categorical review by Murray State University’s IRB, as the study involved “no more than minimal risk to participants”, along with using survey and interview procedures for data collection (“Procedures and Guidelines,” n.d., Section 6.1). The researcher utilized his professional network to recruit participants through email communication, which included a survey invitation, along with a request to participate in a 15- to 20-minute Zoom interview. Fifty-one emails were sent with an invitation to participate in the study with 26 survey responses collected, providing a response rate of 50.9%. Twenty participants were interviewed for the study.

CHAPTER IV: FINDINGS AND ANALYSIS

This chapter provides the findings of a qualitative study investigating community college employee perceptions of the four-day schedule as an institutional strategy for community colleges. Four-day schedules continue to grow in popularity within the P-12 sector (Heyward, 2018; Thompson et al., 2020; Walker, 2019), while being relatively unexplored within higher education, particularly among the community college sector. Information within this chapter is derived from interviews conducted with study participants. An invitation to participate in this research study was sent through email to 51 prospective participants with 26 survey responses collected, providing a response rate of 50.9%. Emails were sent between December 8, 2021 and March 22, 2022. This study included 20 participants who were interviewed, all taking place through Zoom. Each interview was recorded, with the participant's permission, to accurately capture participant responses. Interviews were conducted between February 11, 2022 and April 1, 2022.

The purpose of the study was to investigate community college employees' attitudes toward the four-day schedule, while exploring perceived enrollment growth opportunities through this institutional strategy that are not commonly practiced. The researcher's professional network is located in Missouri, making community colleges in the state the most preferred choice for recruiting study participants. Additionally, the four-day schedule continues to grow in popularity among P-12 school districts in Missouri, as 128 districts have adopted the schedule (Riley, 2022). The study was driven by two research questions:

1. According to community college employees' perceptions, how would the four-day schedule fare as an institutional strategy creating competitive advantages in student recruitment for the community college in which they work?

2. Considering increased adoption rates of the four-day schedule in P-12, what changes are being made, if any, to student recruitment by community colleges?

Presented within this chapter are data analysis procedures, findings and analysis, research question answers, themes, and additional findings.

Data Analysis Procedures

Organizing Survey Data for Analysis

This study utilized a brief survey to collect demographic information for study participants, while also using the survey to obtain informed consent. Demographic categories included age range, position title, employer, years of service in current position, years of total service in community colleges, and other positions held in higher education. Individuals expressing willingness to participate in the study were asked to provide an email address.

The researcher used a spreadsheet provided by Survey Monkey to track survey responses, along with recording email addresses for participants expressing a willingness to participate in the study. This spreadsheet allowed the researcher to categorize and analyze demographic information provided by study participants. Color coding was used to create a visual representation of the participant's demographic association.

Participation for this study came from six of Missouri's 12 community colleges. Four community colleges represented are described as rural-serving institutions, while the other two are located in the suburban region of a large metropolitan area. Of the 20 participants interviewed for the study, one held the position of CFO, 11 worked in positions related to admissions, six worked in federal TRIO programs, and two were involved with admissions and recruitment processes but categorized their position as "other".

Table 1*Participants' Years of Experience Working in Their Current Position*

	Number of Participants	Percentage of Participants
5 years or less	10	50%
6 to 10 years	6	30%
11 to 15 years	0	0%
16 to 20 years	2	10%
21 to 25 years	2	10%
Total	20	100%

Participants offered varying levels of experiences working in their current position at their respective community college. Additionally, some participants indicated they had work in different positions for their community college, giving them more years of experience working within the community college sector than is represented in the years of experience.

Table 2*Participants' Years of Experience Working in the Community College Sector*

	Number of Participants	Percentage of Participants
5 years or less	4	20%
6 to 10 years	5	25%
11 to 15 years	3	15%
16 to 20 years	3	15%
21 to 25 years	4	20%
26 to 30 years	1	5%
Total	20	100%

Organizing Interview Data for Analysis

Using Creswell's (1998) data analysis spiral, the researcher followed the process of organization, perusal, classification, and synthesis. After completing interviews for this study, the researcher transcribed participant responses from the Zoom recordings, ensuring accurate wording for each response. In the organization and perusal stages, line-by-line coding was used to organize data, while making notes about preliminary thoughts, possible categories, and developing themes. This led to the classification stage where themes and subthemes emerged from the data, which will be discussed in this chapter.

Findings

After interviewing 20 participants employed by Missouri's community colleges, themes emerged, allowing the researcher to answer this study's research questions, while also discovering more information about community college employees' attitudes toward the four-day schedule. Themes developed from the data involved the following: Serving Primarily

Commuter Students, Reducing Student Travel to Campus was High Priority; Institutional Course Schedules Should Allow Students to Maintain Employment; and Students Must Have Access to Campus Services on the Non-Scheduled Class Day.

Research Question One

Research Question One asked: According to community college employees' perceptions, how would the four-day schedule fare as an institutional strategy creating competitive advantages in student recruitment for the community college in which they work? Twelve of the 20 participants expressed belief the four-day schedule would create a competitive advantage in student recruitment for their community college. Participant 1 shared, "I believe it would be an advantage, I think students would really like it. I'm not aware of any institutions nearby that we would consider competitors that have moved to a four-day schedule." This was not the case for Participant 5 because a nearby four-year institution was using the four-day schedule. Participant 5 referenced a family relative who attended and graduated from this four-year institution saying, "(My family relative) loved it, absolutely loved it. If students knew they could get a degree with a four-day schedule, I think they would really like that. I know (my family relative) loved that schedule up at (the four-year institution)". Participant 17 also shared about students liking the four-day schedule. "Our new students, when they find out they don't have any Friday classes, they're excited and kind of blown away" (Participant 17).

Another participant referenced discussion with current community college students when discussing transfer consideration to a four-year institution. Participant 6 mentioned:

I've had feedback from students when dealing with transfer counseling. (A neighboring four-year institution) has a four-day schedule. Students really like the idea. As far as

recruitment, yes, I do think a lot of people would really like that idea of a four-day schedule (Participant 6).

A particular student population came to mind for Participant 6 when thinking about the four-day schedule. “I do think it could be advantageous, especially for our non-traditional and mid-career folks” (Participant 6).

Eleven of the 20 participants from this study say the community college where they work is already using components of the four-day schedule in course offerings. For these 11 participants, three Missouri community colleges are represented. Two of the community colleges using the four-day scheduling in course offerings are best described as rural-serving institutions. The other community college using the four-day schedule in course offerings is located in a suburban region of a large metropolitan area.

Five participants did not believe the four-day schedule would create a competitive advantage in student recruitment for their community college. Participant 20 responded by saying, “I would say ‘no’, I don’t believe it would be a deciding factor.” Participant 10 said the four-day schedule was used in course scheduling at their institution. However, this participant said the four-day schedule was not used as a student recruitment strategy, while also adding, “I don’t believe students choose us primarily for our four-day schedule” (Participant 10).

Participant 7 disagreed with the idea four-day schedules would create a competitive advantage in student recruitment for their institution, while mentioning:

When they go to a four-year, they’re expecting that college experience, and to be living in that college world. A lot of our (community colleges) students are like, “okay, I’m going to do this and save some money, live at home.” That’s their mindset. If we ask them to come to school every day, that’s not what they’re looking for (Participant 7).

In describing effects of the four-day schedule as a recruiting strategy, Participant 7 said:

I don't know that telling them (students) they're coming in (to class each week) four days is going to be a huge recruitment, but if we can say "you can do it in two (days each week)", that's where you might actually get more of that pull (Participant 7).

When discussing the four-day schedule and possible recruitment strategies, Participant 19 shared:

I don't know that it would make us more competitive in recruitment, but it would show our ability to adapt and meet the students' needs. Through the pandemic, we realized we can be so much more flexible than we realized. We have followed what our P-12 schools have done and we did what they needed. We also have to think about adult learners and recognize workplaces are being more flexible with work schedules, maybe that's your competitive edge in using the four-day schedule as a recruitment tool (Participant 19).

Three participants were indifferent and did not have an opinion on whether the four-day schedule would create a competitive advantage in student recruitment for their institution. Participant 8 did not feel they worked closely enough with students to provide an accurate response.

When asked if the four-day schedule would create disadvantages in the area of student recruitment, none of the participants expressed belief that it would. Participant 13 remarked, "Not really, I haven't experienced it." Participant 12 had a similar reaction saying, "Not that I can think of, (the four-day schedule) is really part of our college culture." Participant 10 also did not believe the four-day schedule created disadvantages with student recruitment, but noted concerns about the use of hybrid courses, "No, I think the only thing I've seen that creates a disadvantage is the hybrid model." Participant 8 declined to answer the question, feeling they did not have sufficient information. While participants did not express belief the four-day schedule

created disadvantages for student recruitment, most of them cited concerns causing complications in other aspects of the college. The researcher provides more detail about concerns expressed for the hybrid model and other implications of the four-day schedule in this chapter.

Research Question Two

Research Question Two asked: Considering increased adoption rates of the four-day schedule in P-12, what changes are being made, if any, to student recruitment by community colleges? Participants consistently responded that nothing was being done by their community college at an institutional level to recruit students coming from four-day schedules. Several participants described changes being made at a department level, or individually, to enhance recruitment efforts. “Nothing on an institutional level or that’s come down from leadership. My office is just being very strategic in how we’re using our Mondays and Fridays, and what we are offering for group tours and families to come visit us” (Participant 12). Participant 2 described changes being made at the department level for their community college, “There hasn’t been any major changes. It does alter our campus visit schedule when students are coming from school districts using the four-day schedule. These schools aren’t in session on Monday, so we have to make sure we’re not scheduling recruiting events at their school because of this variation.”

Due to several area high schools using the four-day schedule, Participant 12 described efforts to be mindful of area P-12 school districts operating on the four-day schedule to avoid scheduling issues:

In August, at the beginning of the school year, we audit all of our district’s academic calendars to find out what Mondays and Fridays multiple school districts are going to have off, so we can strategically plan a lot of those group events and activities (Participant 12).

Participant 10 had a similar response:

We have several schools in our area that are four-day week. Just us being mindful when we're reaching out to them, or when we're scheduling something. For example, something we started through COVID with counselors is a "lunch and learn". We were scheduling those on Mondays. Well, we had schools that were closed on Monday, so we schedule those on Wednesday. Often, Fridays are a day when they're not available (Participant 10).

By working at a community college using four-day scheduling within their course offerings, Participant 17 shared:

I don't believe (my institution) has intentionally marketed or recruited students coming from four-day schedules to our institution being that we also have the four-day schedule. When I'm in a high school recruiting, I tend to push that option of the four-day schedule. I know some colleges will stick to their traditional models. However, I believe community colleges will have to take this approach seriously (Participant 17).

Participant 16, who also works for a community college using the four-day schedule in course offerings, commented, "We recruit specifically saying we don't have classes on Fridays. We haven't recruited to students coming from the four-day schedules in high school by saying that they can take classes just four-days a week." Participant 18 described the influence of parents in student perceptions of the course offerings. "Students with parents over 40-years old typically have an expectation that they will have classes Monday, Wednesday, and Friday, and they are really surprised when they find out they don't have to meet on Fridays" (Participant 18).

Several participants expressed belief that their recruitment strategies may need to change as result of the growing adoption rate of the four-day schedule among P-12 school districts.

“Now that I think of it, it’s probably something we should be doing. I think it would definitely be worthwhile as a recruiting strategy” (Participant 16). Participant 12 added, “If more high schools go to the four-day week, we would have to start seriously talking about that.” Participant 13 stated, “I believe this will be a growing trend for community colleges as school districts adopt the four-day schedule.”

Participant 14 described their community college’s openness to reimagining all of its operational strategies, as a result of the COVID-19 pandemic:

I think we’re rethinking and retooling recruitment now that we’ve actually been allowed back in schools. I don’t know that anything is being rethought based off the growing number of schools doing the four-day week. Probably something to look at, though (Participant 14).

A couple of participants said the four-day schedule was not a growing trend among P-12 school districts in their service region. Community colleges in Missouri are given boundaries in their geographic region known as a service region. “Nothing we’re doing to work towards that because it’s not a trend we’re seeing in our area, at this point” (Participant 4). Participant 19 shared, “No, most of our schools are using the traditional five-days a week schedule.” Both participants expressed belief their community college would reconsider recruiting strategies if the four-day schedule becomes more prominent in their area. “We could potentially consider it. As a result of the pandemic, it’s caused our college to think about our strategy and being open to different ways to structure the college” (Participant 4). Participant 19 added, “If P-12 school districts start using the four-day schedule in our area, we will definitely need to consider the four-day schedule at the college and use it as a recruiting and marketing tool.”

Theme I: Serving Primarily Commuter Students, Reducing Student Travel to Campus was High Priority

Throughout the interviews, a theme emerged among participant responses describing community college efforts to reduce student travel to campus, as the majority of students served were commuting to campus for class meetings. Participant 14 described their community college as a primarily rural-serving institution with a 16-county service region, where students may spend an hour of travel time in getting to campus:

We have a large commuter population. Getting students to commute only two days a week was a huge factor in the development of our schedules, in trying to line up course offerings that would benefit the most amount of students with the least amount of travel (Participant 14).

Participant 1 shared a similar response, “Our school is a commuter-based school serving a 17-county service region, which is pretty broad. When enrolling students through advising appointments, discussion centers around minimizing the number of days traveling to campus.” Participant 6 also referenced advising discussions when discussing course selection, “We have commuter students who are open to traveling to campus fewer days.” Participant 19 discussed the need to reduce costs associated with travel:

We do have some students that drive quite a (long) ways to get here (campus). So, maybe the cost savings component where you don’t have to come to campus as often because things are expensive, gas is expensive – maybe that’s the strategy (Participant 19).

By working at a community college using the four-day scheduling in course offerings, Participant 17 referenced student preference in reducing student travel, “Commuter students really like the four-day schedule because it limits travel to campus.” Participants 9 and 13 also

worked for community colleges using the four-day scheduling in course offerings. Participant 9 described some of the rationale when switching to four-day scheduling, “We’re not a residential campus. After talking to students who were traveling, so all of them are commuting, wouldn’t it make sense, for the student’s sake, to have this Monday, Wednesday and Tuesday, Thursday?” Participant 13 referenced the effects of reduced campus travel as a result of the four-day schedule, while also mentioning the strategy of enrolling in courses that allow the fewest days on-campus as possible, “As a rural community college, it definitely helps students that have to work and limits travel to campus. It’s common for students to ‘load up’ for a two-day or four-day schedule.”

According to Participant 14, student traffic patterns have changed over the years and throughout the COVID-19 pandemic, “I would be advocating for (the four-day schedule) at least the last five years, just the way traffic patterns have changed across the years, and then especially the last two years the changes that have been brought about.” In providing reasons on why the four-day schedule may be a fit for their community college, Participant 1 shared, “Friday is really slow and there is not much traffic.”

In connection with reducing student travel to campus, a subtheme emerged in participant responses, who worked for community colleges using four-day scheduling in course offerings: the four-day schedule worked much better for recruiting adjunct faculty members, as it better accommodates their scheduling needs, while also reducing their travel to campus. Participant 10 described the four-day schedule assisting in the ability to recruit adjuncts:

I was having to hire mainly adjuncts to accommodate the (course) scheduling. Gas prices were high. Being able to offer the drive for two-days a week, rather than four, and being

able to offer the hybrid model, it really appealed to our adjuncts. It also appealed to our students, too. It worked out better for our students, too (Participant 10).

Participant 17 described the convenience of the four-day scheduling in course offerings when the community college relies heavily on adjunct faculty, “The four-day schedule makes it more attractive for finding adjunct faculty, which is particularly useful for institutions with multiple locations and a large adjunct base.” Sharing the same sentiment, Participant 9 also noted that adjunct faculty often have other jobs:

I’m at a campus location where we rely on adjuncts for so many years because I had a much smaller population of full-time faculty compared to adjuncts. It also made more sense for their schedules, as an adjunct, to be here two-days a week and getting in as much (as they could) compared to coming in three-days a week, because they also had additional jobs beyond teaching for us (Participant 9).

Theme II: Institutional Course Schedules Should Allow Students to Maintain Employment

The second theme emerging from participant responses was the need for institutional course schedules to allow students opportunity to seek and maintain employment. Participant 9 described expectations for students, both traditional and non-traditional, in the areas of producing household income and contributing to household chores:

Another shift we’ve seen over the years are these students who have to have a job. It’s a rarity to encounter a student that doesn’t have a job. A lot of them are not only living with their parents, but they’re supporting their families. They may have a parent who is unable to work or a parent they’re trying to take care of. They’re not just relying on their parent for a living space, they’re actually trying to take care of their parent at the same time (Participant 9).

Participant 19 also referenced the growing pressure for students to provide financially, while being enrolled full-time as a student, in order to maintain eligibility for Missouri's A+ scholarship program:

When I was an advisor, it blew me away how many 18- and 19-year olds came in saying, "I have a full-time job and it's not an option for me to not have a full-time job, and I also need to have a full-time (course) schedule because I have A-plus" (Participant 19).

Participant 9 worked at a community college using the four-day schedule in course offerings. In describing the trend of student's contributing toward household income, Participant 9 said, "As we began to see a shift for that, we decided (the four-day schedule) is what the students are asking for. It lends them an opportunity to have Friday, Saturday, and Sunday off (from class) to work." Participant 13, 17, and 18 also worked for a community college using the four-day schedule in course offerings, both referenced non-traditional students when discussing the four-day schedule. "I think the schedule we have helps that non-traditional student. They can get 30 hours in (at work) within three days, depending on where they work" (Participant 13). Participant 17 also mentioned the fit of the four-day schedule for non-traditional students, in addition to traditional students. "Most of our students are non-traditional. They like the four-day schedule so they can get classes on Monday and Wednesdays or Tuesday and Thursdays, then they work the rest of the time. Traditional students also like it because it works around their schedule" (Participant 17). According to Participant 18, the need to accommodate student work schedules is a major factor for using the four-day schedule at their community college, based on the high percentage of students needing to maintain employment:

The four-day week seems to work better with the students, particularly at community colleges. More than 80-percent of our students work, so it is certainly a motivating factor

knowing they have an additional weekend day. It gives them time to have a work schedule and then time to study (Participant 18).

Several participants interviewed for this study worked in community college TRIO programs. Providing perspective on students participating in Student Support Services (SSS), Participant 15 described students' work obligations and personal responsibilities:

The majority of the students I serve are working. They all at least have a part-time job, but I have quite a few students who are working full-time. There seems to be a lot of time commitment to their job and outside responsibilities that prevent them from taking advantage of SSS opportunities (Participant 15).

Referencing effects of trauma and systemic barriers, Participant 15 responded:

In dealing with community college students, particularly first-generation, low-income, and students with disabilities, I have noticed our students have had a lot of "life thrown at them", and the student is just trying their best to get their degree and to "get out". I'm guessing the four-day schedule would be a little easier on them for scheduling (Participant 15).

Participant 3 had a similar response when discussing the four-day schedule and first-generation students. "First-gen' students and low-income students are able to better support their family with more work-based opportunities. It gives these students a chance to fulfill their responsibilities outside of school" (Participant 3).

Not all participants viewed another weekend day as a positive factor for students. Participant 7 expressed concern that students would view the extra day to work more hours without considering their student obligations:

For our first-gen students whose families maybe don't understand what college requires, and how to be successful in it, they see, "oh, you only go two days a week, that means you can work the rest of this time." We're switching these classes to a hybrid-model, so you're only in class three hours a week, "that's great, you can work 40 hours a week." So, I do think there can be some disadvantage in that, especially for that student who needs that everyday campus involvement (Participant 7).

Participant 11 shared a similar belief, "Students would see it as an opportunity to work and it may diminish their focus on coursework or distract them from using campus services" (Participant 11).

Participants 7 shared concern for some student's ability to handle time management aspects of the four-day schedule:

Anything like (the four-day schedule) where students are not required to be somewhere at a certain time and have live instruction, some students can handle that really well, but some students need that regular schedule and stability to stay on-track. If they're out of habit of being in the classroom as often, it's easier to just not go (Participant 7).

Participant 15 expressed similar concern for students:

I work with 60 to 70 students. For some students, they need the structure of a five-day week. They wouldn't be able to handle the initiative and time management aspect of a four-day schedule (Participant 15).

Theme III: Students Must Have Access to Campus Services on the Non-Scheduled Class Day

The third theme emerging from participant responses involved the belief students must have access to campus services on the non-scheduled class day. Community colleges using the four-day schedule in course offerings typically utilized Friday as the non-scheduled class

meeting day. Participant 20 responded with the belief that any college initiative must prioritize student success. “There are different ways to structure the four-day schedule. If the reason is to benefit students, you have one less day to have class, but you still need campus services to encourage student success” (Participant 20).

While acknowledging concerns the four-day schedule could negatively affect students when campus services are needed, Participant 4 shared:

One of the disadvantages I would consider from the get-go is that we do have student housing on our campus. On the weekends when campus is closed, our cafeteria is also closed, so if we were adding another day to that, for our students who are experiencing food insecurities – that would just be another challenge for them. Our buildings are also locked. We do have a food pantry on-campus, but again, on the weekends if the building is locked, they can’t run in and grab something if they didn’t plan and prepare, so I think people would also find that as a struggle (Participant 4).

Participant 2 expressed the need for access to academic services on the non-scheduled class day:

On that (non-scheduled class) day, we still need to make sure those resources are accommodating students, and not affecting them being able to use the library for purposes. Just make sure that (the non-schedule class day) can be used for academic purposes. I wouldn’t want them to get the negative side of that in not being able to use those resources. If they could have tutoring services available that day, same with Library and Student Support Services – just making sure our students aren’t affected academically (Participant 2).

Participants 15 and 17 described the possible benefit of students completing coursework on the non-scheduled class day instead of staying up late at night during the week to complete coursework. “If you had one day knowing it was dedicated to doing homework instead of staying up late each night throughout the week” (Participant 15). Participant 17 shared, “(The four-day schedule) gives students Friday, Saturday, Sunday to really catch up or stay ahead with their coursework, as opposed to staying up late and completing homework.” In describing their experiences in working at a community college using the four-day schedule in course scheduling, Participant 17 added, “We have a lot of tutoring work on Fridays. Students make contact with an instructor, retake tests, or make up a test. We do most of our placement testing on Fridays.”

Participant 11 described the benefit a non-scheduled class day would create for a particular student demographic. “I have a lot of single parents (enrolled) and having Friday off would give them a scheduled study day” (Participant 11). In working at a community college using the four-day schedule in course offerings, Participant 13 also referenced scheduling advantages created for students who are single parents, as they strive to manage pressures of coursework and family responsibilities:

For those single-parent families, that’s a benefit to them. They may have time to get a few hours of work in, but they have family time. If you’re in nursing school, that’s critical. These students, they’ll be in the classroom studying after class and they’re going to be here until the building closes, and that’s their study time. That extra day gives them a little bit of family time. Otherwise, it would really be tough for them to maintain the rigor of nursing school (Participant 13).

According to Participant 3, TRIO students would benefit from the non-scheduled class day created by the four-day schedule. “For TRIO students, professional tutoring on Friday could

be a huge advantage” (Participant 3). Referencing barriers often encountered by TRIO students preventing them from utilizing campus services, Participant 3 mentioned:

It could give these students a chance to engage at a higher-level, as often college course work and TRIO support may be the only positive thing going on in the student’s life. Our students want to be a part of campus. It’s sometimes the only positive thing they’ve had in their world, that is just for them and they’re moving forward. But there is such a struggle in the life they are trying to put behind and the one they’re moving forward to. If we gave them permission to stay on campus a little longer, they would figure out ways – or their family would figure out ways to compensate without them. They don’t want to go home, but they do, and – if they could say, I can’t be there until Friday night, I think they would stay (on campus) until Friday night, gladly (Participant 3).

Additional Findings

Eighteen of the 20 participants from this study indicated the four-day schedule had been used at some point in their community college’s academic year. As previously mentioned, 11 of the 20 participants indicated their community college used the four-day schedule in course offerings throughout the academic year. Seven of the remaining nine participants from this study, where the traditional five-day school was utilized year-round, indicated their community college had preliminary discussion on using the four-day schedule throughout the academic year. All seven participants acknowledged the discussion never materialized to serious consideration for the four-day schedule.

Participant 1 expressed belief the four-day schedule being implemented during the summer semester at their community college improved employee morale. “I believe the motivation for using the four-day schedule in the summer began as an employee retention tool,

and it has continued for the last several years because it has been well-liked on campus” (Participant 1). Participant 8 spoke of their own work experiences when using four-day scheduling. “In a previous job I worked four-day weeks and I loved it. It gave me more flexibility for appointments and personal responsibilities. It gave me opportunity to get prepared for work” (Participant 8). Sharing in the belief the four-day schedule provides personal scheduling convenience for employees, Participant 2 also expressed this is a benefit for students:

I think some things that would be affected with the four-day class week it would increase students attending class because they could use the extra day to go to the doctor, the dentist, or to make those kind of appointments. Same with faculty, staff across the board – they can use those days to make appointments. Academic burnout between students and burnout with faculty and staff, I think that extra day helps give you an extra day of relief, and extra day to reset, and it could be beneficial mentally (Participant 2).

By working for a community college using the four-day schedule in course offerings, Participant 9 described professional development opportunities, as a result of the condensed schedule:

It’s truly only been a benefit because I have served as support staff for 23 years. As a support staff member, it’s very difficult for us to plan our professional development because we continually need to be here for students and instructors. Now, when we have those type of trainings and professional development, Friday lends itself an opportunity to where we don’t have those student and instructor traffic to be able to dedicate that time. It’s also helped us college-wide, because now our college-wide professional days we always have on Fridays (Participant 9).

Participant 17 also worked for a community college using the four-day schedule in course offerings, described the benefit the condensed schedule provides instructors, “It’s not just the students, but the instructors, as well. They like it. It gives them the opportunity to come in and work on extra committee things that they have, office hours, things like that.”

Several participants described potential negative effects of the four-day schedule for community college employees. Participant 6 said, “I would find it hard for someone (employer) to say you have to shift back to a four-day week, and you have to work all your hours during this time. It would be a big adjustment.” Participant 1 shared concern for employees relying on child-care throughout the work day. “From an employee standpoint, I could see where some child-care issues would come into play, as far as people not lining up with their child-care schedules, due to the extended workdays” (Participant 1). Sharing a similar belief about child-care concerns, Participant 15 said, “Students needing child-care may have particular challenges in trying to find a provider aligning with the four-day schedule.” In contrast, Participants 4 and 7 described their community colleges adopted the four-day schedule in course offerings to better support students with child-care needs. “I think for a lot of students (the four-day schedule) could be seen as advantageous. It allows an extra day of work or not having to deal with child-care” (Participant 4). When describing the motivation for adopting the four-day schedule, Participant 7 explained, “Child-care needs and student work responsibilities certainly motivated the change to the four-day model.”

As a result of the four-day schedule, course offerings typically meet Mondays and Wednesdays, or Tuesdays and Thursdays, for a 75- or 80-minute class meeting. Through the five-day schedule, course offerings meet Mondays, Wednesdays, and Fridays for a 50-minute class meeting. The topic of longer class meetings caused mixed reviews for Participant 6:

We advise a diverse group of students, traditional students, who say they can't handle being in class that long for Tuesday and Thursday courses. Students would prefer to come to class every day each week for a shorter class meeting time (Participant 6).

Participant 9 expressed the belief that longer class meetings were beneficial for teaching and learning:

Let's use the example of a Math class. If you're in there for 55-minutes, instructors and myself, after visiting with students, would learn you felt like you weren't in there long enough because you would really be getting deep into the material and then it would be time to talk about what the homework assignment is, and then "see you next time". Not a lot of time to provide a lot of examples in class. There just wasn't enough time in that 55-minutes. The two-days a week, it lends itself time to do that (Participant 9).

Having utilized the four-day schedule in course offerings, Participant 10 discussed the findings of their investigation into the four-day schedule compared to the traditional five-day schedule:

We didn't find a big change or adjustment with our student success rates. When we looked at that, we were concerned because our enrollment tended to be higher on Monday, Wednesday, Friday, but really, we offered more classes on Monday, Wednesday, Friday, so students were having to take that model to get their full schedule in. Students really like that two-days a week, if they can do that (Participant 10).

From an advising perspective, Participant 4 shared about the difficulty of student advising:

If you're going to a four-day a week schedule, that means you have classes two-days a week – Monday, Wednesday, and Tuesday, Thursday – and just changing that schedule,

we have a fair number of students to manage to fit classes into just Monday, Wednesday, Friday because they're only 50 minutes, and it doesn't seem tedious or overwhelming, but the minute you start making those classes 75 minutes, it's a lot harder to get your full schedule in (Participant 4).

A couple of participants expressed concern for TRIO students to utilize services, as a result of the four-day schedule. Participant 4 said, "The four-day schedule places greater restrictions on TRIO's ability to schedule meaningful student engagement events and participate in relationship building activities." Participant 15 shared a similar belief, "The students I serve have a lot going on, so (the four-day schedule) would make it harder for me to meet with students." Being able to regularly meet with TRIO students helps in relationship building for Participant 4, which allows the student to trust the advisor:

The reason that TRIO works is because we build close relationships with our students. We have that luxury. The way we do that is having meaningful connections with them, whether it's a conversation, or an event. I think that's important, because once that happens, the rest of it falls into place, academically, pretty well (Participant 4).

Participant 10 also shared concerns about student advising challenges with the hybrid model:

Our students will pick face-to-face or virtual first, and then hybrid, if they have to. Hybrid really is something our faculty often prefer. When we're working with students, we're seeing where they are going to get more face-to-face time, whether it's virtual or in-seat, and then their last option is that hybrid model (Participant 10).

According to Participant 10, student advising gets complicated when the course delivery does not match student needs:

Those of us putting students in classes get frustrated with the faculty because “why is this not being offered two-days a week?” Students really don’t want the hybrid model. I can’t say that I’ve had a student ask for the hybrid over another option, it’s just this the only option for your schedule. They don’t say, “oh, I don’t want to do it,” but you can tell they’re not happy about it (Participant 10).

Being primarily commuter-based community colleges, participants did not express significant concern about potentially diminished student engagement opportunities for campus engagement activities. Participant 3 described their community college campus engagement efforts:

I know on our campus, when we have an event, Monday nights are bad because students are getting into the swing of things (for the week). We can’t do it Thursday night because students all go home. So, that leaves only Tuesday and Wednesday for us to have something in the evenings to accommodate students (Participant 3).

Participant 10 shared that their campus engagement activities often receive little student participation:

We have definitely noticed a change in campus life. It’s really hard at some locations, it’s different. At our (campus) location, it’s really Health Science focused. At that campus, we really have a hard time getting students even to eat free hamburgers or hot dogs. They don’t stop for anything, they will get in their cars and drive over to McDonald’s. We have pork producers come in and they donate high quality meat, and – it’s hard to get them involved in anything campus life (Participant 10).

Participant 17 described, “Our students typically have other responsibilities keeping them from taking advantage of student organizations and (campus) engagement opportunities.”

Summary of the Findings

After interviewing 20 participants employed by Missouri's community colleges, themes emerged, allowing the researcher to answer this study's research questions, while also discovering more information about community college employees' attitudes toward the four-day schedule. Research Question One asked: According to community college employees' perceptions, how would the four-day schedule fare as an institutional strategy creating competitive advantages in student recruitment for the community college in which they work? Twelve of the 20 participants expressed belief the four-day schedule would create a competitive advantage in student recruitment for their community college. Research Question Two asked: Considering increased adoption rates of the four-day schedule in P-12, what changes are being made, if any, to student recruitment by community colleges? Participants consistently responded that nothing was being done by their community college at an institutional level to recruit students coming from four-day schedules. Several participants described changes being made at a department level, or individually, to enhance recruitment efforts.

Themes developed from the data involved the following: Serving Primarily Commuter Students, Reducing Student Travel to Campus was High Priority; Institutional Course Schedules Should Allow Students to Maintain Employment; and Students Must Have Access to Campus Services on the Non-Scheduled Class Day. Eleven of the 20 participants from this study say the community college where they work are already using components of the four-day schedule in course scheduling. For these 11 participants, three Missouri community colleges are represented. Eighteen of the 20 participants from this study indicated the four-day schedule had been used at some point in their community college's academic year. As previously mentioned, 11 of the 20 participants indicated their community college used the four-day schedule in course offerings

throughout the academic year. Seven of the remaining 9 participants from this study, where the traditional five-day school was utilized year-round, indicated their community college had preliminary discussion on using the four-day schedule throughout the academic year. All seven participants acknowledged the discussion never materialized to serious consideration for the four-day schedule.

CHAPTER V: DISCUSSION AND CONCLUSIONS

The purpose of this study was to investigate community college employee perceptions of the four-day schedule as an institutional strategy for community colleges. Utilizing a qualitative research design, the study examined Missouri community college employees' attitudes toward the four-day schedule, while exploring perceived enrollment growth opportunities through the institutional strategy that are not commonly practiced. The researcher's professional network is located in Missouri, making community colleges in the state the most preferred choice for recruiting study participants. Additionally, the four-day schedule continues to grow in popularity among P-12 school districts in Missouri, as 128 districts have adopted the schedule (Riley, 2022). Presented within this chapter are the summary of the study, conclusions, relationship of conclusions to other research, discussion, practical significance, P-20 implications, limitations of the study, and recommendations for future research.

Summary of the Study

Given budgetary constraints and the need for enrollment, community colleges have explored the idea of using a four-day schedule for various reasons (Bothwell, 2019; Cardinale, 2013; Chen, 2020; Ellen, 2011; Moltz, 2008; Toppo, 2018; Wallace, 1981). Four-day schedules are increasingly prevalent within P-12 school districts across the country, as the number of districts adopting the model increased from 120 to 662 between 2016 and 2019 (Thompson et al., 2020; Walker, 2019). In the face of enrollment declines (American Association of Community Colleges [AACC], n.d.; Barrington, 2020; Schwartz, 2020) and state funding cuts (Lorenzo, 2018), community colleges search for institutional strategies, such as the four-day schedule, to gain competitive advantages in student recruitment and enrollment growth opportunities.

Attempting to utilize institutional strategy for the purpose of overcoming operational deficits, the four-day schedule has been piloted at a number of community colleges in recent years, with each institution having unique motives for exploring the model (Chen, 2020). Most community colleges rely upon generated tuition and fees for a significant portion of the budget, meaning enrollment growth is vital to an institution's operational viability (Chen, 2020). Institutional strategies leading to enrollment growth are major priorities for many community colleges (Chen, 2020). A community college and four-year private college have adopted the four-day schedule year-round believing the institutional strategy improves recruitment efforts (Alsup, 2019; Ellen, 2011; Toppo, 2018). However, no evidence was discovered to support this claim. Therefore, the problem driving this study was the lack of research involving the four-day schedule to improve student recruitment efforts for community colleges.

An invitation to participate in this research study was sent through email to 51 prospective participants with 26 survey responses collected, providing a response rate of 50.9%. This study included 20 participants who were interviewed, with all interviews taking place through Zoom. Of the 20 participants interviewed for the study, one held the position of CFO, 11 worked in positions related to admissions, six worked in federal TRIO programs, and two were involved with admissions and recruitment processes, categorizing their position as "other". Using Creswell's (1998) data analysis spiral, the researcher followed the process of organization, perusal, classification, and synthesis, in order to answer the study's research questions, while also developing emerging themes from the data. Creswell's (1998) data analysis method provided a systematic approach to data analysis and interpretation, which minimized the researcher's bias within the findings.

Research Question One

Research Question One asked: According to community college employees' perceptions, how would the four-day schedule fare as an institutional strategy creating competitive advantages in student recruitment for the community college in which they work? Twelve of the 20 participants expressed belief the four-day schedule would create a competitive advantage in student recruitment for their community college. Participants 1, 5, and 17 strongly believed the four-day schedule would make a difference in student recruitment for community colleges.

Participant 1 shared, "I believe it would be an advantage, I think students would really like it. I'm not aware of any institutions nearby that we would consider competitors that have moved to a four-day schedule." Participant 5 referenced a family relative who attended and graduated from this four-year institution saying:

(My family relative) loved it, absolutely loved it. If students knew they could get a degree with a four-day schedule, I think they would really like that. I know (my family relative) loved that schedule up at (the four-year institution) [Participant 5].

Participant 6 also described the desirability of the four-day schedule at a neighboring four-year university among students when discussing transfer options during advising conversations. In describing effects of the four-day schedule as a recruiting strategy, Participants 7 and 19 expressed doubt that the four-day schedule would create a competitive advantage in student recruitment for their community college, while acknowledging that students would like aspects of the schedule.

Research Question Two

Research Question Two asked: Considering increased adoption rates of the four-day schedule in P-12, what changes are being made, if any, to student recruitment by community

colleges? Participants consistently responded that nothing was being done by their community college at an institutional level to recruit students coming from four-day schedules. Participant 12 described, “Nothing on an institutional level or that’s come down from leadership. My office is just being very strategic in how we’re using our Mondays and Fridays, and what we are offering for group tours and families to come visit us.” Participants 2 also referenced changes being made at a department level to enhance recruitment efforts for P-12 school districts having adopted the four-day schedule.

Despite their community college not using the four-day schedule as a recruitment strategy even though the institution uses the scheduling strategy in course offerings, Participant 17 described their personal effort to intentionally use the four-day schedule as a recruitment strategy when visiting high schools:

I don’t believe (my institution) has intentionally marketed or recruited students coming from four-day schedules to our institution being that we also have the four-day schedule. When I’m in a high school recruiting, I tend to push that option of the four-day schedule. I know some colleges will stick to their traditional models. However, I believe community colleges will have to take this approach seriously (Participant 17).

Several participants acknowledged that their community colleges would need to consider changing recruitment strategies if the adoption rate of the four-day schedule continues to grow among P-12 school districts. Participant 16 works for a community college using the four-day schedule in course offerings, but the institution is not using scheduling strategy for student recruitment. “Now that I think of it, it’s probably something we should be doing. I think it would definitely be worthwhile as a recruiting strategy” (Participant 16). Participant 12 shared, “If more high schools go to the four-day week, we would have to start seriously talking about that.”

Participant 13 expressed a similar belief, “I believe this will be a growing trend for community colleges as school districts adopt the four-day schedule.”

Theme I: Serving Primarily Commuter Students, Reducing Student Travel to Campus was High Priority

In answering this study’s research questions, the data revealed three major themes relating to community college students. Theme I – “Serving Primarily Commuter Students, Reducing Student Travel to Campus was High Priority” – was the first theme emerging from the data. Participants 1, 6, 9, 13, 14, 17, and 19 emphasized the importance of reducing student travel to campus for community colleges. The four-day schedule allows courses to be offered Monday/Wednesday or Tuesday/Thursday, according to Participant 6. As a result, students may enroll in a course schedule for two days each week:

We have a large commuter population. Getting students to commute only two days a week was a huge factor in the development of our schedules, in trying to line up course offerings that would benefit the most amount of students with the least amount of travel (Participant 14).

Participants 1 and 14 described their community colleges as rural-serving institutions, where service regions were 17- and 16-counties, respectively. As a result of the large service regions, Participant 14 described, “students may spend an hour of travel time in getting to campus.” By working at a community college using the four-day scheduling in course offerings, Participant 17 referenced student preference in reducing student travel, “Commuter students really like the four-day schedule because it limits travel to campus.” Participant 19 also referenced the long drive some students make in getting to campus, while mentioning the need to reduce travel costs for students:

We do have some students that drive quite a (long) ways to get here (campus). So, maybe the cost savings component where you don't have to come to campus as often because things are expensive, gas is expensive – maybe that's the strategy (Participant 19).

Theme II: Institutional Course Schedules Should Allow Students to Maintain Employment

Theme II – “Institutional Course Schedules Should Allow Students to Maintain Employment” – also emerged from the data. Participants 3, 9, 13, 15, 17, 18, 19 discussed the need for institutional course scheduling allowing students opportunity for employment. Participants 9 and 19 described the growing number of students, both traditional and non-traditional, experiencing pressure to contribute financially to household income by working full-time or close to full-time, while being enrolled as a full-time student, in order to maintain eligibility for Missouri's A+ scholarship program. Participant 9 described the financial need communicated by students:

When I was an advisor, it blew me away how many 18- and 19-year olds came in saying, ‘I have a full-time job and it's not an option for me to not have a full-time job, and I also need to have a full-time (course) schedule because I have A-plus (Participant 19).

In working for community colleges using the four-day schedule in course offerings, Participants 9, 13, 17, and 18 referenced the advantage students have in working more hours on the extra weekend day. Participant 18 made the following claim:

The four-day week seems to work better with the students, particularly at community colleges. More than 80-percent of our students work, so it is certainly a motivating factor knowing they have an additional weekend day. It gives them time to have a work schedule and then time to study (Participant 18).

Participants 3 and 15 viewed the extra weekend day as an advantage for TRIO students, who often face pressures with work and personal responsibilities. “First-gen’ students and low-income students are able to better support their family with more work-based opportunities. It gives these students a chance to fulfill their responsibilities outside of school” (Participant 3). Expressing concern with the opportunity to work more hours through the four-day schedule, Participants 7, 11, and 15, shared that students may not understand the demands of being a full-time college student, while not being able to handle time management aspects with near full-time work schedules.

Theme III: Students Must Have Access to Campus Services on the Non-Scheduled Class Day

Theme III – “Students Must Have Access to Campus Services on the Non-Scheduled Class Day” – was the final theme emerging from the data. Participants 2, 3, 4, 11, 15, 17, and 20 acknowledged a crucial component to the four-day schedule is maintaining student access to campus services on the non-scheduled class day. Participant 2 described the need to design the non-scheduled day with student access to campus services:

On that (non-scheduled class) day, we still need to make sure those resources are accommodating students, and not affecting them being able to use the library for purposes. Just make sure that (the non-schedule class day) can be used for academic purposes. I wouldn’t want them to get the negative side of that in not being able to use those resources. If they could have tutoring services available that day, same with Library and Student Support Services – just making sure our students aren’t affected academically (Participant 2).

With student success in mind, Participants 3, 17, and 20 also described the need for academic services to be accessible to students on the non-scheduled class day.

The data suggests Friday is the most common non-scheduled class day for community colleges and higher education institutions. Participant 4 expressed concern for students experiencing food insecurity on the non-scheduled class day, if campus services were not available:

One of the disadvantages I would consider from the get-go is that we do have student housing on our campus. On the weekends when campus is closed, our cafeteria is also closed, so if we were adding another day to that, for our students who are experiencing food insecurities – that would just be another challenge for them. Our buildings are also locked. We do have a food pantry on-campus, but again, on the weekends if the building is locked, they can't run in and grab something if they didn't plan and prepare, so I think people would also find that as a struggle (Participant 4).

Conclusions

Student Recruitment

This study suggests the institutional strategy of using the four-day schedule would create competitive advantages in student recruitment for community colleges, particularly for commuting and employed students. Of the community colleges using the four-day schedule in course offerings from this study, none of them are strategically marketing the four-day schedule at an institutional-level, resulting in an unexplored opportunity to enhance institutional strategy involving student recruitment. For community colleges where the four-day schedule is being utilized, students appear to respond favorably to the schedule.

Commuter Students

Findings from this study suggest the four-day schedule allows community colleges to reduce the number of times a commuter student travels to campus each week, relieving costs

associated with commuting. Four of the six community colleges represented in this study are considered rural-serving institutions, meaning students from these rural community colleges may travel by car for up to an hour in getting to campus. This study's findings also produced concern regarding the longer class meetings, as a result of the four-day schedule.

Employed Students

This study's findings suggest the four-day schedule improves the student experience for employed students, as they are able to balance the demands of a work schedule and coursework more effectively. However, concern was raised regarding the belief some students may choose to work more hours, while neglecting coursework, as a result of the opportunity to work additional hours. Findings from this study also described the growing number of traditional students who are employed full-time, or working significant hours per week, while enrolled as a full-time student, suggesting the four-day schedule could improve community college student retention and persistence rates. Community colleges using the four-day schedule in course offerings from this study described advantages for non-traditional students in the areas of scheduling flexibility, time management, and increased work opportunity.

Campus Services

With student success a priority, this study's findings revealed community colleges utilizing the four-day schedule must provide student access to campus services on the non-scheduled class day. This study's findings suggest the four-day schedule could allow TRIO students and employed students greater levels of engagement with campus services, which provides community colleges an opportunity to improve retention and persistence rates.

Relationship of Conclusions to Other Research

This study supports, and expands upon, conclusions from other literary sources regarding use of the four-day schedule in community colleges. Ellen (2011) presented findings of a survey administered to employees of Southeastern Community College based on their opinions of the four-day schedule piloted during the summer semester. Two of the three common employee responses in the survey referenced “students appreciated commuting one less day” and “students were glad to have another day to earn money” (Ellen, 2011, p. 3). Both responses align with this study’s conclusions, presented as Theme I and II, which describe the belief community colleges should reduce student travel to campus and institutional course schedules should allow students to maintain employment.

Facing a financial crisis and declining enrollment (Nanfria, 2019), Walla Walla Community College adopted the four-day schedule with the belief students would benefit from greater scheduling flexibility between work and family, while also saving gas money (“Walla Walla,” 2019). College officials believed students would benefit from having one fewer class day each week, as a result of the four-day schedule, by having additional time to study and complete coursework. Unlike other community colleges described in this study, Walla Walla Community College selected Wednesday as the non-scheduled class day. Much like Walla Walla, Brevard Community College officials adopted the four-day schedule year-round after piloting the model throughout the summer semester for two years in a row, believing it improved the work-life balance for college employees and students (Moltz, 2008). Findings from this study support claims from Walla Walla Community College and Brevard Community College officials expressing belief that the four-day schedule provides greater scheduling flexibility among

students' work and family obligations, while also allowing additional time for studying and completing coursework.

Several college presidents expressed the belief that the four-day schedule enables their colleges to attract more students. Brevard Community College president, James Drake, credited the four-day schedule for attracting and retaining more students (Zarrella, 2008). Likewise, University of Mobile president, Fred Wilson, attributed the four-day model for providing a recruiting benefit for prospective students (Bothwell, 2019). Itawamba Community College president, Jay Allen, also believes the four-day schedule can attract new students (Alsup, 2019). The researcher was unable to locate statistical evidence substantiating advantages in student recruitment, as described, which prompted the need for this study. The findings for Research Question One affirmed the perception that four-day scheduling would create competitive advantages in student recruitment for community colleges, particularly for commuting and employed students.

Wallace's (1981) research study of the four-day schedule conducted at an Illinois community college, College of DuPage, utilized surveys administered to students who experienced the four-day schedule during a summer semester pilot program. Survey results revealed frustration among students, as a result of computer labs not being accessible on Fridays, which was the non-scheduled class day (Wallace, 1981). Dedicated computer labs were a common academic service provided on college campuses in the 1980s, as Wallace's (1981) findings suggest. In present day, computer access and wireless internet connectivity for student electronic devices, are typically embedded within academic service areas without the need for a dedicated "computer lab" space.

Adopting the four-day schedule year-round, Itawamba Community College promoted the opportunity for students to meet one-on-one with faculty and staff on Fridays, the non-scheduled class day (Alsup, 2019). Additionally, the University of Akron also adopted the four-day schedule, while encouraging students to utilize academic services on Fridays, in an effort to improve student achievement (The University of Akron, 2018). University of Akron officials stressed the importance of using the non-scheduled class day for cooperative education, practical work experiences, hands-on learning, volunteering, tutoring, research, co-curricular activities, and community service (The University of Akron, 2018). These examples of utilizing campus services on the non-scheduled class day are supported by this study's findings, as Theme III conveyed the desire that students must have access to campus services on the non-scheduled class day, which includes academic services such as the library, tutoring center, and TRIO programs.

During the four-day schedule summer pilot, Wallace (1981) also described efforts to track fuel savings from commuting employees and students, as a result of traveling to campus one fewer day per week. While the cost equivalent of the fuel savings would equal more today due to inflation, the inclusion of reducing travel costs in the research study is important to note, as this was also mentioned in Ellen's (2011) study of the four-day schedule. Findings from this study, as communicated in Theme I, also described the importance of reducing student travel to campus, along with reducing associated travel costs.

Discussion

Compared to the P-12 sector, research on the use of four-day schedules within higher education is sparse. This study provides further investigation of the four-day schedule within the community college sector. Given recent enrollment declines (American Association of

Community Colleges, n.d.; Barrington, 2020; National Student Clearinghouse, 2021; Schwartz, 2020) and state funding cuts (Lorenzo, 2018), community colleges search for institutional strategies to gain competitive advantages in student recruitment and enrollment management, in an attempt to generate tuition for the purpose of remaining financially solvent (Chen, 2020).

This study's findings suggest the four-day schedule could provide community colleges a competitive advantage in student recruitment. In the literature review, several community college presidents expressed the perception that the four-day schedule helped their institution attract and recruit students (Zarrella, 2008; Bothwell, 2019; Alsup, 2019). However, the researcher was unable to find any statistical evidence supporting this claim, which prompted the need for this study. Some community colleges may be better suited for the four-day schedule, as compared to others, and future research could explore that question.

Of particular interest are the advantages the four-day schedule creates for institutions with a high percentage of commuter students and with minimal campus housing, which are typically the case for rural-serving community colleges. As presented in this study, rural community colleges often provide services across many counties throughout their region, requiring students to make long commutes from home to campus. The four-day schedule could reduce the number of times a student commutes to campus each week, while reducing associated travel costs. This finding supports Ellen's (2011) study, which referenced students' appreciation for traveling to campus one less day each week. Reducing the number of days per week a student needs to visit campus may make it more feasible for unenrolled students to enroll through the four-day schedule.

Interestingly, findings from this study revealed several Missouri community colleges are already using the four-day schedule as an institutional strategy in their course offerings. As a

result, students can choose to enroll in a schedule where they attend classes only two days each week. Typically, the scheduling was described as Monday/Wednesday or Tuesday/Thursday. Students having the ability to schedule classes for just two days a week prompted mixed reviews from participants in this study. Concern was expressed for the longer class meetings, which typically meet for at least 75-minutes. As mentioned in the findings, this could cause particularly long days for some students, who may struggle to remain engaged in course activities, as a result. Emerging from the findings was the concern that longer class meetings may cause inequitable outcomes for students receiving accommodations through accessibility services. This question deserves further research inquiry.

An unexpected finding was the perception that four-day schedules enable community colleges to recruit adjunct faculty more effectively, as it typically works better for their schedules, with many adjuncts having other jobs. This benefit is particularly useful for institutions relying heavily on adjunct faculty in course scheduling. The non-scheduled class day also provides an opportunity for professional development among community college employees, as suggested in the findings. Some concerns were expressed among participants regarding faculty involvement on the non-scheduled class day. If faculty are not expected to be involved in supporting students on the non-scheduled class day, this could cause friction among employee groups.

Student access to campus services on the non-scheduled class day is a critical component of the four-day schedule, as institutional strategy should always prioritize student success. Failure to provide campus services on the non-scheduled class day could negatively affect the student experience, along with hindering student achievement. Wallace's (1981) study shared student dissatisfaction when access to computer labs was not allowed on the non-scheduled class

day during the College of DuPage's pilot of the four-day schedule. Likewise, findings from this study suggest students must be able to access academic services, such as the library, tutoring center, and TRIO programs. Concerns were also mentioned for students experiencing food insecurity, if campus food services are not provided on the non-scheduled class day.

While the four-day schedule seems to be a good fit for most commuter students, it causes concern for students living in campus housing, particularly for those unable to travel home on weekends or holidays. If the community college does not provide campus engagement events, the four-day schedule could cause long weekends, which are particularly isolating for some student populations. Without campus engagement activities accounting for the extra weekend day, campus life could be diminished.

This study supports Ellen's (2011) findings, which found that students appreciated having one more day to earn money. Participants from this study described the growing number of students who are employed full-time, or working significant hours per week, while being enrolled as a full-time student, as a result of growing financial pressures from home. The non-scheduled class day provides opportunity for employed students to work more hours. This could represent a significant opportunity for low-income and non-traditional students. According to the National Student Clearinghouse (2021), community college enrollment among non-traditional students declined 14.2% between the fall 2019 and fall 2021 semesters. To recapture non-traditional student enrollment, the four-day schedule could allow community colleges to better serve these students, who often struggle to balance work and family obligations with the demands of being a college student. However, the opportunity to work more hours does not come without concern. Some participants shared concern that students needing campus services

most, like TRIO students, may get distracted by more work hours, while their coursework suffers.

Findings from this study suggest if the adoption rate of the four-day schedule continues to grow among P-12 school districts, community colleges will be forced to consider the four-day schedule through their institutional strategy and student recruitment strategies. During interviews for this study, several participants were intrigued by the topic, while stating they would discuss the topic of four-day schedules within their department and adjust their recruiting strategies, as a result.

Practical Significance

This study's findings address the gap in current research on the four-day schedule in higher education, particularly for community colleges. Few research studies have been conducted on the four-day schedule, as it relates to higher education, and research connecting the four-day schedule to student recruitment strategies were not located for this study. Findings from this study support the claims of community college presidents expressing the belief that the four-day schedule improves student recruitment efforts (Zarrella, 2008; Bothwell, 2019; Alsup, 2019), although the scheduling strategy may not be a fit for all community colleges.

Results of this study suggest community colleges serving primarily commuter students should consider the four-day schedule, particularly if students are traveling long distances to campus. In the case of this study, rural community colleges in Missouri may serve more than a dozen counties within their geographic region, causing some students to experience hour-long commutes from their home to campus. Institutions considering the four-day schedule should collect data from commuter students to better understand the time commitment and costs associated with commuting to campus. More research is needed for community colleges with

large populations of students living in campus housing to understand the effect of the four-day schedule on campus life and student success.

Community colleges have historically been comprised of many students who are employed while being enrolled as a part-time or full-time student. Findings from this study demonstrate the growing pressure students are facing to not only financially support themselves, but to also contribute to their household's finances, in an effort to overcome increased living costs. As a result, some students are expecting to maintain full-time employment, or close to full-time employment, while being enrolled as a full-time student, in order to meet eligibility requirements for financial aid and scholarships. In the case of Missouri community colleges, students desire to remain a full-time student for the purpose of receiving maximum benefit from the state-sponsored A+ scholarship, which pays tuition costs for participating students. Ensuring equitable outcomes, community colleges should gather data to better understand the demands of employment and family obligations for low-income students, while considering the four-day schedule as an institutional strategy creating more scheduling flexibility for this student population.

Due to the COVID-19 pandemic, non-traditional student enrollment declined nationwide by 14.8% between the fall 2019 and fall 2021 semesters (National Student Clearinghouse, 2021). As community colleges deploy student recruitment strategies, the non-traditional student population represents a segment of the market to re-engage for enrollment growth. With many non-traditional students needing to remain employed while enrolling as a student, this study suggests the four-day schedule offers promise as an institutional strategy creating more scheduling flexibility for this student population to balance the demands of employment and coursework.

Mulvahill (2019), Ordway (2019), Thompson et al. (2020), and Walker (2019) discuss the growing adoption rate of four-day schedules among P-12 school districts in Colorado, Idaho, New Mexico, Missouri, Montana, Oklahoma, Oregon, and South Dakota. In Missouri, the four-day schedule continues to grow in popularity, as 128 school districts have adopted the schedule (Riley, 2022). For community colleges in regions where the four-day schedule is being adopted by P-12 school districts, findings from this study suggest admission departments need to evaluate school district calendars for the purpose of ensuring schedules coincide for student recruitment events.

P-20 Implications

Usage of the four-day schedule continues to grow within the P-20 sector (Bothwell, 2019; Cardinale, 2013; Moltz, 2008; Toppo, 2018; Zarella, 2008), particularly within P-12 school districts (Mulvahill, 2019; Ordway, 2019; Thompson et al., 2020; Walker, 2019). The growing popularity of four-day schedules in the P-12 sector has led to many research studies seeking to understand implications for school districts and student achievement. While adoption rates of the four-day schedule are being tracked within P-12 school districts, the researcher was unable to locate statistics showing use of the four-day schedule in higher education, particularly among community colleges.

Higher education institutions providing dual-enrollment courses where the P-12 school district has adopted the four-day schedule should evaluate the scheduling strategy's effect on student achievement. Most P-12 school districts using the four-day schedule make Monday the scheduled "day off;" whereas, community colleges are utilizing Friday as the non-scheduled class day. As a result of the four-day schedule, there may be opportunity to increase utilization of academic services for dual-enrollment students on Mondays, correlating to improved student

outcomes. The scheduling misalignment presents challenges for college students needing to fulfill classroom observation hours, as required for their teacher education degree. With P-12 school districts not in session on Mondays and community colleges not in session on Fridays, this only allows three days each week to schedule necessary classroom observations. With teacher shortages prevalent across the nation in P-12, this could cause unnecessary hindrances to preparing pre-service teachers. Furthermore, the misalignment of the four-day schedule between P-12 and community colleges could cause scheduling challenges for collaborative events between the two sectors. To prevent the development of silos, working professionals from these sectors should prioritize communication and scheduling strategies to ensure problems do not arise.

Limitations of the Study

The researcher acknowledges limitations of this study, which could influence the findings and interpretations. This study involved participants from Missouri community colleges, primarily from rural-serving institutions. Factors affecting P-12 school districts and community colleges from states other than Missouri, could alter the transferability of this study's findings. Eleven of the 20 participants from this study indicate the community college where they work is already using components of the four-day schedule in course offerings. For these 11 participants, the experiences in working at a community college using the four-day schedule may create bias toward the scheduling model.

This study included participants from six of Missouri's 12 community colleges. Four community colleges represented in the study are described as rural-serving institutions. The heavy representation of rural community colleges threatens the external validity of the study, which could diminish generalizability for community colleges not having similar attributes.

Community colleges employing large numbers of faculty and adjunct faculty may find reduced relevance in this study, as the number of faculty employed by an institution increases scheduling options within course offerings. As a result, students may encounter more course scheduling options, which effectively reduces the amount of travel to campus without the need for four-day scheduling.

A limitation for this study was the absence of other existing published research relating four-day schedules and student recruitment in higher education. Wallace (1981), Ellen (2011), and Cardinale (2013) presented research studies on the use of four-day schedules within community colleges. However, none of these studies included the relationship of the four-day schedule to student recruitment.

Recommendations for Future Research

This qualitative study involved 20 participants interviewed for the purpose of understanding community college employee attitudes toward the four-day schedule as an institutional strategy to create competitive advantages in student recruitment. The study sought participation from each of Missouri's 12 community colleges, but only six were represented in the study. While this study achieved the saturation point of involving 15 to 20 participants, gaining participation from each of Missouri's community colleges would have provided greater generalizability, transferability, and more rich data. Therefore, the first recommendation for future research is to replicate this study, while seeking more widespread participation.

The next recommendation for future research is to investigate student data from community colleges having adopted the four-day schedule year-round to determine if the scheduling strategy has created advantages for student recruitment and student success. Considering the findings of this study suggesting the four-day schedule creates advantages for

commuter and employed students, the future study would need to analyze enrollment trends among these subpopulation groups. In regards to student success, investigation into the effect of the four-day schedule on specific discipline areas is also needed, as Math and Science course offerings can involve class meetings five times per week at some community colleges. Findings from this study were mixed in the effect the four-day schedule had on Math and Science courses. Additionally, where community colleges have adopted the four-day schedule year-round, future research could include interviewing students to better understand effects of the four-day schedule when balancing employment and coursework. Important populations to include in the study are low-income, employed, and commuting students.

According to Donis & Silvernail (2009), most P-12 schools adopting the four-day school week over the 40-year history of the scheduling model are located west of the Mississippi River. For this reason, the fifth recommendation for future research is to replicate this study in states west of the Mississippi River, which typically consist of rural areas where the four-day scheduling strategy may provide competitive advantages in community college student recruitment. While this study involved many factors found in rural community colleges, transferability of the findings to urban and suburban community colleges may still exist. For example, many urban and suburban community colleges enroll high-percentages of commuting students, while also serving low-income and first-generation college students. As a result, feasibility of the four-day schedule among urban and suburban community colleges should be investigated for future research.

The final recommendation for future research involves the nature in which employers view flexible work arrangements and condensed work schedules after the coronavirus pandemic. Through greater usage of video-conferencing solutions and other technology improvements,

employers, and particularly employees, are more open to rethinking workplace policies in a post-pandemic world. As a result, the four-day schedule may be more a more feasible scheduling strategy after the coronavirus pandemic, due to the workplace restructuring that occurred during the pandemic to remain operational.

Summary of the Discussion and Conclusions

Compared to the P-12 sector, research on the use of four-day schedules within higher education is sparse. This study provides further investigation of the four-day schedule within the community college sector. Given recent enrollment declines (American Association of Community Colleges, n.d.; Barrington, 2020; National Student Clearinghouse, 2021; Schwartz, 2020) and state funding cuts (Lorenzo, 2018), community colleges search for institutional strategies to gain competitive advantages in student recruitment and enrollment management, in an attempt to generate tuition for the purpose of remaining financially solvent (Chen, 2020).

This study suggests the institutional strategy of using the four-day schedule would create competitive advantages in student recruitment for community colleges, particularly for commuting and employed students. Of the community colleges using the four-day schedule in course offerings from this study, none of them are strategically marketing the four-day schedule at an institutional-level, resulting in an unexplored opportunity to enhance institutional strategy involving student recruitment. Findings from this study suggest the four-day schedule allows community colleges to reduce the number of times a commuter student travels to campus each week, relieving costs associated with commuting. With student success a priority, this study's findings revealed community colleges utilizing the four-day schedule must provide student access to campus services on the non-scheduled class day. This study's findings suggest the four-

day schedule improves the student experience for employed students, as they are able to balance the demands of a work schedule and coursework more effectively.

References

- Alsup, B. (2019, October 18). ICC's new four-day week schedule increases flexibility, benefits students. *Daily Journal*. https://www.djournal.com/news/icc-s-new-four-day-week-schedule-increases-flexibility-benefits-students/article_54745846-6902-5822-92f4-f8ff4c1698aa.html
- American Association of Community Colleges. (n.d.). *Community college enrollment crisis? Historical trends in community college enrollment*. <https://www.aacc.nche.edu/wp-content/uploads/2019/08/Crisis-in-Enrollment-2019.pdf>
- Anderson, C. (2020, May 3). Missouri Western faculty react to cuts. *News-Press Now*. https://www.newspressnow.com/news/local_news/missouri-western-faculty-react-to-cuts/article_d743874c-8bb2-11ea-a551-97e5d64d27db.html
- Anderson, D. M., & Walker, M. B. (2015). Does shortening the school week impact student performance? Evidence from the four-day school week. *Education Finance and Policy*, 10(3), 314-349. https://www.mitpressjournals.org/doi/full/10.1162/EDFP_a_00165
- Anglum, J. C., & Park, A. (2019, October 24). The four-day school week. *Prime Center*. <https://www.sluprime.org/prime-blog/four-day-school-week>
- Bao, A. (2018, April 27). *Four-day school week not coming to a school near you*. Spartan News Room. <https://news.jrn.msu.edu/2018/04/four-day-school-week-not-coming-to-a-school-near-you/>
- Barrington, K. (2020, July 7). Community colleges are changing strategies to increase enrollment. *Community College Review*. <https://www.communitycollegereview.com/blog/community-colleges-are-changing-strategies-to-increase-enrollment>

- Barshay, J. (2018, September 10). *College students predicted to fall by more than 15% after the year 2025*. The Hechinger Report. <https://hechingerreport.org/college-students-predicted-to-fall-by-more-than-15-after-the-year-2025/>
- Bothwell, E. (2019, April 18). *The four-day week: Will it catch on in academia?* Times Higher Education. <https://www.timeshighereducation.com/news/four-day-week-will-it-catch-academia>
- Bradley, K. (n.d.). *The advantages of a four day school week*. Seattle PI. <https://education.seattlepi.com/advantages-four-day-school-week-1548.html>
- Brown, J. (2019, August 27). Colorado now has more school districts on four-day weeks than any place in the nation – with little research on the benefits. *The Colorado Sun*. <https://coloradosun.com/2019/08/27/four-day-school-weeks-in-colorado/>
- Bureau of Labor Statistics. (2022, June 3). *The employment situation – May 2022*. <https://www.bls.gov/news.release/pdf/empstat.pdf>
- Burke, L. (2020, March 31). *The big transition*. Inside Higher Ed. <https://www.insidehighered.com/news/2020/03/31/faculty-discuss-their-quick-transition-online-instruction>
- Burke, M., & Gordon, L. (2020, May 15). *Newsom's proposed budget cuts to higher education force difficult choices ahead*. EdSource. <https://edsources.org/2020/newsoms-proposed-budget-cuts-to-higher-education-force-difficult-choices-ahead/631681>
- Cardinale, N. (2013). Examining the transition to a four-day school week and investigating post-change faculty/staff work-life balance: A community college case study. (Publication No. 3596425) [Doctoral dissertation, Northeastern University]. ProQuest Dissertations and Theses Global.

- Chen, G. (2020, September 11). *Why community colleges are cutting Friday classes*. Community College Review. <https://www.communitycollegereview.com/blog/why-community-colleges-are-cutting-friday-classes>
- Coldiron, M. (n.d.). *Kentucky school advocate: Webster County calendar change*. Kentucky School Boards Association. <https://www.ksba.org/KentuckySchoolAdvocate-WebsterCountycalendarchange.aspx>
- Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Sage Publications, Inc.
- Cunningham, J. B. (1982). Compressed shift schedules: Altering the relationship between work and non-work. *Public Administration Review*, 42(5), 438-447.
<https://doi.org/10.2307/975646>
- Data Security and Compliance*. (n.d.). Survey Monkey. Retrieved April 11, 2021 from <https://www.surveymonkey.com/mp/data-security-and-compliance/>
- Defining Work-Life Balance: Energy is the Missing Ingredient*. (n.d.). Kumanu. Retrieved November 2, 2022, from [https://www.kumanu.com/defining-work-life-balance-its-history-and-future/#:~:text=Defining%20Work%20Life%20Balance%3A%20Energy,balancing%20ime%20to%20balancing%20energy](https://www.kumanu.com/defining-work-life-balance-its-history-and-future/#:~:text=Defining%20Work%20Life%20Balance%3A%20Energy,balancing%20time%20to%20balancing%20energy).
- Delisio, E. R. (2019). *Could four-day weeks work for you?* Education World.
https://www.educationworld.com/a_admin/admin/admin279.shtml

Determine Operational Viability. (n.d.). The Living Classroom. Retrieved November 1, 2020

<https://livingclassroom.ca/building-block/determine-operational-viability/#:~:text=Operational%20viability%20means%20the%20ability,collaborative%20LC%20is%20even%20possible.>

Donis-Keller, C., & Silvernail, D. L. (2009). *Research brief: A review of the evidence on the four-day week.* Center for Education Policy, Applied Research and Evaluation,

University of Southern Maine. https://cpb-us-w2.wpmucdn.com/wpsites.maine.edu/dist/e/97/files/2017/04/Review_of_Evidence_on_Four-Day_School_Week-qid3ot.pdf

Eadicicco, L. (2019, November 10). *Companies from Microsoft to Shake Shack have experimented with a shorter, 4-day workweek – and most of the time, it's had incredible results.* Business Insider. <https://www.businessinsider.com/microsoft-shake-shack-4-day-work-week-productivity-life-balance-2019-11>

Eastern Florida State College. (2020). Our history & mission.

<https://www.easternflorida.edu/discover-efsc/our-history-and-mission/>

Edelman, A. (2019, May 28). *A four-day school week? Teachers and kids give it an 'A.' Parents are less enthusiastic.* NBC News. <https://www.nbcnews.com/politics/politics-news/four-day-school-week-teachers-kids-give-it-parents-are-n1009506>

<https://www.nbcnews.com/politics/politics-news/four-day-school-week-teachers-kids-give-it-parents-are-n1009506>

Ellen, M. (2011). *4-day work week survey: Summary of results.* Southeastern Community

College. https://www.scciowa.edu/userup/inst_research/securedfiles/4-Day%20Work%20Week%20Survey%20Report.pdf

Enrollment report for Missouri public & comprehensive independent institutions. (n.d.).

Department of Higher Education and Workforce Development. Retrieved October 16,

2020, from https://dhewd.mo.gov/data/documents/Fall2019enrollmentreport_fin.xlsx

Federal Employees Flexible and Compressed Work Schedules Act of 1982, 5 USC §§ 6120-

6133. <https://www.congress.gov/bill/97th-congress/senate-bill/2240>

Fischer, S., & Argyle, D. (2018, March 30). Juvenile crime and the four-day school week.

Economics of Education Review, 64, 31-39.

<https://doi.org/10.1016/j.econedurev.2018.03.010>

'Five-Star Fridays' to be devoted to career-development activities. (2018, January 24). The

University of Akron. [https://www.uakron.edu/im/news/five-star-fridays-to-be-devoted-to-](https://www.uakron.edu/im/news/five-star-fridays-to-be-devoted-to-career-development-activities)

[career-development-activities](https://www.uakron.edu/im/news/five-star-fridays-to-be-devoted-to-career-development-activities)

Forsey, C. (2020, April 9). Flexible schedules: The good, bad, and the surprising. *Marketing,*

Hubspot. <https://blog.hubspot.com/marketing/flexible-schedule>

Fottler, M. D. (1977). Employee acceptance of a four-day workweek. *The Academy of*

Management Journal, 20(4), 656-668. <https://doi.org/10.2307/255364>

Fretwell, G. (2019, May 14). Institutional strategic planning: The building block for the future.

Education Insights Blog. [https://www.ruffalonl.com/blog/enrollment/institutional-](https://www.ruffalonl.com/blog/enrollment/institutional-strategic-planning-building-block/)

[strategic-planning-building-block/](https://www.ruffalonl.com/blog/enrollment/institutional-strategic-planning-building-block/)

Gartner. (2020, April 3). *Gartner CFO survey reveals 74% intend to shift some employees to*

remote work permanently. [https://www.gartner.com/en/newsroom/press-releases/2020-](https://www.gartner.com/en/newsroom/press-releases/2020-04-03-gartner-cfo-surey-reveals-74-percent-of-organizations-to-shift-some-employees-to-remote-work-permanently2)

[04-03-gartner-cfo-surey-reveals-74-percent-of-organizations-to-shift-some-employees-to-](https://www.gartner.com/en/newsroom/press-releases/2020-04-03-gartner-cfo-surey-reveals-74-percent-of-organizations-to-shift-some-employees-to-remote-work-permanently2)

[remote-work-permanently2](https://www.gartner.com/en/newsroom/press-releases/2020-04-03-gartner-cfo-surey-reveals-74-percent-of-organizations-to-shift-some-employees-to-remote-work-permanently2)

Glatter, H. (2017, March 20). *What if students only went to school four-days a week?* The Atlantic. <https://www.theatlantic.com/education/archive/2017/03/what-if-students-only-went-to-school-for-four-days-a-week/520044/>

Goff-Dupont, S. (2020, February 4). The truth about compressed work weeks, according to people who've done it. *Productivity, Atlassian*.
<https://www.atlassian.com/blog/productivity/compressed-work-week-how-to>

Griffith, M. (2011, May). *What savings are produced by moving to a four-day school week?* Education Commission of the States. <https://www.ecs.org/clearinghouse/93/69/9369.pdf>

Haar, J. (2018, July 25). *Working four-day weeks for five days' pay? Research shows it pays off.* Phys.org. <https://phys.org/news/2018-07-four-day-weeks-days.html#:~:text=The%20analysis%20shows%20that%20employees,significant%20decrease%20in%20work%20demands.>

Hagar, S. (2020, February 2). Layoffs begin as Walla Walla Community College crisis deepens. *Union-Bulletin*. https://www.union-bulletin.com/news/education/walla_walla_community_college/layoffs-begin-as-walla-walla-community-college-crisis-deepens/article_1b3aacd6-ad30-5fa8-8557-5f9f849ce3e9.html

Hardiman, S. (2018, February 10). Amid teacher shortage, four-day school districts can't afford to go back, superintendents say. *Tulsa World*.
https://tulsaworld.com/news/education/amid-teacher-shortage-four-day-school-districts-can-t-afford/article_cdd1b3f3-4303-574f-8352-54462e93a796.html

Harper, J. (2020, May 22). *Coronavirus: Flexible working will be a new normal after virus.* BBC News. <https://www.bbc.com/news/business-52765165>

- Hewitt, P. M., & Denny, G. S. (2011). The four-day school week: Impact on student academic performance (EJ987605). ERIC. <https://files.eric.ed.gov/fulltext/EJ987605.pdf>
- Heyward, G. (2017). A user's guide to the four-day school week: How to assess district readiness and evaluate the results (ED578179). ERIC. <https://files.eric.ed.gov/fulltext/ED578179.pdf>
- Heyward, G. (2018). What do we actually know about the four-day school week (ED584166)? ERIC. <https://files.eric.ed.gov/fulltext/ED584166.pdf>
- Hill, P. T., & Heyward, G. (2015). *The four-day school week in rural Idaho schools*. The Rural Opportunities Consortium of Idaho. http://www.rociidaho.org/wp-content/uploads/2015/07/ROCI_4DayWeek_Final.pdf
- Hofmeister, J. (2020, January 23). *Administrative rule promulgation*. Oklahoma State Department of Education. <https://sde.ok.gov/sites/default/files/documents/files/January%202020%20Rules.pdf>
- Ip, G. (2020, August 24). *New thinking on covid lockdowns: They're overly blunt and costly*. Wall Street Journal. <https://www.wsj.com/articles/covid-lockdowns-economy-pandemic-recession-business-shutdown-sweden-coronavirus-11598281419>
- Jozuka, E., & Wakatsuki, Y. (2016, November 30). *Death by overwork: Pressure mounts on Japan to act*. CNN Money. <https://money.cnn.com/2016/11/30/news/economy/japan-workers-overwork-death/index.html>
- Katepoo, P. (n.d.). *Compressed work week pros and cons: Is it the right flex choice for you?* Work Options. <https://workoptions.com/compressed-workweek-pros-and-cons>

- Kleeman, R. S., Shelton, R. E., Copeland, C. W., Bright, C. A., & Nelson, T. L. (1992, March 24). *The changing workforce: Demographic issues facing the federal government*. U.S. Government Accountability Office. <https://www.gao.gov/assets/160/151488.pdf>
- Kline, M. (2019). *The looming higher ed enrollment cliff*. Higher Ed HR Magazine. <https://www.cupahr.org/issue/feature/higher-ed-enrollment-cliff/>
- Leedy, P. D., & Ormrod, J. E. (2010). *Practical research: Planning and design*. Pearson Education, Inc.
- Lorenzo, G. (2018). *Facing the future: State funding of community colleges*. National American University's Roueche Graduate Center. https://www.edpath.com/index_htm_files/state%20funding%20paper.pdf
- Meyer, M. (2016, January 11). *P-12 public education*. Prezi. <https://prezi.com/ewjl00bjjktc/p-12-public-education/#:~:text=Definition%3A%20P%2D12%20Education%20is%20the%20action%20or%20process%20of,paid%20for%20by%20their%20government.>
- Michigan Department of Education. (n.d.). *P-20 system definition*. https://www.michigan.gov/documents/mde/P-20_System_Definition_619066_7.pdf
- Ministry of Women's Affairs. (2013, September). *Realising the opportunity: Addressing New Zealand's leadership pipeline by attracting and retaining talented women*. https://women.govt.nz/sites/public_files/Realising%20the%20opportunity.pdf
- Missouri Community College Association. (n.d.). *Who We Are*. <https://www.mccatoday.org/we-are-mcca>

Missouri Department of Elementary and Secondary Education. (2020, July 1). *School Calendar Requirements*.

<https://dese.mo.gov/sites/default/files/sf-ESchoolCalendarRequirements.pdf>

Missouri Department of Higher Education and Workforce Development. (n.d.). *Enrollment Report for Missouri Public & Comprehensive Independent Institutions*.

<https://dhewd.mo.gov/data/documents/Fall2020enrollmentreport.xlsx>

Molla, R. (2020a, April 14). *This is the end of the office as we know it*. Vox Media.

<https://www.vox.com/recode/2020/4/14/21211789/coronavirus-office-space-work-from-home-design-architecture-real-estate>

Molla, R. (2020b, May 21). *Office work will never be the same*. Vox Media.

<https://www.vox.com/recode/2020/5/21/21234242/coronavirus-covid-19-remote-work-from-home-office-reopening>

Moltz, D. (2008, August 19). *Are 4-day workweeks the future?* Inside Higher Ed.

<https://www.insidehighered.com/news/2008/08/19/are-4-day-workweeks-future>

Mulvahill, E. (2019, June 19). *25 states are testing 4-day school weeks – Will yours be next? We Are Teachers*. <https://www.weareteachers.com/4-day-school-weeks/>

Nanfria, A. (2019, September 4). *Walla Walla Community College in a financial emergency*.

NBC Right Now. https://www.nbcrightnow.com/news/walla-walla-community-college-in-a-financial-emergency/article_1b51f410-cf74-11e9-beba-d3346d0825db.html

National Center for Education Statistics. (n.d.). *Nontraditional undergraduates: Definitions and data*. <https://nces.ed.gov/pubs/web/97578e.asp>

National Conference of State Legislatures. (2020, April 1). *Four-day school week overview*.

<https://www.ncsl.org/research/education/school-calendar-four-day-school-week-overview.aspx>

National Student Clearinghouse: Research Center. (2021, November 18). COVID-19: Stay informed with the latest enrollment information. <https://nscresearchcenter.org/stay-informed/>

Oklahoma State Department of Health. (2017). *Impact of a 4-day school week on student academic performance, food insecurity, and youth crime*.

<https://www.ok.gov/health2/documents/FINAL%20HIA%20Four%20Day%20School%20Week%202017.pdf>

Ordway, D. M. (2019, October 30). *The four-day school week: Research behind the trend*.

Journalist's Resource. <https://journalistsresource.org/studies/society/education/four-day-school-week-research/>

Owl Labs. (2019). *State of remote work: 2019*. <https://www.owllabs.com/state-of-remote-work/2019>

Pesce, N. L. (2019, March 15). *A surprising number of school districts have switched to a four-day week*. Market Watch. <https://www.marketwatch.com/story/a-surprising-number-of-school-districts-have-switched-to-a-four-day-week-2019-03-15>

Peshkin, A. (1993). The goodness of qualitative research. *Educational Researcher*, 22(2), 23-29.

Procedures and Guidelines. (n.d.). Murray State University. Retrieved June 10, 2022, from <https://www.murraystate.edu/headermenu/administration/Provost/InstitutionalReviewBoard/ProceduresGuidelines.aspx#level1>

Puzzanchera, C. (2013). *Juvenile arrests 2011 Technical Report*. National Institute of Justice.

<https://ojjdp.ojp.gov/sites/g/files/xyckuh176/files/pubs/244476.pdf>

Richard, A. (2002, September 25). *Rural schools see dividends in four-day week*. Education

Week. <https://www.edweek.org/ew/articles/2002/09/25/04week.h22.html?print=1>

Richert, K. (2016, May 10). What do the numbers say about four-day school weeks? *Idaho*

Education News. <http://www.edweek.org/ew/articles/2015/12/15/what-do-the-numbers-say-about-four-day.html>

Riley, C. (2022, March 6). *A record 128 Missouri school districts – 25 percent – switch to four-*

day weeks. Springfield News-Leader. [https://www.news-](https://www.news-leader.com/story/news/education/2022/03/06/record-128-missouri-school-districts-25-percent-switch-to-four-day-weeks/6694742001/)

[leader.com/story/news/education/2022/03/06/record-128-missouri-school-districts-25-percent-switch-to-four-day-weeks/6694742001/](https://www.news-leader.com/story/news/education/2022/03/06/record-128-missouri-school-districts-25-percent-switch-to-four-day-weeks/6694742001/)

Ryan, M. (2009, November). *Four-day school week*. Education Commission of the States.

<http://www.ecs.org/clearinghouse/82/94/8294.pdf>

Salkind, N. J. (2014). *Statistics for people who think they hate statistics*. Sage Publications, Inc.

Saunders, B., Sim, J., Kingstone, T., Baker, S., Waterfield, J., Bartlam, B., Burroughs, H., &

Jinks, C. (2018). Saturation in qualitative research: exploring its conceptualization and operationalization. *Quality & Quantity*, 52(4), 1893-1907.

<https://doi.org/10.1007/s11135-017-0574-8>

Schwartz, N. (2020, September 24). *How can community colleges weather enrollment declines?*

Education Dive. <https://www.educationdive.com/news/how-can-community-colleges-weather-enrollment-declines/585858/>

- Simonton, S. (2019, December 11). *Is four-day school week education mistake or big opportunity for expanded learning?* Youth Today. <https://youthtoday.org/2019/12/is-four-day-school-week-education-mistake-or-big-opportunity-for-expanded-learning/>
- Snyder, H. N., & Sickmund, M. (2006). *Juvenile offenders and victims: 2006 national report*. Office of Juvenile Justice and Delinquency Prevention.
<https://files.eric.ed.gov/fulltext/ED495786.pdf>
- St. Amour, M. (2020, October 15). *Report: Enrollment continues to trend downward*. Inside Higher Ed. <https://www.insidehighered.com/news/2020/10/15/worrying-enrollment-trends-continue-clearinghouse-report-shows>
- Study International. (2019, June 27). *Why US schools are moving towards four-day school weeks?* <https://www.studyinternational.com/news/why-us-schools-are-moving-towards-four-day-school-weeks/>
- Thompson, P. N. (2019, March). *Effects of four-day school weeks on student achievement: Evidence from Oregon*. IZA Institute of Labor Economics. <http://ftp.iza.org/dp12204.pdf>
- Thompson, P., Gunter, K., Schuna, J., & Tomayko, E. (2020, May 14). *Are all four-day school weeks created equal? A national assessment of four-day school week policy adoption and implementation*. Semantic Scholar.
<https://scholarworks.montana.edu/xmlui/bitstream/handle/1/16453/tomayko-four-day-school.pdf;jsessionid=7E1E2E17CC5B611AD8D433E003E3F59C?sequence=1>
- Toh, M. (2020, May 21). *New Zealand's prime minister floats 'four-day week' as a way to help the economy*. CNN Business. <https://www.cnn.com/2020/05/21/business/new-zealand-4-day-week-hnk-intl-scli/index.html>

Toh, M., & Wakatsuki, Y. (2019, November 18). *Microsoft tried a 4-day workweek in Japan. Productivity jumped 40%*. CNN Business.

<https://www.cnn.com/2019/11/04/tech/microsoft-japan-workweek-productivity/index.html>

Toppo, G. (2018, May 4). *A different kind of Friday*. Inside Higher Ed.

<https://www.insidehighered.com/news/2018/05/04/focus-fridays-alabama-university-offer-four-day-weeks>

Turner, J. S. (2022, May 12). *Missouri 4 day week school districts* [Missouri map].

<https://public.tableau.com/app/profile/jon.scott.turner/viz/WithMultiselectfiltermap/MainDashboard>

Turner, J. S., Finch, K., & Uribe-Zarain, X. (2018). Staff perspectives of the four-day school week: A new analysis of compressed school schedules. *Journal of Education and Training Studies*, 6(1), 52-62. <https://files.eric.ed.gov/fulltext/EJ1164595.pdf>

Turner, J., Finch, K., Uribe-Zarain, X. (2019). Three Midwest rural school districts' first year transition to the four day school week: Parents' perspectives. *The Rural Educator*, 40(1), 1-15. <https://files.eric.ed.gov/fulltext/EJ1225164.pdf>

United States Department of Agriculture. (2020, September 9). *Definitions of food security*.

<https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/definitions-of-food-security.aspx>

University of California-Davis. (2020, August 24). *Remote work*.

<https://hr.ucdavis.edu/departments/worklife-wellness/workplace-flex/telework>

U.S. Department of Commerce. (2000). *Alternative work schedules*.

[https://www.commerce.gov/hr/practitioners/leave-policies/alternative-work-schedules#:~:text=Alternate%20work%20schedules%20\(AWS\)%20is,less%20than%2010%20working%20days.](https://www.commerce.gov/hr/practitioners/leave-policies/alternative-work-schedules#:~:text=Alternate%20work%20schedules%20(AWS)%20is,less%20than%2010%20working%20days.)

U.S. Department of Education. (2017, February 10). *Community college facts at a glance*.

<https://www2.ed.gov/about/offices/list/ovae/pi/cclo/ccfacts.html>

U.S. Department of Education. (2022, June 9-a). *Federal TRIO Programs – Home Page*.

<https://www2.ed.gov/about/offices/list/oep/trio/index.html>

U.S. Department of Education. (2022, June 9-b). *Student Support Services Program*.

<https://www2.ed.gov/programs/triostudsupp/index.html>

U.S. Office of Personnel Management. (n.d.-a). *Coronavirus Disease 2019 (COVID-19)*.

<https://www.opm.gov/policy-data-oversight/covid-19/opm-fact-sheet-the-use-of-flexible-work-schedules-in-response-to-coronavirus-disease-2019-covid-19/>

U.S. Office of Personnel Management. (n.d.-b). *Labor-management relations*.

<https://www.opm.gov/policy-data-oversight/labor-management-relations/law-policy-resources/#url=Negotiating-Flexible-and-Compressed-Work-Schedules>

U.S. Office of Personnel Management. (n.d.-c). *Pay & leave*.

<https://www.opm.gov/policy-data-oversight/pay-leave/reference-materials/handbooks/alternative-work-schedules/>

Walker, T. (2018, January 18). *Teacher burnout or demoralization? What's the difference and why it matters*. NeaToday. <http://neatoday.org/2018/01/18/teacher-burnout-disillusionment/>

Walker, T. (2019, March 29). *After moving to a four-day school week, there may be no going back*. NeaToday. <https://neatoday.org/2019/03/29/4-day-school-week-here-to-stay/>

Walla Walla Community College to adopt 4-day class schedule in September. (2019, May 30).

Union-Bulletin. [https://www.union-](https://www.union-bulletin.com/news/education/walla_walla_community_college/walla-walla-community-college-to-adopt-4-day-class-schedule-in-september/article_9f59d418-8306-11e9-a2d3-b35541c2dba1.html)

[bulletin.com/news/education/walla_walla_community_college/walla-walla-community-college-to-adopt-4-day-class-schedule-in-september/article_9f59d418-8306-11e9-a2d3-b35541c2dba1.html](https://www.union-bulletin.com/news/education/walla_walla_community_college/walla-walla-community-college-to-adopt-4-day-class-schedule-in-september/article_9f59d418-8306-11e9-a2d3-b35541c2dba1.html)

Wallace, C. C. (1981). *Academic effects and cost benefit of a four-day week at College of*

DuPage, an Illinois community college. Association for Institutional Research.

Whitford, E. (2020, May 5). *Public higher ed funding still has not recovered from 2008*

recession. Inside Higher Ed. <https://www.insidehighered.com/news/2020/05/05/public-higher-education-worse-spot-ever-heading-recession>

Wu, J., Smith, S. Khurana, M., Siemaszko, C., & DeJesus-Banos, B. (2020, April 29).

Stay-at-home orders across the country. NBC News.

<https://www.nbcnews.com/health/health-news/here-are-stay-home-orders-across-country-n1168736>

Yeung, J. (2018, July 19). *A New Zealand company tried a four-day work week. It was a*

'resounding success'. CNN Money.

<https://money.cnn.com/2018/07/19/news/economy/new-zealand-four-day-work-week-perpetual-guardian/index.html>

Zarrella, J. (2008). *Four-day workweek gets A+ at college*. CNN.

<https://www.cnn.com/2008/LIVING/worklife/08/12/shorter.workweek/index.html#:~:text=So%2C%20it%20was%20welcome%20news,with%20a%20four%2Dday%20workweek.&text=Over%20that%20year%2Dlong%20period,saved%20%24267%2C000%20in%20energy%20costs.>

Appendix A: SurveyMonkey Permission to Conduct Research



SurveyMonkey Inc.

www.surveymonkey.com

For questions, visit our Help Center

help.surveymonkey.com

Re: Permission to Conduct Research Using SurveyMonkey

To Whom It May Concern:

This letter is being produced in response to a request by a student at your institution who wishes to conduct a survey using SurveyMonkey in order to support their research. The student has indicated that they require a letter from SurveyMonkey granting them permission to do this. Please accept this letter as evidence of such permission. Students are permitted to conduct research via the SurveyMonkey platform provided that they abide by our [Terms of Use](https://www.surveymonkey.com/mp/legal/terms-of-use/) at <https://www.surveymonkey.com/mp/legal/terms-of-use/>.

SurveyMonkey is a self-serve survey platform on which our users can, by themselves, create, deploy and analyze surveys through an online interface. We have users in many different industries who use surveys for many different purposes. One of our most common use cases is students and other types of researchers using our online tools to conduct academic research.

If you have any questions about this letter, please contact us through our Help Center at help.surveymonkey.com.

Sincerely,

SurveyMonkey Inc.

Appendix B: Recruitment Email

Hi there,

My name is Mitch Holder, and I'm the Dean of Instruction for North Central Missouri College. I am a doctoral candidate at Murray State University in the P-20 and Community Leadership program.

I am requesting your participation in my research study which seeks to investigate Missouri community college employee perceptions of the four-day schedule as an institutional strategy for community colleges. In the face of government disinvestment and negative enrollment trends for community colleges, this study explores four-day schedules as an enrollment strategy. The P-12 sector experiences a growing adoption rate of school districts utilizing the four-day schedule. Furthermore, some 2- and 4-year institutions have implemented the schedule for various reasons, some citing enrollment benefits. However, very little scholarly work has been discovered related to four-day schedules as an institutional strategy, particularly enrollment-related, within higher education.

This research study aims to shine light on this important topic. As a participant, you will be asked to complete a 2-3 minute survey. Within the survey, you will be invited to participate in a 15-20 minute interview conducted through Zoom, where I, as the researcher, will ask questions to better understand your experiences and perceptions.

The study involves no more than minimal risks to participants. There are no direct benefits from participating in the study. General benefits for study participation come from participation in research on important topics for community colleges. Findings and opinions will be made available to participants upon request.

If you would like to participate in the study, please select the link below to access the survey:

[Survey Link](#) (embedded within email)

Or, copy and paste the URL below into your internet browser:

<https://www.surveymonkey.com/r/N6YW7TB>

If you have questions or concerns, please contact me at miholder@mail.ncmissouri.edu or 660-357-6310. If you have any questions or concerns not addressed by the researcher, Mitch Holder, please contact the study's dissertation chair, Dr. Teresa Clark, at tclark24@murraystate.edu or 270-809-6956.

This project has been reviewed and approved by the Murray State University Institutional Review Board (IRB) for the Protection of Human Subjects. If you have any questions about your rights as a research participant, you should contact the MSU IRB Coordinator at (270) 809-2916 or msu.irb@murraystate.edu.

Thank you for your consideration and valuable time.

Sincerely,

Mitch Holder
Doctoral Candidate, P-20 and Community Leadership
Murray State University
miholder@mail.ncmissouri.edu
660-357-6310

Appendix C: Follow-Up Email

Hi, again.

I'm following up with you from an email sent a few weeks ago requesting your participation in my research study. The survey takes 2-3 minutes to complete and the interview, conducted via Zoom, would take 15-20 minutes. Please consider participating in this study.

My name is Mitch Holder, and I'm the Dean of Instruction for North Central Missouri College. I am a doctoral candidate at Murray State University in the P-20 and Community Leadership program.

I am requesting your participation in my research study which seeks to investigate Missouri community college employee perceptions of the four-day schedule as an institutional strategy for community colleges. In the face of government disinvestment and negative enrollment trends for community colleges, this study explores four-day schedules as an enrollment strategy. The P-12 sector experiences a growing adoption rate of school districts utilizing the four-day schedule. Furthermore, some 2- and 4-year institutions have implemented the schedule for various reasons, some citing enrollment benefits. However, very little scholarly work has been discovered related to four-day schedules as an institutional strategy, particularly enrollment-related, within higher education.

This research study aims to shine light on this important topic. As a participant, you will be asked to complete a 2-3 minute survey. Within the survey, you will be invited to participate in a 15-20 minute interview conducted through Zoom, where I, as the researcher, will ask questions to better understand your experiences and perceptions.

The study involves no more than minimal risks to participants. There are no direct benefits from participating in the study. General benefits for study participation come from participation in research on important topics for community colleges. Findings and opinions will be made available to participants upon request.

If you would like to participate in the study, please select the link below to access the survey:

[Survey Link](#) (embedded within email)

Or, copy and paste the URL below into your internet browser:

<https://www.surveymonkey.com/r/N6YW7TB>

If you have questions or concerns, please contact me at miholder@mail.ncmissouri.edu or 660-357-6310. If you have any questions or concerns not addressed by the researcher, Mitch Holder, please contact the study's dissertation chair, Dr. Teresa Clark, at tclark24@murraystate.edu or 270-809-6956.

This project has been reviewed and approved by the Murray State University Institutional Review Board (IRB) for the Protection of Human Subjects. If you have any questions about your rights as a research participant, you should contact the MSU IRB Coordinator at (270) 809-2916 or msu.irb@murraystate.edu.

Thank you for your consideration and valuable time.

Sincerely,

Mitch Holder
Doctoral Candidate, P-20 and Community Leadership
Murray State University
miholder@mail.ncmissouri.edu
660-357-6310


Appendix D: IRB Approval



Institutional Review Board

328 Wells Hall
Murray, KY 42071-3318
270-809-2916 • msu.irb@murraystate.edu

TO: Teresa Clark, Education

FROM: Jonathan Baskin, IRB Coordinator 

DATE: 12/6/2021

RE: Human Subjects Protocol I.D. – IRB # 22-091

The IRB has completed its review of your student's Level 1 protocol entitled *Community College Employee Perceptions of the Four-Day Schedule as an Institutional Strategy by Community Colleges*. After review and consideration, the IRB has determined that the research, as described in the protocol form, will be conducted in compliance with Murray State University guidelines for the protection of human participants.

The forms and materials that have been approved for use in this research study are attached to the email containing this letter. These are the forms and materials that must be presented to the subjects. Use of any process or forms other than those approved by the IRB will be considered misconduct in research as stated in the MSU IRB Procedures and Guidelines section 20.3.

Your stated data collection period is from 12/6/2021 to 3/6/2022.

If data collection extends beyond this period, please submit an Amendment to an Approved Protocol form detailing the new data collection period and the reason for the change.

This Level 1 approval is valid until 12/5/2022.

If data collection and analysis extends beyond this date, the research project must be reviewed as a continuation project by the IRB prior to the end of the approval period, 12/5/2022. You must reapply for IRB approval by submitting a Project Update and Closure form (available at murraystate.edu/irb). You must allow ample time for IRB processing and decision prior to your expiration date, or your research must stop until such time that IRB approval is received. If the research project is completed by the end of the approval period, then a Project Update and Closure form must be submitted for IRB review so that your protocol may be closed. It is your responsibility to submit the appropriate paperwork in a timely manner.

The protocol is approved. You may begin data collection now.

**Opportunity
afforded**

murraystate.edu

Appendix E: IRB Data Collection Amendment



Institutional Review Board

328 Wells Hall
Murray, KY 42071-3318
270-809-2916 • msu.irb@murraystate.edu

TO: Teresa Clark
Education

FROM: Institutional Review Board
Jonathan Baskin, IRB Coordinator

DATE: 3/4/2022

RE: Amendment to Human Subjects Protocol I.D. – IRB # 22-091

The IRB has completed its review of the amendment submitted for your student's Level 1 protocol entitled *Community College Employee Perceptions of the Four-Day Schedule as an Institutional Strategy by Community Colleges*. After review and consideration, the IRB has determined that the changes, as described in the amendment application, will be conducted in compliance with Murray State University guidelines for the protection of human participants.

The updated forms and materials that have been approved for use in this research study are attached to the email containing this letter. These are the forms and materials that must be presented to the subjects. It is your responsibility to ensure that only the updated materials are used from this point forward. Use of any process or forms other than those approved by the IRB will be considered misconduct in research as stated in the MSU IRB Procedures and Guidelines section 20.3.

This amended Level 1 protocol is valid until 12/5/2022.

If data collection and analysis extends beyond this time period, the research project must be reviewed as a continuation project by the IRB prior to the end of the approval period, 12/5/2022. You must reapply for IRB approval by submitting a Project Update and Closure form (available at murraystate.edu/irb). You must allow ample time for IRB processing and decision prior to your expiration date, or your research must stop until such time that IRB approval is received. If the research project is completed by the end of the approval period, then a Project Update and Closure form must be submitted for IRB review so that your protocol may be closed. It is your responsibility to submit the appropriate paperwork in a timely manner.

You may begin data collection using the approved changes.

Opportunity
afforded

murraystate.edu

Appendix F: Informed Consent

Informed Consent Form

Identification of Researcher: This research is being conducted by Mitch Holder, Dean of Instruction for North Central Missouri College and Murray State University doctoral candidate.

Purpose of the Study: The purpose of this study is to investigate community college employee perceptions of the four-day schedule as an institutional strategy for community colleges. This study will examine Missouri community college employees' attitudes toward the four-day schedule, while exploring perceived enrollment growth opportunities that do not currently exist.

Request for Participation: I am inviting you to participate in a research study investigating perceptions of the four-day schedule as an institutional strategy for community colleges. Participation is entirely voluntary. If you decide not to participate, you will not be penalized.

Exclusions: You must be at least 18 years of age to participate in this study.

Description of Research Method: This survey will collect demographic information from which the researcher will use to request participation in this study through a Zoom interview. This survey will take approximately 2-3 minutes to complete. The interview will take approximately 15-20 minutes to complete.

Privacy: The researcher will make every effort to secure data to maintain privacy and confidentiality of study participants. Your confidentiality will be maintained to the degree permitted by the technology used. Specifically, no guarantees can be made regarding the interception of data sent via the Internet by any third parties.

Explanation of Risks: Participation in this study will not expose participants to risks greater than those encountered in daily life. No compensation will be provided.

Explanation of Benefits: Participants may benefit from the study by gaining firsthand experience in research and by learning from the findings of the study.

Questions: If you have any questions about this study, please contact Mitch Holder by email at mholder5@murraystate.edu or by calling 816-377-4422.

Appendix G: Survey Questions

1. I acknowledge consent for this study.
 - ☐ Yes
 - ☐ No
2. Are you interested in participating in this study?
 - ☐ Yes
 - ☐ No
3. What position do you currently hold?
 - ☐ Chief Financial Officer
 - ☐ Admissions professional
 - ☐ Recruitment professional
 - ☐ Federal TRIO Program professional
 - ☐ Other (please specify) [Fill in the blank] _____
4. How many years have you been in your current position?
 - ☐ 31+
 - ☐ 26-30
 - ☐ 21-25
 - ☐ 16-20
 - ☐ 11-15
 - ☐ 6-10
 - ☐ 0-5
5. Which community college serves as your employer? [Drop down menu]
 - ☐ Crowder College
 - ☐ East Central College
 - ☐ Jefferson College
 - ☐ Metropolitan Community College
 - ☐ Mineral Area College
 - ☐ Moberly Area Community College
 - ☐ North Central Missouri College
 - ☐ Ozarks Technical Community College
 - ☐ St. Charles Community College
 - ☐ St. Louis Community College
 - ☐ State Fair Community College
 - ☐ Three Rivers College
6. How many years of service do you have working at community colleges?
 - ☐ 31+
 - ☐ 26-30
 - ☐ 21-25

- ☐ 16-20
- ☐ 11-15
- ☐ 6-10
- ☐ 0-5

7. Please list other job titles you've held in higher education. [Short answer]

8. What is your current age range?

- ☐ 65+
- ☐ 55-64
- ☐ 45-54
- ☐ 35-44
- ☐ 25-34
- ☐ 24 or younger

9. Please provide your email address if you are willing to participate in a 15-20 minute interview relating to this study. [Short answer]

Appendix H: Interview Questions

Opening questions for all participants

1. Does your community college use a four-day schedule at any point throughout the academic year? (Yes/No)
2. **[Follow up]** If so, describe the nature of the four-day schedule used by your community college. (Open-ended)
3. **[Follow up]** Based on the four-day schedule described, what is the motivation in using the model for your community college? (Open-ended)
4. Has your community college considered using a four-day schedule on a year-round basis? (Yes/No)
5. **[Follow up]** If so, what factors were mentioned when considering the four-day schedule? (Open-ended)
6. If the four-day schedule were implemented at your community college, would it create any competitive advantage in student recruitment? (Yes/No)
7. **[Follow up]** If so, what competitive advantages would be created for student recruitment? (Open-ended)
8. Would the four-day schedule create disadvantages in student recruitment? (Yes/No)
9. **[Follow up]** If so, what disadvantages would be created for student recruitment? (Open-ended)
10. Does your community college have campus housing? (Yes/No)
11. **[Follow up]** If so, approximately what percentage of your student population lives in campus housing? (Fill in the blank)
12. **[Follow up]** How would campus life change if your community college implemented the four-day schedule? (Open-ended)
13. From 2016 to 2019, the number of P-12 school districts adopting the four-day schedule grew from 120 to 560. Considering the growing adoption rate of the four-day schedule among P-12 schools, what changes are being made to your community college's student recruitment strategy? (Open-ended)
14. **[Follow up]** Do you believe student recruitment will experience any change as a growing number of P-12 school districts adopt the four-day schedule? (Yes/No)
15. What *benefits* do you perceive occurring if the four-day schedule were to be implemented at your community college? (Open-ended)
16. What *disadvantages* do you perceive occurring if the four-day schedule were to be implemented at your community college? (Open-ended)

CFO-specific questions

17. Going back to the early 2000s, state funding for higher education is down 18% nationwide. Coupling this fact with the decline in community college enrollment, which was down 14.4% between 2010 and 2017, what efforts to increase revenue has your community college implemented? (Open-ended)

18. **[Follow up]** In your opinion, how would the four-day schedule fare as an institutional strategy for your community college to overcome state funding cuts for higher education? (Open-ended)