

THE FOUR-DAY SCHOOL WEEK:
RESEARCH ON EXTENDED
WEEKENDS

by

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ABSTRACT

With restrictions being made on state budgets, “the four-day school week has been an increasingly attractive option for legislators seeking to cut education costs” (NCSL, 2014). Research has shown the beneficial and adverse aspects of an alternative school calendar through monetary interest, attendance of students and staff, morale, and academic scores (Donis-Keller & Silvernail 2009). However, there is limited information regarding the influence shortened school weeks have on students’ social choices, particularly the choices they make with activities on weekends.

As a result of lengthened weekends, the purpose of this case study was to examine the perception four-day school weeks has left on the various stakeholders of a rural Montana high school, with an emphasis on extended weekends, and to investigate the specific activities high school students participate in during three-day weekends. In order to investigate this topic further, the following research questions were directed to stakeholders from a rural Montana school district that recently shifted to a four-day schedule: 1.) As a result of a four-day school week, how do rural school stakeholders view the choices made by students on extended weekends?; 2.) What choices do students make on their extended weekends, and, according to stakeholders, what influences those choices?; 3.) In what ways is the four-day school week contributing to or detracting from student well-being? Data collection was achieved through individual interviews of administrators, teachers, and coaches, a focus group was held with parents of high school students, and insight from senior students was collected through a text-messaging system called Remind. Remind provided an innovative data collection technique that maintained anonymity of adolescent participants. The findings of this case study emphasize the importance and advancement in adolescent involvement with extracurricular activities, workforce, time spent with family and peers, and religious practices. However, the findings also bring forth further questions about adolescents not involved in athletics, clubs, religious endeavors, and the workforce.

CHAPTER 1 – INTRODUCTION

Introduction

In order for education to be of a high quality for all students, it must constantly evolve. The content and the pedagogical approaches are continuously expanding to meet the needs of students' personal, professional, and social advancement. Since the emphasis of education is on holistic growth, there is no debate that education itself must adapt in order to keep up with current affairs and to prepare for future matters.

One of the adaptations being made to the field of education is the shift in academic calendars. A prominent alteration of academic calendars consists of four-day school weeks taking the place of traditional school weeks of five days (Griffith, 2011). Research suggests the shift to a shortened school week enhances student and staff morale and attendance; however, finance has been highlighted as the primary reason schools are shifting to a four-day school week (Donis-Keller & Silvernail, 2009). With restrictions being made on state budgets, "the four-day school week has been an increasingly attractive option for legislators seeking to cut education costs" (NCSL, 2014). By eliminating one full day per week, schools cut back on wages of hourly workers, electrical expenses, the cost of transportation, and miscellaneous overhead that enable schools to operate. Depending upon the specific school, the realistic amount saved is between 0.4% and 2.5% (Griffith, 2011, p. 2). Although the savings are not as substantial as many districts hope for, reduction in expenses has become one of the underlying incentives for the shift.

Although the use of shortened school weeks dates back decades, the number of districts operating on four-day school weeks is recently gaining momentum. This transition from a five-day school week to a four-day school week is happening primarily in rural schools. There are approximately 20% of all public students attending rural schools, which is close to 10 million students, and that percentage and number is rising faster than students in urban or suburban settings (Johnson, Showalter, Klein, & Lester, 2014). With an increasing number of rural students, there is also an increasing chance those students will attend a school with a four-day school week.

In 2008, 17 states had schools operating with a four-day school week. By 2015, that number increased to 21 different states (Griffith, 2011; NCSL, 2015). Montana has the highest percentage of rural schools of any state, with over 75% of the schools in the state considered rural. In 2005, the Montana Legislature approved a change to accreditation standards, basing the requirements on academic hours opposed to academic days. Within the first year of implementation, a total of 10 schools began using a shortened school week. That number increased to 22 schools by the 2008-2009 academic year, and by 2012-2013, that number exceeded 100 schools. The number of Montana students who were initially educated at schools using four-day school weeks was 200; based on data from 2013, the number of students attending schools with four-day school weeks grew to 2,685 (Tharp, 2014).

Problem Statement

Research has shown the beneficial and adverse aspects of an alternative school calendar through monetary interest, attendance of students and staff, morale, and academic scores (Donis-Keller & Silvernail 2009). However, there is limited information regarding the influence shortened school weeks have on rural students' social choices, particularly the choices they make with activities on weekends. It is unknown if students are spending their extended weekends with work, family matters, and extracurricular events, or if students are spending that added time with alcohol, tobacco, or drug abuse, criminal activity, or other behaviors detrimental to their health (Lindberg, Boggess, Porter, Williams, & Urban Inst., 2000). Additional research on shortened school weeks is necessary to truly weigh the advantages and disadvantages.

While there is hope that the students' unsupervised time, which is extended by four-day school weeks, is being spent with beneficial activities, students may instead be filling that added time with detrimental behavior. A particular age range commits some categorical crimes, and changing the school calendar could influence students' ability to commit crimes or be victims of crimes (Clayborn, 2015, p. 27). In other words, the more days a student spends in school could limit the potential time and possibility of him/her committing a crime or being a victim of such crimes.

Purpose Statement and Research Questions

The purpose of this case study was to examine rural stakeholders' perception of four-day school weeks and extended weekends and to investigate the specific activities

high school students participate in during three-day weekends. There is limited knowledge on this topic, so in order to investigate it further, the following research questions were directed to stakeholders from a Montana school district that recently shifted to a four-day schedule:

1. As a result of a four-day school week, how do rural school stakeholders view the choices made by students on extended weekends?
2. What choices do students make on their extended weekends, and, according to stakeholders, what influences those choices?
3. In what ways is the four-day school week contributing to or detracting from student well-being?

To explore these research questions within the context of a rural school district that has recently transitioned to a four-day school week, the researcher applied case study methodology through the lens of problem-behavior theory and adolescent well-being.

Theoretical Framework

Given the gap in research related to how students are behaving outside of the four-day school week, this case study draws upon the problem-behavior theory. Within problem-behavior theory, problematic behavior can be defined as “behavior that departs from familial or social standards and that poses some risk to the well-being of the individual or to society” (Maggs, Almeida, & Galambos, 1995, p. 344). The problem-behavior theory has a presumption that behavior is the outcome of the interaction between person and environment. The interaction between person and environment can

be physical or socially constructed space, such as learning environment (e.g. a classroom) or a social setting resulting from an extended weekend (Chapman, Buckley, Sheehan, & Shochet, 2013). This interaction also includes adolescent health related to substance abuse, deficient social performance, insufficient dietary and health habits, and mental health adversity (Jessor, 2001).

Problem-behavior theory has a conceptual framework that is based on protective factors and risk factors. The protective factors limit the likelihood of engagement in problem behaviors. The opposite is the case for risk factors, where the tendency to engage in problem behavior increases (Jessor et al., 2003). According to Ndugwa (2010), the problem-behavior theory has three types of protective factors (models protection, controls protection, and support protection) and three types of risk factors (models risk, opportunity risk, and vulnerability risk). Jessor et al. (2003) characterize the categories of protective and risk factors as follows:

Models protection includes measures of models such as parental involvement in community groups and volunteer work, and peer models for health-enhancing behaviors such as engagement in regular exercise; controls protection includes individual-level measures of control such as attitudinal intolerance of deviance, and social environmental measures of controls such as predictable parental sanctions; and support protection includes measures of contextual supports such as family closeness and teacher interest in students. With regard to risk, models risk includes measures of models such as parental smoking, and peer models for alcohol use; opportunity risk includes opportunity measures such as availability of alcohol in the home and presence of gang activity in the neighborhood; and vulnerability risk includes measures of personal vulnerability such as felt stress and low self-esteem. (p. 331)

While the spotlight of problem-behavior theory is centered on negative aspects of adolescent behavior, it is important to reiterate that the protective factors of the

conceptual framework promote beneficial characteristics. The prevalence of protective factors of the problem-behavior theory “indicates that social influence occurs when people continually compare themselves with others to ascertain whether or not their own behavior is appropriate” (Maxwell, 2006, p. 267). If adolescents are surrounded by parents or guardians who are highly involved in serving the community, by models who continually promote healthy habits, by authority that holds reasonable and high standards, and by teachers and coaches invested in their prosperity, then they will naturally conform to those virtues.

Stemming from and directly related to the problem-behavior theory is the notion of adolescent well-being. Problem-behavior theory provides a unique lens to understand what positively influences, and what might negatively influence, adolescent well-being. According to a study done by Bourke and Geldens (2007), there is difficulty defining what true well-being is in adolescence, since the concept has not been clearly determined or measured. In order to research this topic, Bourke and Geldens (2007) randomly selected and interviewed 56 students in grades 11 and 12. The findings of the research study found that the majority of participants suggested the key aspects of well-being were related to relationships, psychological dimensions, physical health, and environmental factors.

The information received from the students showed that relationships with family, peers, and teachers provided both positive and negative outcomes on their well-being. The psychological dimension of these students concentrated on pursuing careers, education, growth, and overall happiness. The physical well-being of these students

suggested the positive nature of being active and eating healthily, while the deterrent was connected to alcohol, tobacco, and drug use. Environmental factors specifically included the way students were treated at home and at the school (Bourke & Geldens, 2007).

Positive and Negative Behaviors of Adolescents

In order to explore the application of problem-behavior theory and adolescent well-being to this study, this section highlights examples of positive and negative behaviors of adolescents, including extracurricular activities, work, and risky driving. This section also includes findings specific to four-day school weeks.

Extracurricular activities are a big part of high school education, and the importance of clubs and athletics makes travel a challenge, particularly with the vastness of Montana. Districts working off a traditional five-day schedule, oftentimes, require students to miss afternoons in order to travel to events. In order to accommodate travel and to cut back on students and educators from missing class time, the four-day school week allows an extra day of travel (Hewitt & Denny, 2011). Not only do students involved with extracurricular activities struggle with missing academic opportunities, but the students who are not involved with activities are set back, too. With such small class sizes at rural schools, oftentimes, only a student or two would still be in the classroom while student athletes or students involved with clubs are gone. The teachers are faced with either having to reteach the lesson once the students involved with extracurricular activities came back the following class, or they would simply not exert the added energy and not teach the material that should be given (Gullatt, 2006).

The increased amount of “time adolescents spend in structured extracurricular activities, the less time they have to become involved in unsupervised activities” (Hancock, Dyk, & Jones, 2012, p. 87). Research also suggests that students’ leadership, academics, and social skills increase as the number of extracurricular activities in which adolescents participate increases (Mahoney et al., 2006). While this is beneficial to those students involved in extracurricular activities, it is uncertain if the use of a four-day school week aids in increasing or decreasing student participation, or if the number of participants remains the same.

For the students who are not involved in extracurricular activities, the extended weekend offers further opportunity for work. In regard to adolescent employment, Brown (2001) mentions mixed findings, with some research suggesting a connection between adolescent employment and the success of employment after the completion of high school, while other research shows familial strain that is associated with student employment, since the students’ working hours limits the time spent with family. Another study (Lerman, 2000), which did not indicate whether the school operated on a four-day or a five-day week, proposes that students working long hours had lower engagement in school and were more likely to be suspended. However, Lerman’s study also found that these same teens were less likely to miss school, and a higher percentage of the parents of these teens stated that their children were doing well academically when compared with the percentage of parents of teens not working (Lerman, 2000).

These findings on adolescent employment were further investigated in Lerman’s study to show additional benefits and disadvantages. One area of emphasis in Lerman’s

study is that the increased income of the working teens adds financial backing in low socioeconomic households (Lerman, 2000). Since impoverished communities are prominent in rural Montana, which is the major demographic for schools operating on four-day school weeks, this has become a point of interest in this dissertation study.

A four-day school schedule changes the students' weekly environment. The variables of activities and choices also modify to the structure of environment, which can instigate engagement in problem behavior and problem behavior proneness. Problem behavior proneness, "in specifying the likelihood of occurrence of problem behavior, is essentially synonymous with the concept of risk" (Jessor, 1987, p. 2). One factor of concern that is associated with Montana's rural students relates to driving. Montana's low population and geographic extensiveness coincides with miles and miles of paved and unpaved roadways that have limited traffic and overall enforcement of laws. These components offer adolescents ample opportunity for risky driving, which is one type of problem behaviors. The more often adolescents participate in risky driving, the more likely they are to partake in other problem behaviors (Jessor, 1987).

In this case study, problem-behavior theory offers a lens for research design and analysis, particularly with the emphasis on protective factors and risk factors. The research questions focus on the perceived and actual choices students make on extended weekends and the resulting impact on well-being, with attention to the viewpoints from various stakeholders. Administrators, teachers, coaches, and parents and guardians expressed their perception on the actions students make on extended weekends, and the students provided detail in regard to activities that take place during the longer weekend.

Limitations and Delimitations

This study was completed at a school that has recently adopted the four-day school schedule. Because the research took place at one particular school, the results focus on only a select number of participants and a specific context. Although the nature of this study does not allow generalizability, it still contributes to the limited research on this topic and offers a model for studies in additional communities. The school used in this research is located in the rural areas of southwest Montana. This community has limited racial diversity and overall cultural diversity that would be representative of all students attending schools with shortened school weeks.

The researcher has also been an educator and activities director for a K-12 school in rural Montana. The topic of shifting to a four-day school week was considered while the researcher was employed there, and the school eventually followed through with shortening the school weeks after the researcher left. The researcher had and still has a strong rapport with his former students, and there is skepticism with shortening the school week, which could possibly lead to an increase in adolescent risky behavior. The researcher had knowledge of student activities that included underage substance use and risky driving along rural roads, and the potential increase of opportunity for those activities became, and remains, a concern about the calendar shift. Because the researcher has emotional investment with his former students, school, and community, the personal background of the researcher potentially influences the study design and analysis. However, given the researcher's background, it was important to develop a study in a way that would allow exploration of the four-day school week and three-day weekend by

applying a methodology that would build in-depth understanding through multiple perspectives.

To limit the possibility of researcher bias, the researcher and five colleagues formulated the interview questions and means of collecting data from students. The five colleagues had limited understanding of the four-day school week, which aided the researcher in placing a heuristic evaluation on the topic; however, each of the five colleagues maintain a level of K-12 expertise in education, with each of them holding positions as university professors. This ensured that the questions and the prompt did not promote the participants to answer and respond in a certain manner. In regard to the participants' perceptions on students' weekend choices, the interview questions encouraged the participants to provide both pros and cons of their personal beliefs. The data provided was also coded and themed by the researcher and two other colleagues, which helped make certain that aspects of the data were not overlooked.

Conclusion

Additional research is necessary to weigh the advantages and disadvantages of shortened school weeks. Since there is already emphasis on the financial savings, increased attendance and morale, and academic scores of four-day school weeks, the purpose of this case study was to examine the perception four-day school weeks has left on the various stakeholders of a rural Montana high school, with an emphasis on extended weekends, and to investigate the specific activities high school students participate in during three-day weekends. The following chapters provide a detailed

overview of the research literature related to this area of study, the methodology selected and implanted by the researcher, the findings from the case study, and a discussion of the case within the context of the broader field of research on four-day school weeks, problem-behavior theory, and student well-being.

CHAPTER 2 – LITERATURE REVIEW

Introduction

While, across the nation, there have been increased efforts to lengthen contact with students through adoption of year-round school schedule (Dixon, 2011), rural communities have shown more interest in modifying contact hours in different ways that results in shortened school weeks. The shift to four-day school weeks is not a new trend. Dating back to the 1930s, energy costs and overall finances influenced and encouraged school systems to adopt an alternative and shortened school week, and these concerns continue to be relevant today (Donis-Keller & Silvernail, 2009). While the budget constraints still influence scheduling today, contemporary decisions related to shortening school weeks are also due to further considerations.

Although the amount of research on shortened school weeks is not extensive, there is accurate assessment regarding the benefits four-day school weeks have on morale, attendance, and finances, and there are mixed findings connected to academic performance. But, there are also possible disadvantages associated with four-day school weeks, which include further financial struggles for low socioeconomic families, challenges facing rural communities, curriculum development, and problem behaviors of adolescents.

The intention of this section is to provide some forms of justification for the reasons school districts are shifting to a shortened school week. This section also gives detail about the possibility of favorable and disadvantageous outcomes associated with

four-day school weeks, and it relates those possible benefits and potential downfalls to the topic of adolescent well-being.

Possible Benefits of a Shortened School Week

Finances

The economic restrictions surrounding the educational system are some of the prominent reasons schools are making the shift to shortened school weeks. The constraint of financial ceilings is not necessarily relieved by four-day school weeks, but it is, in a sense, eased. The savings made by a school district taking part in a shortened school week come in the form of cutting costs on food and food service employees, hourly workers, energy expenses, substitute teachers, and the costs associated with transportation (Donis-Keller & Silvernail, 2009).

Since each school district has unique characteristics, it is impossible to place a specific percentage a school would save when implementing a four-day school week. Considering Montana's Office of Public Instruction's 2011 data, 53 school districts operated on a four-day schedule; however, according to data from the 2014-2015 school year, that number increased to 61 school districts. Because the number of Montana schools taking part in four-day school weeks is growing, the overall amount of savings is broad and expanding. More research is needed to establish a general amount saved, but the research that has been conducted found that it is an exaggeration that cutting back one single day of school per week will cut expenses by 20%. The realistic amount a school will actually save is between 0.4% and 2.5% (Griffith, 2011).

Although the savings are not as substantial as many districts hope for, reduction in expenses has become enough incentive for the shift. In spite of the limited amount saved, one district in Peach County, Georgia, claimed they were able to save teaching positions for 39 instructors, as a result of shifting to a four-day schedule. If the school district continued to operate on a five-day school week, these teaching positions would have either been eliminated or cut to hourly wages (Plucker, Cierniak, & Chamberlin, 2012).

Morale and Engagement

While the four-day school week decreases the total number of days in an academic year, when in comparison to traditional school calendars, the amount of time students and staff are obligated to attend school remains the same in Montana. This is the result of the requirements school districts have to meet the minimum aggregate hours in accordance with the state law. Research studies have shown that a switch to shortened school weeks has resulted in a gain in morale of students, teachers, and parents (Blankenship, 1984). The added day of rejuvenation promotes the overall mood, which translates to stronger engagement, making students and teachers more readily prepared and refreshed. Even though the school days are extended, teachers reported feeling less burn-out (Reinke, 1987). Another research study has shown a drop in employee departures due to a higher morale (Donis-Keller & Silvernail, 2009), which addresses what Ingersoll (2001) notes is a key problem in rural educational settings: high teacher turnover rates.

The increase in morale and engagement is linked to a decrease in disciplinary issues. Results from a research study done at Shelley School District in Idaho found that

“classroom observations of engaged learning time indicated high levels of student on-task behaviors despite lengthened classes and longer school days. Disruption of instructional time was lower, and teaching practices such as active learning and guided practice maintained student engagement” (Sagness & Salzman, 1993, p. 28). According to another study, the lengthened class period and the added time teachers have for preparation, resulting from four-day school weeks, has coincided with classes becoming more constructive (Donis-Keller & Silvernail, 2009). The increased morale of students relates to Cohen’s views on adolescent well-being, where the interaction between the atmosphere and the student is the prominent aspect of increasing student well-being (2006).

Attendance

The decreased number of school days associated with shortened weeks has led to a reduction in absenteeism. For students and staff, the added day off allows the opportunity for business and medical appointments without the hindrance of missing time in class. During traditional school weeks, these appointments required students and staff to miss school (Hewitt & Denny, 2011).

Attendance issues, particularly in rural settings, expand into extracurricular activities, too. With over 147,000 square miles, Montana makes up the fourth largest state (MT, 2016), so many of the rural schools adopting the four-day school week are required to travel long distances in order to attend extracurricular events. The result of the lengthened and time-consuming travel adds up to class periods missed. Research done on four-day school weeks in Oregon showed that students involved in extracurricular

activities had a dramatic increase with the amount of time they spent in school (Reinke, 1987). Although the research failed to give specifics as to how the time spent in school increased, it did mention the transition to a four-day school week improved one varsity player's attendance by 56 hours in one academic year.

Potential Disadvantages of a Shortened School Week

Academic Performance

Since the focal point of education is to provide students opportunities to obtain knowledge and skills, a measurement of academic performance is necessary to see if the obligations are being met. Research on the relationship of academic performance and four-day school weeks is inconclusive. Findings are mixed between shortened school weeks leaving no influence, providing academic setbacks, and contributing to increased education. As previously stated, Erylmaz (2011) argues that if adolescents identify as having higher levels of well-being, their motivation to learn increases. However, if adolescents have lower levels of well-being, they experience burnout and have a perception of being insufficient students. In regard to academics, it is unclear if students' well-being increases, decreases, or remains the same.

Some research suggests that the shortened school week does not hinder or enhance students' performance, but the academic performance remains neutral (Hewitt & Denny, 2011). Based off the results of eight different research studies, Donis-Keller and Silvernail (2009) found that the "broadest conclusion that may be drawn from the limited

research on the impact of the four-day week on student achievement is that it has no negative impact” (Donis-Keller & Silvernail, 2009, p. 10).

To date, standardized testing is the fixture for measuring student performance. Dam (2006) argues that if standardized tests are the tool for assessing student performance, then, when comparing four-day school weeks and five-day school weeks, there had only been one study completed. This study was based on a group of students throughout a four-year period. During the first two years students were enrolled in a traditional five-day school week, and during the last two years the students were in a four-day school week. The standardized test scores were compared, and there proved to be no significant distinction (Dam, 2006).

Evidence that Dam’s (2006) research study proved no significant distinctions in standardized test scores has recently been expanded upon in a research study completed in Montana. This causal comparative study (Tharp, 2014) looked at the Montana standardized assessment (MontCAS) scores from all the schools in the state that operate on four-day school weeks and all the schools in the state that use the traditional five-day school calendar. While the Montana research study found similarities with consistent test scores throughout the first two years of implementation, there was disparity in the years following, which resulted in test scores dramatically dropping (Tharp, 2014). It was after the shortened school week became a part of each of the communities’ culture that “the loss of the days of instruction appears to negatively affect student performance” (Tharp, 2014, p. 70-71).

Resulting from an alternative school calendar, another study found improvements in Colorado's academic assessment (Anderson & Walker, 2015). Using fourth-grade reading and fifth-grade mathematics scores from the Colorado Student Assessment Program (CSAP), this research study offered data from a state that has one third of its schools operating on a four-day school week. The data collected ranged from 2000-2010, and the results showed "positive relationship between the four-day school week and the percentage of students scoring at the proficient or advanced levels on math and reading achievement tests" (Anderson & Walker, 2015, p. 341). Anderson and Walker (2015) did mention that this study focused its research on only fourth and fifth grade reading and math scores. Because of this, they suggested uncertainty about the overall results being conclusive for all grade levels and suggested further research to investigate results at differing levels.

Teaching and Learning

The design of an academic calendar impacts the process of learning and teaching. While state and district standards remain the same, teaching strategies and learning objectives are dependent upon the length of class periods and the overall amount of days in school. Regarding curriculum development, four-day school weeks provide different opportunities and challenges.

While the approach of the class schedule in four-day school weeks varies from district to district, the minutes in a class period are generally lengthened. Gullatt (2006) found that only 60% of the school day is associated with actual time of instruction. To counter the low percentage of learning time, many schools cut back the total number of

class periods and added minutes to the subjects being taught and learned, which was a change from a typical day of seven or eight class periods to a day of four or five class periods. However, a study done by the School of Education at the University of Virginia found that teachers working with fewer, albeit longer, class periods each day could not cover the amount of material that was needed. The outcome led to drops in students' ACT, SAT, and advanced placement scores (Gullatt, 2006).

Although studies have shown an increase in teacher morale, as mentioned, the transition to a four-day school week does place an added obligation on educators to shift the design of curriculum they have grown accustomed to using. It is not that any framework used for curriculum development could not meet the academic needs for four-day school weeks. But, it is the teachers who are required to adhere to curriculum changes, even though they may not have been advocates for the alteration in the first place. The "teachers are in the rather strange position of being simultaneously both the subject and the agent of change" (Sikes, 1992, p. 36).

Change can be difficult for teachers, who can become stuck in an instructional rut. According to Milstein (1993), instructional ruts or plateauing occur when an educator becomes stagnant and lacks ambition for change, which most often occurs after a teacher has remained in the educator role for more than three to five years. Teachers grow comfortable with how and what they teach, which can make any form of pedagogy or content difficult to alter. Milstein's report (1993) also found that the restructuring of the educational process left certain teachers feeling as though it was not honoring their focus of the classroom, and created burnout, stress, and even anger.

Research done by Yarbrough and Gilman (2006) in rural western Kentucky observed a district changing to a four-day schedule. While the school week was cut shorter, the district designated twelve Mondays each school year for teacher preparation, with an additional four Mondays required for professional development. The study found that the majority of the teachers were advocates of the schedule change; however, some teachers claimed the added days for instructional planning and development required more work than what they were being paid for.

Rural Poverty

The majority of school districts adapting to the four-day school week, particularly in Montana, are defined as rural. In 2006, the National Center for Education Statistics (NCES) and the Census Bureau placed the definition of *rural* dependent upon the proximity a school is to an urbanized area or urban cluster, with urban clusters defined as an area populated between 2,500 and 50,000 and urbanized areas with 50,000 or more. A school that is less than or equal to five miles from an urbanized area and is less than or equal to 2.5 miles from an urban cluster is considered fringe rural; one that is five miles to 25 miles from an urbanized area and is between 2.5 and 10 miles from an urban cluster is distant rural; and, a school that is more than 25 miles from an urbanized area and is more than 10 miles from an urban cluster is remote rural (Provasnik et al., 2007).

The growth of rural students exceeds non-rural districts by short and long term trends, “with total rural student enrollment increasing by 136,884 students from 2008-09 to 2009-10 while non-rural student enrollment decreased by 54,162” (Johnson, Showalter, Klein, & Lester, 2014, pp. 27-28). In total, there are close to 10 million rural

students making up 20% of all public school students (Johnson, Showalter, Klein, & Lester, 2014).

This growth of rural education is overshadowed by the burden of low socioeconomic status. Lockette's (2007) research states that 800 of the poorest rural districts, which have a combined enrollment of over 900,000 students, have the same poverty rates as the major urban districts of Chicago and Los Angeles. Statistics also show that of the 250 poorest counties located in the United States, rural counties make up 244 of them (Monk, 2007). Overall, poverty rates are directly associated with the distance a rural community is from a metropolitan area (Partridge & Rickman, 2008).

While it seems as though the four-day school week would encourage students from impoverished families to use that added day for work, research suggests otherwise. According to Lerman (2000), a survey done by National Survey of America's Families (NSAF) found that teens in moderate- or high-income families were more likely to have a job. The NSAF survey, which was given during the 1997 school year, analyzed work status of 2,630 high school students in 13 different states. The research suggests that teens from low-income families had lower-than-average rates of holding a job; however, the low-income teens that were employed had a higher-than-average rate of working 20 hours or more.

Impoverished families of young rural students attending four-day school weeks will have an added expense of an extra day of daycare (Dam, 2006; Donnis-Keller, 2009). In a survey conducted by Sagness and Salzman (1993), some of the parents' major concerns about a four-day school week were associated with finding daycare and with the

overall issue of their children being left alone on those days that were once filled with school attendance. Of the 492 parents who took part in the survey, 42% wanted to discontinue the four-day school week schedule. Out of the groups surveyed, which included students, teachers, and support staff, the parents had the highest disapproval rating by nearly three times more than any other group.

There is also apprehension that students from low socioeconomic households will be missing out on a day of nutrients, with a loss of breakfast and lunch that was once provided by the school. In regard to students' nutrition and the level of well-being, adolescents living on an insufficient diet face consequences of poor immune systems and poor cognitive function and learning ability (Nelson, 2000). A research study done by Berliner (2009) found that a teacher from a New York school noticed a student acting up during the beginning of the week; however, the student's manner became milder as the week went on. The teacher made the connection of the poor conduct with hunger. During the school week, this student was receiving a sufficient amount of food based on the school's free and reduced meal plan. Due to limited financial resources, this student was not receiving enough food on weekends. In order to manage this, the school began sending impoverished students home with food for the weekends. It was not long before the teacher noticed behavioral improvements from the students when the school week started.

Rural Substance Abuse

The pressure of curbing substance abuse among youth is not just a present-day predicament. Substance abuse among rural adolescents is becoming a more recognized

issue of concern (Spoth, Goldberg, Nepl, Trudeau, & Ramisetty-Miler, 2001).

Teenagers “living in rural areas are often exposed to significant levels of risk factors, such as social isolation, early alcohol and other drug use behavior” (Dunn et al, 2008, p. 588). Not only are adolescents in rural areas prone to alcohol and drug use, but those rural adolescents also abuse tobacco, alcohol, cocaine, methamphetamine, hallucinogenic, and prescription drugs at a higher rate and at a younger age than adolescents in an urban setting (Pruitt, 2009).

The National Center on Addiction and Substance Abuse at Columbia University analyzed national data in 2000 on adolescent substance use in rural areas. The findings showed that adolescents living in rural areas were 104% more likely to use amphetamines, 50% more likely to use cocaine, 34% more likely to smoke marijuana, 70% more likely to have been drunk, and twice as likely to have smoked cigarettes than adolescents living in urban areas (Spoth, Goldberg, Nepl, Trudeau, & Ramisetty-Miler, 2001). The National Rural Health Research Center issued substance abuse as the leading health issue in 2001, and substance abuse ranked in the top 10 of health priorities in the Rural Healthy People 2010 Project (Williams, Barnes, Holman, & Hunt, 2014).

According to Pruitt (2009), rural communities struggle to adjust to this growth in substance abuse. There is a lack in resources to provide prevention and treatment, and rural law enforcement agencies are less likely than urban agencies to have personnel and expertise to combat the issues. Coinciding with these challenges is the vulnerability of rural populations, with fewer opportunities for educational advancement and generally less funding. The decreased number in population results in a decline in tax revenue and

eroding infrastructure, leading to a dilemma that has infected the rural adolescent population (Pruitt, 2009).

School Connectedness

The research regarding four-day school weeks highlights the benefits and raises some questions about possible disadvantages. However, there is little to no mention of what the students are doing to fill their extended weekends. It is unclear if students are filling their extended weekends with work, time with family, or at-risk behaviors. The research does, however, show that higher levels of school connectedness increase positive behaviors while reducing problem and at-risk behaviors.

Research shows “that higher levels of school connectedness were strongly related to students’ delayed initiation of cigarette smoking, alcohol and marijuana use, delinquency, and violent behavior 1 year later” (Chapman, Buckley, Sheehan, & Shochet, 2013, p. 96). School connectedness consists of three dimensions: affective, behavioral, and cognitive. The affective dimension is related to the students’ feelings about peers, teachers, and the school as a whole. The behavioral dimension is associated with performance and participation in school activities. The cognitive dimension is linked to the students’ motivation and expectations, which includes academics and extracurricular involvement (Jimerson, 2003). While each of these dimensions is essential for school connectedness, the positive social setting in which it is delivered is necessary for constructive outcomes (Hermann et al., 2002). Therefore, the academic setting can impact the health-related behaviors of students. The level of connectedness a student has with the school supports or deters the involvement they would have with health-related

behaviors (Lindberg, Boggess, Porter, Williams, & Urban Inst., 2000). While the morale of students has been mentioned to increase due to shortened school weeks, it is uncertain whether the connectedness to school would increase, decrease, or remain the same, which, conceivably, could factor into students' substance use, delinquency, and violent behavior.

A study looking at ten different risk behaviors (alcohol use, tobacco use, illegal drug use, weapon carrying, suicide attempts, binge drinking, marijuana use, fighting, suicidal thoughts, and risky sexual activity) found that when compared “with in-school male adolescents, out-of-school male adolescents are more likely to engage in multiple risk behaviors” (Lindberg, Boggess, Porter, Williams, & Urban Inst., 2000, p. 28). Of the out-of-school male adolescents, 64 percent were involved with two or more health risk behaviors, while 40 percent of in-school male adolescents were involved with two or more health risk behaviors. The results from the studies do not suggest that the adolescent risk-taking behavior comes primarily from at-risk students and/or impoverished students. While there are many factors that are relevant in risk-taking behavior, “school factors, which may be more readily influenced through school-based prevention programs, do play a part in shaping adolescents' behavior both within and external to the school environment” (Chapman, Buckley, Sheehan, & Shochet, 2013, p. 97). This connects to all socioeconomic levels of students, with affluent youth engaging in problematic behavior, too (Racz, McMahon, & Luther, 2011).

According to research studies, nearly half of adolescents' waking hours are considered free time (Hofferth & Sandberg, 2001; Larson & Verma, 1999). The way in

which adolescents choose to spend that free time affects the choices they will make in the future. Unstructured and “unsupervised socializing, or ‘hanging out’ with friends, is consistently associated with risky [...] behavior” (Siennick & Osgood, 2012, p. 646). Similarly, if that unsupervised and unstructured time is connected directly to opportunity for risk taking behavior, then parents, mentors, and interventionists may consider channeling all adolescents’ free time toward more focused and structured activities (Siennick & Osgood, 2012).

According to Shann (2001), a nationwide poll on adolescent delinquency was sent out to 855 police chiefs. Of the 855 police chiefs, two-thirds of them responded, and 86% of them suggested that reducing adolescents’ unsupervised time would greatly reduce crime and all forms of violence. Smith, Chein, and Steinberg (2013) mentioned that changes in individuals’ livelihood contribute to modifications in decision-making. Due to limited supervision, adolescents engage in risk-taking behavior in order to become more affiliated with peers. This opportunity to partake in hazardous behavior, which was once discouraged by parents and mentors, only increases with more freedom.

Adolescent Well-Being

Students’ well-being is of the highest priority in any educational setting; however, it is unclear if a shortened school week and lengthened weekends promote or hinder adolescents’ well-being. Adolescent well-being directly links to the potential advantages and disadvantages of shortened school weeks. The following section will define well-

being, for the purpose of this research, then will look at well-being in relation to academics, extracurricular activities, family, peers, food and sleep, and religion.

As previously stated, well-being is difficult to define. Warner Wilson originally defined the term in 1967 as a state where someone is a “young, healthy, well-educated, well-paid, extroverted, optimistic, worry-free, religious, married person with high self-esteem, job morale, modest aspirations, of either sex and of a wide range of intelligence” (p. 294). According to Diener and Suh (2000), Wilson’s definition has shifted from specific characteristics to the process of obtaining happiness. Bourke and Geldens’ definition of well-being was based on the interpretation of 56 high school students. The participants in Bourke and Geldens’ research study based their well-being on relationships, psychological dimensions, physical health, and environmental factors (2007). While countless aspects tied to well-being influence adolescents, students’ happiness with academics, extracurricular activities, family, peers, food and sleep, and religion directly relate to the topic of the four-day school week.

Academics

Eryilmaz (2011) argues that if adolescents identify as having higher levels of well-being, their motivation to learn increases. Conversely, “if they have low level of subjective well-being, they experience school burnout, find school activities meaningless, and also perceive themselves as insufficient students” (Eryilmaz, 2011, p. 1758). Cohen (2006) views adolescent well-being in education as an interaction between the atmosphere and the student. According to Cohen, adolescent well-being in the educational arena can be achieved through promoting social and emotional competencies

and by providing the students with a safe environment to learn. This relates to the possible benefits of attendance and morale and engagement within a shortened school week, and it also relates to the potential disadvantages surrounding academic performance, teaching and learning, and school connectedness.

Extracurricular Activities

According to Eccles, Barber, Stone, and Hunt (2003), extracurricular activities provide students with the opportunity to take part in social, physical, and intellectual skills, to advance a feeling of membership in community, to grow social networks with adults and peers, and to experience, overcome, and fail at challenges, all of which contribute to the maturation leading to adulthood. Mahoney (2002) found that extracurricular activities significantly boosted the well-being of adolescents living with a single parent. A research study also found that extracurricular activities were more influential on student well-being in small schools than in larger schools (Feldman & Matjasko, 2005). Broh's research study found that adolescents in grades 10-12 who participated in extracurricular activities had a higher level of self-esteem and overall well-being than students who did not participate, and Barber, Eccles, and Stone (2001) concluded that adolescent involvement in extracurricular activities provided protective feelings against isolation and depression.

Family

According to Allen, Hauser, Bell, and O'Connor (1994), adolescents' extended time spent with parents has "been linked to a range of positive outcomes, including self-

reports of better adjustment to separation, higher assertion and dating competence, greater resistance to peer pressure, higher self-esteem, and lower rates of reported loneliness after leaving home” (p. 179). Cripps and Zyomski’s extends on the importance of parental involvement on adolescent well-being:

Personal experiences that evolve from the parent-adolescent relationship are the initial source that sets in motion the cycle of how adolescents will self-evaluate and interact with others. In other words, the type of relationship they experience with their parents is thought to foreshadow their attitudes toward themselves and the quality of relationships they will have with their peers (p. 2).

The relationship of parental engagement and adolescent well-being is significant, and it is important to mention how parental dynamics factor in. According to Amato and Keith (1991), adolescents from divorced families experience significantly lower levels of well-being than children from families that are intact (Amato & Keith, 1991). Findings from a research study done by David, Demo, and Acock (1996) states that adolescents from divorced parents had a significantly higher level of anxiety and depression, had lower levels of well-being, and more issues with misbehavior at school than students whose parents were together.

Sleep and Food

Adolescence is a period in which it is essential that the body and mind receive adequate rest (Amschler & McKenzie, 2005). The length and quality of adolescent sleep link directly to physical and emotional well-being, with less sleep increasing levels of depression and fatigue, while lowering cognitive function and academic results (Fuligni & Hardway, 2006). Along with sleep, adequate nutrients factor into a primary aspect of

achieving a high level of well-being (Oreml, Lindenberg, Steverink, and Verbrugge, 1999). Adolescents living on an insufficient diet face consequences of poor immune systems and poor cognitive function and learning ability (Nelson, 2000). This relates directly to the potential advantages and disadvantages of student attendance, academic performance, and school connectedness.

Religion

Based on interviews and surveys completed by 225 high school students, Eryilmaz (2015) found that religion influences adolescent well-being in seven different ways. First, religion is believed to show a reason for existence and information about what will happen after death. Second, religious followers have a strong tendency to believe that future hopes and wishes will become true, which promotes the feeling of optimism. Third, adolescents' faith coincides with happiness and the moral reward for those deeds. Fourth, religion proves to be an essential source for coping with detrimental or tragic happenstance. The fifth aspect relates to comfort, support, and protection in relationships with others. The sixth aspect includes the adolescents' intimate relationship with God, which aids in attaining developmental goals. A strong relationship with God encourages adolescents to better their identity in pursuit of advancement in morals (Sinha, Cnaan, & Gelles, 2007). The final aspect is the influence religion has on adolescents' performing positive deeds. An adolescent who has a strong religious belief is more inspired to help and aid others, which encourages adolescents to become active participants in society. Steger and Frazier (2005) have a more simple theory on the

connection between religion and well-being, which states that religious beliefs coincide with the pursuit of finding the purpose of life.

Peers

According to Spear (2000), during an average week in a school year, high school students spend close to one-third of their waking hours interaction with peers, and they spend less than 10 percent of their time interacting with adults. This large percentage of time adolescents spend with friends provides a “significant source of positive experiences for adolescents, with adolescents reporting that they are most happy when talking with peers” (Spear, 2000, p. 420). However, another study found that the increase of well-being in adolescents was the same for when they were associated with peers or family. According to Raja, McGee, and Stanton (1992), the amount of time adolescents spend with friends is incredibly important for their well-being; however, that interaction does not come at the expense of attachment to family. However, it is important to note that the time adolescents spend with peers coincides with the potential disadvantage of substance abuse (Dunn et al, 2008).

Conclusion

The impression four-day school weeks has made on various districts is far from universal. Districts and the individual stakeholders have perceptions that are unique, which makes the topic of shortened school weeks so difficult to analyze through a specific lens. Dependent upon which angle researchers and stakeholders view certain aspects of the shortened school week, benefits and disadvantages could be highlighted

from finance and academics to curriculum development and morale. This literature review provides an overview of the existing research related to the four-day school week, with special interest regarding students' choices on extended weekends. While this chapter provided an overview of key benefits and disadvantages associated with four-day school weeks, it is likely there are other advantages and disadvantages not discussed here.

CHAPTER 3 - METHODS

Introduction

There is limited research regarding the extended weekend choices of students enrolled at districts operating on a four-day school week. The purpose of this case study was to examine the perception of various stakeholders regarding the transition of a rural Montana high school to a four-day school week, with an emphasis on the activities students participate in during extended weekends. The following research questions were directed to stakeholders from a Montana school district that recently shifted to a four-day schedule:

1. As a result of a four-day school week, how do rural school stakeholders view the choices made by students on extended weekends?
2. What choices do students make on their extended weekends, and, according to stakeholders, what influences those choices?
3. In what ways is the four-day school week contributing to or detracting from student well-being?

The ensuing sections explain in detail the design of this research, the manner in which the samples were selected, how the data was collected and analyzed, and the validity and credibility that was used to provide accurate and appropriate information.

Study Design

The transition to four-day school weeks is gaining popularity. Because of this, there is a need for further research, particularly in regard to how and why students are making the choices they are on extended weekends and if those choices are impacting their overall well-being. In order to gain a better understanding of students' weekend choices, a case study was used to examine the benefits and disadvantages of student behavior. The intent of case study research is to gain insight on a specific issue or concern through detailed and subjective data collection, which involves multiple sources of information (Creswell, 2012). In order to meet the expectations for a case study, data was gathered through the perspectives of multiple groups and through multiple means, with the overall research centered on the issue of students' weekend activities resulting from shortened school weeks.

Data was collected from students, parents and guardians, teachers, coaches, and administrators from a rural Montana school district, which shifted to a four-day school week within the past three years. Data from the parents and guardians, teachers, coaches and administrators was collected at the school, either in the classrooms or the school offices, and the data collected from the senior students was done remotely through a text-messaging system called Remind. Further data on academic results, student enrollment, and student enlistment in free and reduced meal plans was collected through Montana Office of Public Instruction website.

This case study is bound by time through two different aspects. First, it is bound in time for when data was collected, which was during the final month of the 2015-2016

school year. It was also bound in time in relation to when the case site transitioned the school calendar. The school used for this research study shifted to a four-day school week in the 2014-2015 school year, so the participants of this case study could compare and contrast the school schedules without too much time of separation. This case study is also bound by place, which is the specific school district and the community surrounding it.

Case Site

For the purpose of this study, a rural Montana high school was used as the case site. For the sake of confidentiality, the school district will be referred to as Montana Rural High School (MRHS). According to 2010 census gathered from city-data (2016), MRHS is located in a town with a population of 875, with 97% of the community racially white. The location of the town is near a major recreation site and tourist attraction, which makes the population growth and reduction seasonal, and the proximity to the federally-managed tourist site also stimulates the economic market. Because of the location near tourist site, the industries of accommodation and food services and recreational activities dominate the market, combining for close to 55% of the employment (City, 2016). While it can be considered a premiere destination for the outdoor enthusiast, the nearest town of over 2,500 residents is over 50 miles away, and the closest city with over 50,000 residents is over 150 miles of travel. Due to the distance from the closest urban cluster and closest urbanized area, MRHS is considered a remote rural school.

School districts operating on a four-day school week function through drastically different calendar arrangements. The days students attend schools differ, with some

districts shifting what days the students are present, with districts taking Fridays off, and other districts taking Mondays off (Donis-Keller & Silvernail, 2009). This research is based on MRHS's alternative schedule of the school week that consists of Monday-Thursday.

Before shifting to a four-day school week, MRHS exceeded Montana's requirement of 1,080 aggregate hours; so, according to the administrators, the transition added only 30 minutes to each school day, and the aggregate hours are still widely surpassed. Although MRHS operates on a modified four-day school week, the school doors are still open to students on Fridays. There are two school functions that operate on those days: Friday Program and Friday School.

Based on a grant MRHS received from 21st Century Community Learners Center, Friday Program offers the opportunity for elementary students from kindergarten to 6th grade to attend the school from 9 a.m. to noon. While this learning opportunity starts at the school, teachers and the students take full advantage of the surrounding wildlife and community resources. From fly fishing and hiking to arts and crafts, the instructors and students connect real-life experiences to the subjects and standards of academics.

Friday school has been adapted to what it is now. The Friday hours that were once required for students with a record of being tardy, suspensions, and disciplinary issues have been transformed into a platform for student growth. The district has set in place an eligibility and student-growth policy that has the struggling students formulate an Academic Modification Plan. This has the students sit down with their parents or guardians, an adult advocate (other than their parents or guardians), and the educators

whose class or classes they are struggling with. The students initiate the approach to improve their academic performance, which coincides with attending school on Fridays from 9 a.m. to noon, until improvements are met. Regardless of the specific grade a student is receiving, if they are following their Academic Modification Plan, they will still be eligible if they are participating in extracurricular activities.

According to administration at MRHS, Friday School and the Academic Modification Plan do not take something away from students in a punitive style, but they do contribute to student maturity and accountability for their actions. However, Friday School is not designated for just students with an Academic Modification Plan. Administrators also mentioned that students from all academic levels still attend the school on Fridays, stating that some students prefer getting their work done Friday mornings in order to spend the rest of their weekends with leisure activities of their choice.

Primarily out of necessity, MRHS shifted from a traditional five-day school week to a shortened school week in the 2014-2015 school year. According to national media (2014), leading into the 2014-2015 school year, MRHS was notified of errant financial support coming from the Department of the Interior. The revenue was originally intended to help finance schools with children of federal employees who lived on untaxed federal money. MRHS received that money into 2014; however, the monetary aid was supposed to stop in 1976. About 25 percent of the district's budget was cut, leaving the school and all stakeholders in question on how to find \$700,000 in revenue to offset the loss. The transition to a four-day school week helped provide answers to that dilemma. According

to MRHS administration, the financial savings rooted in a shortened school week has been between 4 and 5 percent.

Because the shift to a shortened school week was such an immediate and drastic measure, the community agreed to operate on a four-day school week during a two-year trial. Throughout this trial period, school board meetings and continuous surveys were held and given to the various stakeholders. The discussions and the results from the meetings and surveys culminated in MRHS making the four-day school week a permanent fixture in the spring of 2016.

While it was never the main feature of shifting to a shortened school week, MRHS has seen added benefits related to travel for extracurricular activities. Because the school, which is a Class C school that enrolled 83 students in the spring semester of 2016 (OPI, 2016), is located in a rural community, extracurricular activities require extensive travel. The travel to several of MRHS's district opponents requires close to four hours one way. While operating on a traditional five-day school week, this considerable amount of travel translated to students missing a large portion of school hours.

When it comes to academics, the effects of a four-day school week are still unknown. Based on the rankings published in a leading national publication, MRHS has been ranked the top academic high school in the state of Montana for four out of the last five years (2016). The ranking is centered on overall standardized test scores, the proficiency rates on standardized test scores for the least advantaged student groups, graduation rates, and preparedness for college through advanced placement exams and international baccalaureate exams (US, 2016). During MRHS's first year operating on a

four-day school week, the district was not labeled the most elite high school in the state, which brought concern from MRHS stakeholders that the school calendar had a negative impact on students' learning. However, the following year, MRHS was back on top of the academic podium as the leading school in Montana.

The purpose of choosing to study MRHS was because the school district was not far removed from the traditional school schedule. As mentioned, MRHS started using a four-day week the year prior to this research, which made the comparisons and contrasts of the differing school calendars fresh in the memory of the participants. MRHS also met the demographic classification of Montana schools that traditionally shift or have already transitioned to a shorted school week. This demographic classification that coincides with schools using four-day school weeks is based primarily on its rural location.

Sample

The sample population for the interviews and focus group of this research study was formulated through modified snowball sampling with desire to have maximum variation. Snowball sampling is a technique of gathering participants through a form of recruitment (Creswell, 2009). Once approval to conduct this research study was gained through Montana State University's Institutional Review Board and through MRHS, the superintendent, principal, and secretary of the school recommended participants for the study. There was emphasis that the participants came from differing backgrounds and interests; however, availability and approval to partake in the study became limited. Since authorization from Montana State University's Institutional Review Board was not granted until the final month of MRHS's 2015-2016 school year, there was a brief

timeframe to meet with, gain approval from, and interview participants. However, administrators, parents and guardians, teachers, coaches, and students were all participants of this case study.

Although it is not intended to be truly representative of the entire student enrollment, each of the senior participants was enrolled at MRHS when the traditional five-day school week was being used. The students were encouraged to supply detail as to the activities they were participating in on extended weekends and to share what their friends were doing. The data for this research study was completely anonymous, even to the researcher, so it was encouraged that all activities be revealed. Interviews with the students were not part of this research study, so the student participants' socioeconomic status, involvement in extracurricular activities, involvement in the workforce, use of substances, and academic standings could only be insinuated through the text-message data collected. Although maturation influences adolescent development and judgment (Steinberg & Morris, 2001), the student participants' viewpoints still helped to gain understanding of an area of four-day school weeks that has not been researched.

The superintendent and principal were participants in the group of administrators. Each of them was employed at the school before the calendar shifted to a shortened schedule. There was intention to interview the activities director; however, it was discouraged from the superintendent due to the activities director being employed in that position strictly during the four-day school week. One point of emphasis while selecting participants was their experience at MRHS while the district operated on a five-day week and a four-day week. To meet this criterion, along with the superintendent and principal,

interviewees consisted of five parents/guardians of MRHS students, four teachers, the school secretary, and three coaches.

To maintain confidentiality, each of the participants' names is not used in the following chapters. When referring to the participants, the students, administrators, teachers, coaches, and the parents and guardians, each had the option to choose their own pseudonyms; however, there was little interest from any of the participants to choose those names, so the researcher has randomly assigned them. Random names were given to the participants. Prior to the data collection process, the researcher explained to each of the participants that names, locations, and other labels associated with the specifics of MRHS would be altered for the following chapters.

Participants

The target of this case study was to gain depth in terms of the views and choices of students' extended weekend activities. To do this, a qualitative design was used instead of a quantitative approach, which could have potentially given more breadth. However, it is uncertain how much more breadth a quantitative design would have given in such a rural setting as that surrounding MRHS. Due to the rural population of the community and the limited enrollment at MRHS, the number of potential participants was limited. To gain as much detail as possible, various data sources were used, but it is noted that the data that was collected is not meant to be generalizable to other communities or even representative of the community surrounding MRHS. It is also not representative of the entire student population. Following are descriptions of the participants in this case study.

Mr. Smith, Superintendent - Before becoming the superintendent at MRHS, a position Mr. Smith has held for the last four years, he maintained that educational position at both Texas and Idaho schools. He claimed that being a superintendent in Texas and Idaho had far more community issues and student behavioral issues than what is at MRHS. The location of MRHS near a major tourist destination and the proximity to the countless opportunities for hunting and fishing was one prominent incentive for Mr. Smith and his wife and children to move to the rural Montana community. With three children, in 6th, 9th, and 10th grade, the academics at MRHS become another draw for his family's move. Mr. Smith and his family are also very invested in school sports and clubs at MRHS, stating that his "Fridays and Saturdays are pretty much taken up with extracurricular activities."

Mr. Brown, Principal - Much like Mr. Smith, Mr. Brown's passion for the outdoors attracted him and his family to the MRHS community. The rural location has become a place where Mr. Brown, his wife, and his three children, all in elementary school, call home. Prior to becoming principal at MRHS three years ago, Mr. Brown spent 14 years as a general teacher in an Alaskan village and as a science teacher in a rural South Dakota school. Since the school he taught at in South Dakota operated on a four-day school week, Mr. Brown's time spent as a science teacher gave him hands-on experience with the alternate scheduling. He said that he "was pretty solid with what was going to happen, what it was going to be like." Mr. Brown is also the head football coach at MRHS, which he said coincides well with the four-day school week, primarily because it gives his team extended weekends to bond more.

Mrs. Murphy, Teacher - For the past 17 years, Mrs. Murphy been the family and consumer science and art teacher at MRHS. Mrs. Murphy's two daughters graduated from MRHS before the school shifted to a four-day school week; however, she still has that parental/guardian closeness to the school with her sophomore age nephew living with her. Her nephew moved in with her the year MRHS shifted to a shortened school week. She made it clear throughout the interview process that she is uncertain if the difference between her nephew and her daughters are because of gender, the length of school week, or a combination of both.

Mr. Lincoln, Teacher - Mr. Lincoln's entire career as a teacher has been at MRHS. As a senior in college in pursuit of an English Teaching degree, Mr. Lincoln was assigned to student teach at MRHS in the spring of 2011. The following school year, Mr. Lincoln was hired as a journalism teacher for the juniors and seniors and as an English teacher in grades 7-10. Not only has Mr. Lincoln spent two years teaching on the five-day school week and two years on the four-day school week, he also has experience with the school's extracurricular activities. He has been a coach for both track and football, which he said makes for long days since he lives in a town 40 miles away from the school.

Mrs. Dunn, Parent - Mrs. Dunn has been a Response to Intervention (RTI) specialist at the MRHS school district for the past nine years. While her teaching is in the elementary wing of the school, Mrs. Dunn is well informed with high school students' choices and activities on extended weekends. She has one child, a sophomore son, who she jokingly confessed is "not an academic." Her strong opinion against the four-day

school week as a teacher is countered by her positive feelings of the shortened school week as a parent, stating, “I just don’t have enough time to teach what I need to teach,” but “as a mother, it’s great for my son.” She stated that the main reason a shortened school week is so beneficial for her son is because he is highly involved with athletics, and the four-day week cuts back on the amount of school he misses for competition.

Mrs. Ross, Parent - A research study done by Reed and Salazar (1998) found that school secretaries are the backbone that keeps the districts upright. From aiding administration and the teachers to helping students with medication and lost lunch money, the school secretary is nothing less than a foundation within the school walls. Mrs. Ross has held that position at MRHS for the past 19 years, and she is thrilled with the shortened school week. She said that she did not realize she would like it as much as she does, but “just having that extra day off is great.” As a mother of a sophomore son at MRHS, she enjoys the shortened school week as a parent just as much as an employee. Two of her other sons graduated from MRHS while the school operated on a traditional school calendar, and she commented on how the four-day school week has allowed more family time.

Mr. Peters, Parent - From the time a four-day school week became a topic at MRHS, Mr. Peters was against it, and his views have not changed. He had concern from the beginning that missing the Friday of school would lead to more re-teaching on Mondays, less homework, and was “not good for the majority of the student population.” As a teacher, a coach, and a former activities director at MRHS for over 15 years, Mr.

Peters believes his concerns regarding a shortened school week have been verified after two years of the scheduling. Mr. Peters has a daughter who graduated from MRHS before the transition to a four-day school week, a daughter who is a junior, and a son in middle school.

Students - As already mentioned, specific identifying information of the senior participants in this research study is not known. Senior students of MRHS's 2016 graduating class became participants and provided data through a text-messaging system. While three meetings were held with the entire senior class of 19 students and notifications and emails were given to parents, three students supplied consent forms and assent forms from parents and/or guardians. Although the number of student participants was low, this case study was meant to explore the perception of stakeholders and to get a specific glimpse into student activities on extended weekends. The data that was collected from the MRHS seniors is exclusively related to their weekend activities and to the weekend activities of their peers.

Data Collection

In order to gain as much information as possible on the understudied topic of students' extended weekend choices, this case study used face-to-face, phone, and email interviews, a focus group, and a text-messaging system called Remind. The researcher conducted the face-to-face interviews and the focus group at MRHS, and the remainder of the data was collected through consistent contact with the various participants during the spring semester of the 2015-2016 academic year and the summer of 2016. Email

conversations and phone conversations were made on a weekly basis to individual participants, which clarified interview comments and provided further detail on topics that came up during transcription.

The senior participants each registered for a text-messaging system called Remind. Remind is a text-messaging system that sends messages to the recipients on specified dates and times. The web-based Remind was originally designed for use in K-12 contexts and allows a teacher to send reminders about homework and other events anonymously to students; it prevents a teacher from having direct access to a student's mobile number. The researcher gave a brief tutorial on the system and had the participants log into an account to the program. For the sake of this research study and to gain the most insight on specific student activities, the students received text messages prompting them to identify their current behavior during the last two weekends of their senior year. According to Wagenaar et al. (1993), the timeframe in which the data was collected from the senior participants coincides with a period of adolescents that connects with risky behavior and substance use:

Approximately 6 percent of 10- and 11-year-olds are current (within the last 30-days) users of alcohol; the rate increases to about 25 percent at ages 12-14, and to 55 percent at ages 15-17. Among high school seniors, 92 percent report consuming alcohol at some point in their lives, and 64 percent report being current drinkers (p. 459).

Based on the student feedback during the tutorial of the Remind program, the student participants agreed to set the most appropriate times for the text messages. The text messages were then sent to them at 7 p.m. on Thursday nights, noon and 7 p.m. on Fridays, noon and 7 p.m. on Saturdays, and noon and 7 p.m. on Sundays. While there is

concern as to the activities students were involved with after 7 p.m., that time was selected based on student participants' feedback about when they would be most likely to respond.

Aside from thanking the student participants for their involvement in this research study on the final text message, each message simply asked the student participants what they were doing and what their friends were doing. They had the option to reply, not respond, or withdraw from this process at any given time. However, each participant responded to each message sent to them, resulting in a total of 42 responses. The responses filtered into the Remind account of the researcher. Upon registering for an account on Remind, the user accounts for each participant were coined with a fictitious name made by the student participants. This resulted in complete anonymity.

The administrators each took part in individual interviews that lasted between 30 minutes to one hour. The interview questions (See Appendix A) focused on the perspectives the superintendent and principal have in regard to students' weekend activities. Follow-up questions were answered through further face-to-face, phone, and email interviews. The face-to-face interviews were recorded and transcribed. Phone interviews and email conversations were used to gain further insight; however, specific quotes were not used from phone or email conversations.

An identical method of collecting data through interview was used for teachers and coaches at MRHS, with each of them conducting an interview and answering follow-up questions through various interview methods. A focus group was used to collect data from the three parent participants. This focus group was held at MRHS, where each of

the parents presented their perception on students' and their children's weekend activities.

The teachers, coaches, and administration were able to interview after school hours or during their prep periods. Due to working hours and the overall ability to contact each of the parents and guardians, the ideal scenario was to have a focus group following a school board meeting. However, that approach did not become fruitful. The superintendent informed the researcher that parents and guardians rarely attend school board meetings, so the approach was shifted. In order to hold a focus group, the school secretary, who is the mother of a sophomore son, contacted two other parents. This resulted in the three parents participating in a focus group at MRHS during the first week of summer break. While it would have been beneficial to interview and/or hold focus groups with MRHS students, this path was not taken. Because approval to conduct research on underage participants is difficult to achieve and because sensitive topics of alcohol, substance, and tobacco use, and other detrimental behavior were points of interest in this research study, the student participants took part in the text-messaging program. Remind provided the opportunity to collect student data without researcher influence or prodding.

Because phone interviews, face-to-face interviews, email conversations, a focus group, and data from Remind were used, information was collected through various manners, each of which included respondent validation. The transcripts were approved by the participants, and no alterations were made. Once again, to maintain confidentiality,

names mentioned throughout this data collection process were changed for this research study.

Data Analysis

To begin with, the collection and initial analysis of the data occurred simultaneously. During each of the interviews and the focus group, the researcher took notes to support initial data coding and to log detail of emotions. Examples of this included the tone of interviewees' voices, their sighs, and their laughter. Examples also included notes on the surroundings and overall atmosphere of the classrooms or offices where the interviews took place.

Upon transcription of the various interviews and focus group, and after reformatting the text-message responses from Remind to a Microsoft word layout, two colleagues and the researcher read through and highlighted commonalities and themes from the collection of transcripts. The process included both open and focused coding practices (Charmaz, 2003).

The researcher and the two colleagues each read through the entirety of the transcripts, and key words and overarching motifs from each participant of the study were compared and contrasted. Much like the colleagues used to design the interview questions, the colleagues who contributed to analysis of the transcripts held limited understanding of the four-day school week; however, as instructors at the university level, the colleagues did hold some expertise in terms of K-12 education. This coding process took part in three phases. First, the researcher and two colleagues independently reviewed the transcripts. The intention of the first phase of coding was to find repetition

and outliers from each of the individual transcripts, with no intention of indicating whether the information came from a parent, guardian, teacher, coach, administrator, or student. The second phase of coding did involve categorizing the data based on the groups. The researcher compared within and between the groups of participants to crystalize the most common themes and to note divergent examples. The final phase considered the themes and codes from the first two phases within the context of the research literature and the conceptual framework. The dissection of the transcripts led to feature categories, and certain outliers were also presented in the following chapter to portray the complete picture of the data.

The analysis of the transcripts and the overall coding of each participant's responses helped give insight into the research questions. The various groups and individuals provided detail into the stakeholders' perception of students' weekend choices, the state of well-being of the students, and the student activities during extended weekends.

Validity and Credibility

This case study was meant to identify overarching themes with respect to the perception of how and why students are filling their extended weekends the way they are, and to explore how the activities affect student well-being. The sampling technique resulted in variations of perception from students, parents and guardians, teachers, coaches, and administrators.

As previously mentioned, trustworthiness was gained through member checking, or respondent validation, which gave the participants the opportunity to read through the

transcripts to make certain their intent was not misinterpreted. Data provided through interviews, a focus group, and text responses also provided triangulation. The importance of triangulation is to supply data through various forms, which aids in eliminating biased views and to gain a level of certainty on analysis of the topic. Once the transcripts were coded and themed, rich and thick description is presented in the representation of findings, which allows “readers to make decisions regarding transferability” (Creswell, 2013, p. 252). In order to provide accurate and thick description, participants’ emotional responses were included in representation of the findings. Nonverbal cues, such as laughter and sighs, contributed to analysis by helping establish meaning and tone.

Since this research was conducted on a single case site, there was a limit to cultural diversity. However, due to MRHS’s rural location, there is transferability in the findings of this research study. While each community has its own distinctive traits, MRHS has rural characteristics similar to other schools that may or already have shifted to an alternative school calendar.

Conclusion

The purpose of this case study was to fill a void in the research on four-day school weeks by examining the perception of the stakeholders, investigating the specific activities of high school students, and looking at the adolescent well-being resulting from lengthened weekends. In order to collect and analyze appropriate data on students’ choices and activities on extended weekends, various stakeholders from the MRHS community participated in this dissertation study. Located in the southwest corner of

Montana, MRHS and the community surrounding the school fit the rural demographic of districts that typically shift to four-day school weeks.

CHAPTER 4 - FINDINGS

Introduction

The purpose of this research study was to examine the perception four-day school weeks has left on the various stakeholders of a rural Montana high school and to investigate the specific activities high school students participate in during three-day weekends. The following research questions informed this study:

1. As a result of a four-day school week, how do rural school stakeholders view the choices made by students on extended weekends?
2. What choices do students make on their extended weekends, and, according to stakeholders, what influences those choices?
3. In what ways is the four-day school week contributing to or detracting from student well-being?

In order to gain insight into the research questions, parents and guardians, coaches, teachers, and administrators provided detail throughout the interview process. The text-messaging feedback from the senior students at MRHS presented distinct information regarding what the students were actually doing on extended weekends. Based on the responses from interviews, a focus group, and data collected from seniors at MRHS, the following themes materialized: extracurricular activities, workforce, time spent with family, time spent with peers, Mondays, community influence, and outlook.

Participants contributed differing levels of information toward these themes. Some participants provided a level of depth on certain themes, while others did not

provide extended detail. The conflicting and parallel viewpoints are presented in the following sections, and because some themes are closely related, the data provided a degree of cohesiveness to those separate themes.

Themes

Extracurricular Activities

The topic of students' involvement in extracurricular activities dominated the perception and overall interviews of each of the participants. In the first interview of this research study, Mr. Smith, the superintendent and father of three students in the district, stated with certainty that "most of the activities in town revolve around the school activities." While this seemed to be a somewhat presumptuous statement, several of the participant interviews uncovered perspectives that matched the administrator's perception. The participants specified the significance that school related extracurricular activities had on students' lives, and they expressed the transition to a four-day school week and the resulting lengthened weekends accommodates students' involvement.

Mr. Smith has been the superintendent at MRHS for four years, with two of his years at the school district operating on the traditional five-day school week and two years scheduled around the four-day school week. Mr. Smith mentioned the importance extracurricular activities have on not only the student population, but he also suggested the value those activities have on the community as a whole. Mr. Smith said with a sense of pride:

We're a small K-12, rural school that's fairly isolated, so most of the activities in town revolve around the school activities, which is the way it

is in most rural towns. We intentionally schedule our games and activities on Fridays and Saturdays. As we're a K-12 rural district, there's a very large percentage of our students that participate in these activities. So on Fridays and Saturdays, most of those kids are at some sort of athletic event.

Mr. Peters has been a teacher at MRHS for over fifteen years, has one daughter who graduated from MRHS, has a daughter in 11th grade and a son in 7th grade, and is the golf coach. Mr. Peters' view coincides with Mr. Smith, stating that "about 80 percent of our students" at MRHS are involved in extracurricular activities.

The information gained through the seniors' text message responses supports the comments made by Mr. Smith and Mr. Peters. Out of the 42 overall responses, 21 of the text messages mentioned school related extracurricular activities:

"At the junior high and high school concert."

"My friends are getting done with track practice."

"I'm at a track meet."

"I'm at dinner with the track team. My friends are here too!"

"I am on the bus to divisional track."

The remaining messages about extracurricular activities included information about other team outings, dinners, and time spent watching movies on bus rides.

When asked if the three-day weekend factored into the number of participants in extracurricular activities, there was overwhelming compatibility in the responses. All of the feedback established that the numbers were not affected by the school schedule.

Mr. Brown has been the principal and football coach at MRHS for the past three years and said:

I haven't seen a difference in numbers. Some have gone up and some have gone down, but that's more a fluctuation in the population of our students. I don't think it's been related to the four-day week. Volleyball is very big here, and volleyball numbers are still strong. Boys' basketball is popular. Football has always struggled and is still struggling. Once again, I don't think any of that has anything to do with a four-day week though.

In the interview with Mr. Smith, the superintendent, he stated:

We haven't specifically tracked the numbers, so I'm going off my own observations. But I think, for the most part, it's stayed the same. It's a small community and kids use extracurriculars as a source of entertainment, so I don't think it's changed. I think it's been fairly consistent.

Parents and guardians echoed Mr. Smith's views regarding the schedule's effect on participation in extracurricular activities. "They are going to go out for the sport if they want to, whether it's a two-day or three-day weekend," Mrs. Dunn, who is an elementary teacher in the district and the mother of a MRHS sophomore son, said. While she does not believe the numbers of students participating has changed with the schedule, her perspective on the benefits of a three-day weekend and extracurricular activities connects with the views of the other participants in this research study. She confessed through a laugh that her son "is not an academic, so I guess he's missing less school for sports. He's happy. He has more time to do what he loves to do and not worry about missing school."

Mr. Brown's beliefs concurred with Mrs. Dunn's. In reference to the springtime track season, Mr. Brown said:

Most of our competitions are on Saturdays, so they come in and practice on Friday. I don't know what they do for the rest of the day. During basketball season, we schedule everything for Fridays and Saturdays. So on Fridays, they are gone playing basketball just like they were before, but they're not missing class time now to do that.

According to the participants, the four-day school week aligns well with the involvement students have in extracurricular activities. Resulting from the shortened school week, the time spent competing in MRHS's activities does not infringe on academics and actually benefits students' overall attendance and state of mind.

Workforce

High school students' participation in the workforce was mentioned throughout the data collection, with each group (students, parents and guardians, coaches, teachers, and administrators) stating the added possibilities for students to make extra money on three-day weekends. While the small population of the community and the location of MRHS define the school as remote rural, the area is considered a tourist scene due to the proximity to a major tourist destination. Because this is a tourist area, job opportunities are prevalent.

Mr. Brown, the principal at MRHS, said:

I think there are kids working more as well. There are a lot of opportunities to work here because of the [tourist destination], so I think some of them have extended their time to work. You go up to the shops on a Friday, and you see kids, and they are working on Fridays now.

Mrs. Murphy has taught family and consumer science and art at MRHS for the past 17 years. During the five-day school week at MRHS, Mrs. Murphy's two daughters graduated. Now, her nephew, who is a junior at MRHS, lives with her. After a moment of contemplation, she said:

I'm not sure that the differences I see are because my nephew has been living with me. He came here the year before we switched. Before that, I had three years between the daughters I raised in this school system to compare to. I'm comparing boys and girls, so it's different. There are a lot

of things that have changed, but, really, it seems like they are working more than they used to.

The superintendent at MRHS adamantly stated that for “those who aren’t involved in extracurricular activities, they are working. I think you’ll find very few students in town who waste time.”

Mrs. Ross, who is finishing her 19th year as a secretary at MRMS had similar views:

During the school year, it’s too hard for the students in extracurricular activities to work. They are too active with everything else, so the calendar hasn’t factored in at all with that. But, I think it’s nice because some of them not involved with sports have an extra day to work, if they can.

The text messaging responses from the seniors match the comments from the interviews and focus group. As mentioned before, half of the text messages mentioned school related extracurricular activities. Overall, a total of two text messages, which is less than five percent of the messages, mentioned work:

“I am currently working right now. Friends are at the school concert.”

“I’m working.”

The small number of text messages on the topic could be related to the timeframe in which the messages were sent. The data was collected from the senior students at noon on Fridays, Saturdays, and Sundays, and at 7 p.m. on Thursdays, Fridays, Saturdays, and Sundays. The time in which the evening text messages were sent could have been past working hours.

Overall, there is a perception that students are spending more time working. According to the participants, athletics and other extracurricular activities take priority

for MRHS students. However, for those students who are not involved with those school related activities, the opportunities for employment are prevalent in the MRHS community.

Time with Family

The transition to a four-day week at MRHS began with a two-year trial of the shortened school calendar. Before making this calendar shift a permanent fixture, the trial period included surveys sent out to the different stakeholders of the school, and an increase in the time the students were spending with family became an accolade that was highlighted on the surveys.

Mr. Brown, the principal, exclaimed that family time has become a major perk with shortened school weeks:

We've done a survey the last two years as we monitored this change, and that comes back as one of the biggest pluses that parents say. I think it's great. The academics here are very high with the level that's held. You can see as an administrator the good and bad of stress and the mental pressure we've been dealing with the last couple years, and to create that opportunity to allow kids more time with their family to lower the anxiety is great. I'm all for it.

Mr. Smith, the superintendent, proudly said:

The kids spend a ton of time with family. I drive a bus in the morning, so when some of my kids get on the bus, they tell me they took the canoe out to one of the lakes, or they went in the [tourist destination] and camped with family. So the feedback that we got from the survey reflected that 80 percent of folks that liked four-day school weeks commented on how they liked more time as a family.

Mr. Smith went on to say:

This town is a family-oriented community. When you look at our free and reduced lunch percentage, if you look at research, you can typically tie

family structure to free and reduced percentage. So the more that the nuclear family unit has broken down, typically the more likely that family is to qualify for free and reduced lunch. This town's family units are still typically intact. Kids still live with that nuclear family unit, a very large percentage that I am guessing is at about 85 percent, and you don't see that in most districts.

Mr. Peters, whose two children are in the school district, and Mrs. Ross, whose son is a sophomore at MRHS, each stated that they are spending more time with their kids than they had during a five-day school week. "I like having the extra time with my son," Mrs. Ross, the school secretary, said through a smile. "It's more time. It's an extra day, and that adds more time. For instance, this last weekend, we had a two-day weekend because we had school on Friday, and it felt like it wasn't long enough."

However, there were mixed emotions in regard to the time students spend with their families. While the students generally have Fridays off from school, that is not the case with many parents. "I think there are opportunities to spend more time," Mr. Lincoln, a fifth year English teacher, assistant football coach, and track coach, said. "But, most parents, especially now, are both working on Fridays."

Mrs. Murphy's view on students' time spent with family contradicts with Mr. Brown's position on the strenuous nature of academics and a shortened school schedule. "I'm not sure that they're spending more time with family," she said while referencing her nephew who lives with her. "I don't think that happens during the week. In order to get caught up, I don't think they are spending more time with their families on the weekends either."

While it was not specified that family was involved, three responses from the MRHS senior participants suggested activities that coincide with family time, which

included attending church. However, eight different responses from the MRHS senior participants specifically mentioned spending time with family:

“I am going up to the cabin with my dad to go fishing and do some upkeep.”

“About to watch some movies with my family.”

“Out for dinner with my family for my mom’s birthday.”

“I am eating saltines and watching *Minions* with my sister.”

“I’m watching *Deadpool* with my brother and his friend.”

“I am watching my mother cook dinner.”

“Watching *We’re the Millers* with the family.”

“Sitting at home with family.”

Although the four-day school week offers students more opportunities to spend time with family, there were mixed perceptions if students were actually spending more time with family. However, students are not required to spend those Fridays in the classroom, and many of the participants of this research study expressed gratitude and feelings of confidence that those added minutes were spent with siblings and parents.

Time with Peers

The majority of text-message data received from the seniors at MRHS was associated with time being spent with peers. Including the messages involving extracurricular activities, which can be considered peer time, a total of 30 messages out of 42 mentioned spending time with friends.

In regard to students spending their three-day weekends with friends, Mr. Brown said:

Well, I'd say [time with peers has] probably increased just because of the opportunities for them to do more together. I would say though, as the football coach, we practice Friday mornings, and then I think groups of our kids would go off and spend the rest of the day together doing whatever, which is good as a coach to have the team building.

Mr. Peters referenced his daughter, saying that high school students “are spending more time with friends. They do whatever they normally do. Those who hunt and fish do more of that together.”

Related to the extended weekends, when questioned about the students' potential increase with peer influenced alcohol, tobacco, and drug use, along with other risky behaviors, participants suggested similar tendencies that were present with two-day weekends. Mr. Smith, Mr. Brown, and Mr. Lincoln each made comments during their individual interviews that the students who associate themselves with risky behavior are going to do so no matter the day and time.

Mr. Lincoln, the English teacher and track and football coach, said the following about adolescent substance abuse at MRHS:

From what I know about students who were in those activities already, I think they're going to do that no matter what. They're not focused to be in an activity or focused on school, and they're going to do that to fill their time on weekdays as much as they would have anyways. You can say there is more opportunity, but if you're going to be involved in those activities, you're not focused with what's going on anyways.

Mr. Smith, who has spent time as a superintendent in Texas and Idaho before moving with his family to Montana, said he has been employed in areas where students' risky behavior was a far bigger issue than what could ever be imagined at MRHS. As far as the three-day weekend, Mr. Smith said with confidence:

I don't think it's giving them an extra day to go party. They are going to do those things regardless of whether they are on a four-day week or five-day week, especially in a rural community. Those who are going to do it are going to find their time to do it, and I don't think being on a four-day changes that any more than a five-day week.

During his interview, Mr. Brown explained his view on adolescent risky behavior from his personal and emotional experience:

I came from a four-day week in South Dakota, a school I was at for five years. They've been using a four-day schedule for about 13 years now, and, unfortunately, we had a tragedy one year I was there. There was a car wreck and the kids were out drinking and it actually killed one of the students. That was on a Wednesday night. Four-day week, three-day week, two-day week, kids are going to do kids' stuff. Apparently it doesn't matter if it was during the weekday or weekend. Knock on wood, but we haven't had any law enforcement issues or any tragedies like that here. It's a matter of time, I guess, because it happens everywhere at some point. I guess when you are comparing weekends, it opens up extra opportunity without school on Friday. Like I said though, with the four-day week we were using, it was a Wednesday night, and we had school on Thursday.

Mrs. Murphy added in her interview that she has not witnessed behavior associated with students partying, especially with the present students at MRHS. "I don't see a lot of that," she said quietly as a student walked by her classroom door. "I've seen them partying in previous years, which was based on those classes' personalities. We have a huge youth group here that's making a huge influence. I just don't hear about or see it."

The data received from the seniors at MRHS corresponds with the comment made by Mrs. Murphy. Five different text messages mentioned the students' involvement with church and youth group; and, although anonymity and truthfulness of citing all activities were stressed and encouraged when description to this research was given to the senior class, not a single text message hinted at alcohol, tobacco, or drug use, or any other suggestion of risky behavior.

Mondays

The participants in this research study were asked about students' behavior and involvement on Mondays. With a three-day weekend leading back into the week's opening bell, there were mixed responses on the topic, and the different perceptions each held strong emotions.

Mr. Smith expressed his certainty with the benefits as a father of three and as the superintendent at MRHS:

I'm going on this based on my own kids, so they are absolutely better off. When we were on a five-day school week, the kids were still playing sports on Fridays and Saturdays, and I'm talking about my own kids. We had games Fridays and we had games Saturdays, so on a five-day week, my kids had the extra pressure on a Friday of going to the game and doing their schoolwork, either while they were going to the game or their entire Sunday. Having that extra day, my kids actually have downtime now on Sundays. So, when Sunday rolls around, we talk about going fishing. We actually have downtime on Sundays now versus when we were on the five-day week where we didn't have off time. It was sports, schoolwork, sports, schoolwork, come back to school on Monday. There are those times between sports, when we don't have anything, and that really gives the kids three days of getting their homework done on Friday and then having a real weekend. It's a huge benefit for us as a family.

As the secretary at MRHS for the past 19 years, as the mother of two sons who graduated through the five-day school week at MRHS, and as the mother of a current sophomore son at the school, Mrs. Ross stated that the students "seem a little more rested up. They seem more relaxed, because they have that extra day."

Mr. Lincoln also believes the students are more rested, but that luxury comes with a price. "I think their batteries are a little more recharged," he said. "The longer days are a little more demanding, and that seems to be kind of a tradeoff. Seventh hour on a Thursday is a little more difficult than what it used to be."

While Mr. Brown is tentatively optimistic about students' behavior and motivation after an extended weekend, he voiced his uncertainty:

I don't know. I know our staff has mixed feelings about that. I don't think I can answer that. I'd like to say they are. I wonder how they feel about that. They should be, but I don't have any indication about that. The first year we shifted, right away, the staff said the kids were better off on Mondays and were more rested. That was an observation they made. I don't know if they would still make that same observation. It's kind of funny. You change something like the schedule, and you see that benefit right away, but then people adjust. You adjust to the three-day weekend, so then you become more active or your schedule is able to change on those three days, so maybe you're not getting as much rest as you were when it originally happened. You become desensitized. I don't know if that's the correct word. You get comfortable with the schedule, and that's one thing that the research with the four-day week says.

Mrs. Murphy, Mr. Peters, and Mrs. Dunn each specified downfalls that the extended weekends have on students. Based on their combined experience as employees at MRHS for close to 40 years, Mrs. Murphy and Mr. Peters both stated that the students were far more tired on Mondays than they were during a five-day school week. Mrs. Murphy said, "It's harder being off three days to come back on Monday, to get back into a routine. They are just tired. They get out of schedule and aren't getting as much sleep."

As a teacher and a parent of a sophomore son, Mrs. Dunn said:

I don't know that my kid is more rested, because he always puts stuff off until Sundays anyways. He's not more rested. I think his weekends are actually busier. He's doing more activities and doing more sleepovers. I definitely don't see a lot of my other students more rested.

Because approval was not given to interview the student participants, there is no student data to support or disapprove these perceptions. The only indication that did come from the student participants' data that related to preparedness for Mondays was regarding

homework. Out of the 42 text-message responses, two messages stated the student participant was doing homework.

Community Influence

During the individual interviews and the focus group, participants were given explanations of protective factors and risk factors of the Problem Behavior Theory. The interviewees were given examples of possible protective factors, which included parental or guardian involvement in the community through volunteer work, community sanctions for adolescent misbehavior, and the closeness to and interest adolescents receive from family and teachers. The interviewees were also given potential examples of risk factors, including the presence of peer alcohol and tobacco use in the community, availability of alcohol or delinquent behavior for adolescents, and the adolescent vulnerability to stress and low self-esteem. The responses from the participants overwhelmingly showed assurance in the welfare of the community; however, some still implied the concern for certain students' surroundings.

Mr. Smith, the superintendent, said after a moment of thought:

It seems like there are way more protective factors in this community. I have been a superintendent in districts that had far more risk factors. If I was in a community that had a lot of risk factors, I might structure that fifth day differently than I do here. I'm not as worried about it here.

Mr. Peters, a veteran teacher and former activities director at MRHS, said:

We have a very strong group of students involved in the Community Church Youth Group that have adults as their coordinators. This includes some teachers. A very high percent of the parents are very involved with the kids of our community. We have had this active youth group for more than 15 years. We also have about 15 kids in boy scouts, and with the high

number of students playing sports, the coaches are very involved in the lives of our kids.

Mr. Lincoln and Mr. Brown each voiced the positive influence of the community surrounding MRHS, but each also stated the blemishes of the area. Mr. Lincoln confessed and concluded with a laugh:

Overall, this town has quite a few positive influences. No place is going to be perfect, but this town is interesting because it has the [tourist destination] right next to it. That makes it a unique set of families that concentrate here. I think that has helped with the positive role model aspect. By no means is it perfect, but there are a lot of complaints and concerns that teachers have here that really wouldn't be on the radar at most other schools. The ease that we have with our student population is unique.

Mr. Brown admitted:

I do believe this community has more protective influence. That's always a concern, because there are always going to be some kids in the school exposed to the risk factors more than they are the protective factors. So, that's where your concern always lies is with those kids. I would say we have more protective factors overall, but that's not where your concern is.

Mrs. Dunn was more straightforward with her response by stating, "I guess it depends on which group the students are in. I think there is still definitely the group that parties and has the added risk."

As mentioned previously, student participants were not interviewed for this study; however, the positive surroundings and influence of the MRHS community were recognized through text messages about youth group and church involvement. Nearly 12 percent of the student participants' responses mentioned being at church or at a youth group event. These messages highlight the comments made that the MRHS community does have beneficial attributes with which students can become involved.

Enduring Perception

Participants were asked during interviews and during the focus group if their initial thoughts on the implementation of the four-day school week had changed about extended weekends and students' activities. Many of the interviewees' responses addressed both weekend activities of students and other aspects about reduced school weeks. However, no matter what angle and what topic the interviewees chose to discuss, participants' original viewpoints – the perspectives they held prior to the adoption of the four-day school week – have not altered.

Mr. Smith said the following about the benefits of the four-day school week and the community acceptance of the calendar change:

My views haven't changed, because I did my homework before we went to a four-day week. I knew enough to know what I was going to expect. My thoughts and expectations didn't change on it. Because we know our community well, which is our job as superintendents, I could have told you when we started what the survey would look like two years down the road.

Based on his previous experience as an employee at a district operating on a four-day school week in South Dakota, Mr. Brown reinforced his optimism as an administrator by saying, "I've had the experience with it before, so I was pretty solid with what I thought was going to happen, what it was going to be like."

Mrs. Ross, a staple at MRHS as secretary for the previous 19 years, said her positive thoughts about the four-day school week have remained high. She also made it clear that she has seen little difference in her own sons' weekend activities, regardless of the weekend being two days or three days. "I've had other sons go to school here, and they did the same stuff that my son is doing now," she said.

Mrs. Murphy and Mr. Peters' responses highlighted the negative results of transitioning to a four-day school week. Mrs. Murphy has been skeptical about the shift from the very beginning. She had original views about how condensing the schoolwork would culminate in students spending their weekends trying to get caught up, and, from her observation, that has only been verified during the first two years of the new calendar. "I still don't think it's a great idea," she said. "I'm not convinced yet that it's a great idea. I think it makes really long days, and it condenses things instead of having that one more evening to have a regular routine to do homework. Now, we have short periods and work is saved up for the weekend."

Mr. Peters, the computer and business education teacher and the father of a high school student, has been an antagonist of the shift to a four-day school week ever since it was first brought up at a school board meeting. He believes the transition to the school's schedule has verified the reasons behind his reluctance and has put roadblocks of failure in place for, particularly, the struggling students:

I would rather see them in school, even if it is part of the day. Losing the contact time with students on Fridays has resulted to more re-teaching on Monday. Doing less homework, and losing a day of school is not good for the majority of the student population. The good, high achieving students are still there. It is the rest of the students I see a decline in achievement. In addition to losing Fridays, in my school we lost an additional 21 days of school due to other activities. I tracked the number of periods students were out of the classroom and it totaled up to 21 days. I like the fact that we are able to do outside activities, but it comes with a price. When a student is sick one day, that only gives them three days of school, and that is not enough.

From the first day MRHS operated on a four-day school week to the time the participants were interviewed for this research study, perceptions about the shortened school week did

not change. The stakeholders who were initially optimistic about the shortened school week remain encouraged, and the stakeholders who initially doubted the transition continue to have uncertainty.

Conclusion

The shift to four-day school weeks is a culmination of multifaceted issues. While many of these issues have been addressed in previous research studies, the comments made by various stakeholders at MRHS provided insight into the overall perception of how and why students are spending their extended weekends the way they are. Many of the perceptions of the administrators, teachers, and parents were verified by the students' input through text-messaging responses.

Although MRHS is only one of the many Montana schools operating on a four-day school week, the viewpoints provided from the various participants helped to get an overall look at shortened school weeks. Students, parents and guardians, coaches, teachers, and administrators at MRHS shared distinct perspectives on extracurricular activities, workforce, time spent with family, time spent with peers, Mondays, community influence, and outlook. Chapter Five will synthesize and discuss these findings in more detail.

CHAPTER 5 - DISCUSSION

Introduction

In order to understand why school districts are making the shift to shortened school weeks, it is imperative to highlight the benefits. There is backing for the changes school districts are making in their school schedules. However, the research does not explore the repercussions an extended weekend has on students' choices and behavior. Prior to this study, the result of the added free time of shortened school weeks had not been thoroughly investigated.

The case study described in this dissertation explored various stakeholders' perceptions regarding the four-day school week and its influence on student activities during extended weekends. Students, parents and guardians, teachers, coaches, and administrators participated, each providing detail on the shortened school weeks and the extended weekends. Based on the responses from interviews, a focus group, and data collected from seniors at MRHS, the following themes materialized: extracurricular activities, workforce, time spent with family, time spent with peers, Mondays, community influence, and outlook. In order to collect data pertaining to the four-day school week and the extended weekends, and in order to identify the mentioned themes, the following research questions were used:

1. As a result of a four-day school week, how do rural school stakeholders view the choices made by students on extended weekends?

2. What choices do students make on their extended weekends, and, according to stakeholders, what influences those choices?
3. In what ways is the four-day school week contributing to or detracting from student well-being?

The following sections will include a discussion of findings, which will examine each of the research questions based on the data received from the participants, suggestions for further research, and a conclusion to this dissertation study.

Discussion of Findings

Stakeholder Perceptions of Protective and Risk Factors

In response to the first research question, which explores the ways that rural school stakeholders view the choices made by students on extended weekends, it is evident that individual stakeholders embrace varying perceptions on four-day school weeks; however, this study demonstrated there was an overwhelming confidence in the positive activities and choices students at MRHS make on extended weekends, and there was overwhelming confidence in the high level of protective factors surrounding MRHS. Overall, the responses from the stakeholders primarily highlighted beneficial aspects of weekend activities, and that approval of the students' weekend choices was represented as a mere extension of what was already in place during a traditional five-day school schedule. Data suggests students are doing more of the same. The students who spent their time with athletics, clubs, youth group, work, peer and family interaction during the five-day school week are still spending their time with those activities during the

shortened school week and extended weekends. The shift to a four-day school week did not alter students' specific weekend activities.

Extracurricular activities are the focal point for the stakeholders and the student population at MRHS. Although the number of actual high school students participating in extracurricular activities was not verified, Mr. Peters, a former activities director and current teacher and golf coach at MRHS, estimated that 80 percent of high school students are involved with sports or clubs associated with the school. According to the National Longitudinal Study of Adolescent Health, MRHS's percentage of students involved with extracurricular activities exceeds the national average, which is 70% (Feldman & Matjasko, 2005). Based on responses from the participants, this high percentage of student involvement has remained the same, no matter the schedule of the school calendar.

However, savings on energy costs, hourly wages, and food expenses provided by the four-day school week coincide with maintaining the number of students involved in activities. In 2014, MRHS was notified that the school district would no longer be receiving funding from the Department of the Interior, which was financial support originally designed to provide aid to schools with employees working on federal lands. The funding that was lost from the Department of the Interior led to a financial crisis at MRHS, with nearly 25 percent of the school's annual revenue depleted and not going to return. At the time of this dilemma, all activities associated with the school were considered dispensable, and the most reasonable way to cut expenses was to eliminate certain extracurricular activities. Based on the responses from the participants in this

research study, cutting back on extracurricular activities was not a path MRHS would choose to go down.

The transition MRHS made to a four-day school week, which cut costs on food and food service employees, energy expenses, and hourly workers, allowed the extracurricular programs to continue. This further solidified MRHS as an activities oriented school and community. Mr. Smith, the superintendent and father of three, highlighted this by saying that “most of the activities in town revolve around the school activities.” It was not one group of participants that expressed the overall emphasis extracurricular activities have on the student population. The parents and guardians, teachers, coaches, and, as already mentioned, administrators all voiced their strong opinions on the weight MRHS extracurricular activities have on the students, and all of the participants showed their views through a personal tone.

As the head football coach at MRHS, Mr. Brown showed his enthusiasm with how much time the extended weekends have added to the overall connectedness of the team. He stated that his football players would practice Friday morning, then the group would “go off and spend the rest of the day together doing whatever, which is good as a coach to have the team building.” Mr. Brown mentioned that basketball and volleyball are the most “popular” sports at MRHS, but the extended weekends are beneficial for aiding in the football program’s development. The team bonding that Mr. Brown and the extended weekend encourages relates to Jowett and Chaundy’s study on team cohesion and overall team success. According to Jowett and Chaundy (2006), team cohesion is made up of social and task components. The social component is the degree where

members of the team relate to and appreciate each other. The task component is the degree where team members cooperate to achieve a goal. From a coach's standpoint, the three-day weekend helps bolster social and task components.

Mrs. Dunn, a teacher and a mother of a sophomore son, chuckled when she admitted her son does not excel when it comes to academics, but she is happy that the four-day school week gives him more time to focus on sports. According to a study done by Coakley (2006), Mrs. Dunn's enthusiasm for her son's involvement in sports relates to the moral worth of a parent. The achievements of children in such highly publicized activities as sports "come to symbolize proof of one's moral worth as a parent" (p. 160). This heightened level of moral capital comes from stakeholders of MRHS, so there is an obligation for parents to emotionally invest in their child's involvement.

Connected to the topic of extracurricular activities, the stakeholders viewed the students as spending more time with peers on the extended weekends. Siennick and Osgood (2012) suggested that peer time is consistently related to risky behavior. The data received from the participants contradicts the association of peer time and hazardous demeanor. When asked their opinions about students spending their longer weekends with activities associated with potential alcohol, tobacco, and drug use, aside from comments saying that type of action generally does not happen around MRHS, there was minimal response from the majority of adult stakeholders.

Time spent with peers is a factor of maturity that corresponds with adolescent growth (Hofferth & Sandberg, 2001), and the adult participants were certain the students' time spent with peers did not involve substance abuse. Based on previous research studies

and statistical data, MRHS is located in a rural community that is prone to substance availability and abuse by adolescents. Spoth, Goldberg, Neppl, Trudeau, and Ramisetty-Miler (2001) stated that students in rural areas abuse tobacco, alcohol, cocaine, methamphetamine, hallucinogenic, and prescription drugs at a higher rate and at a younger age than adolescents in an urban setting. During his time spent as principal at MRHS, Mr. Brown said there have been no instances of students getting in trouble with substances or, for that matter, any other misdemeanors. Because adolescent substance use and abuse brings with it an unwanted social blemish, it is possible that the participants have turned a blind eye to this issue. However, throughout the data collection process, it was made obvious that there was closeness between the adult participants and the student population, and the intimacy between the parents/guardians and their children was made clear. Each of the parents/guardians spoke about their child's weekend activities in detail, with specifics of whom their child was with and where their child was. According to Kerr and Stattin (2000), adolescents who are emotionally attached to their parents are less likely to take part in actions that would cause embarrassment, and adolescents are more likely to be open about whom they hang out with and what they are doing.

The problem-behavior theory has a presumption that behavior is the outcome of the interaction between person and environment (Chapman, Buckley, Sheehan, & Shochet, 2013), and the adult participants made it known that the environment around MRHS promotes hunting, fishing, and other outdoor activities. Mr. Smith, the superintendent, said that he is one of the bus drivers for the district, and he often hears the

students on the bus ride to school talking about camping, fishing, or boating on weekends.

The location of MRHS near a major tourist destination helps promote an environment that is linked to protective factors, specifically models protection. Models protection includes peer and parental involvement for health-enhancing behaviors such as exercise (Jessor, 2003), and the countless opportunities for exercise are within the tourist site. The motto for the tourist site encourages visitors to marvel at the natural beauty, to explore the wildlife, and to discover the history that led to the conservation of the land.

Participants of this research study were also eager to address the students' increased time spent with family during extended weekends. This was cemented by each of the parents and guardians who were interviewed and by the survey that was sent out during MRHS's two-year trial of the shortened school week. The "feedback that we got from the survey reflected that 80 percent of folks that liked four-day school weeks commented on how they liked more time as a family," Mr. Smith said. The superintendent and principal emphasized that the transition to a four-day school week was not done so in a rash manner, and they took great interest in the results the survey provided.

While MRHS stakeholders centered their views of students' choices on extended weekends around extracurricular activities, outdoor endeavors, and family and peer time, the topic of choosing to work was also mentioned. Each of the participants in the interviews suggested that students were spending more time working. Each of the five parents and guardians questioned revealed an increase in students working on extended

weekends. The parents and guardians stated the difficulty of student employment while participating in extracurricular activities though, and they went on to say that not a single one of their children held a job during the school year.

As for the geographic location of MRHS, rural students are typically faced with many “challenges in gaining a sound education, but one of the advantages they have is that their schools are set in a community context that values a sense of place and offers a unique set of conditions for building social capital” (Bauch, 2001, p. 1). The participants of this research study showed that sense of place through their proud responses and confident tone while speaking about MRHS and the students. To give examples, the superintendent compared his previous administrative duties in other locations to his time spent at MRHS, and he said that the MRHS community has far more positive influences than other places he’s been. Mr. Peters, a veteran teacher and former activities director, talked about the strong connection between the students and the youth group and boy scouts, and Mr. Lincoln said through a smile that there are complaints and concerns at MRHS that “wouldn’t be on the radar” most places.

Overall, the responses from the adult participants were positive. The goal was to find data on the adult stakeholders’ perception of what high school students were doing to fill their extended weekends. The way in which the adult participants answered the interview questions highlighted the beneficial activities that the MRHS community has to offer and the constructive activities of the school.

Student Realities and Stakeholder Perceptions of Protective and Risk Factors

As mentioned in the previous section, the weekend activities students were involved with during a five-day school week are linked to and extended by the lengthened weekends after a four-day week. In response to the second research question, which asks students about the choices they make on their extended weekends, and according to stakeholders, what influences those choices, participants of this study said that students who play sports would continue to play sports, students who work would continue to work, and students who spend time with friends and family would continue to spend time with friends and family. Thus, the choices made by students on extended weekends were already predetermined by students' engrained interest of personal activities. The lengthened weekend just added more time to do those things.

According to a research study, nearly half of adolescents' waking hours are considered free time (Hofferth & Sandberg, 2001). While that research study did not define free time, the information received from MRHS students did not mention downtime on three-day weekends, which suggests a potential decrease in opportunity risk. Opportunity risk relates to the availability for adolescents to participate in detrimental behavior (Jessor, 2003), but the availability for opportunity risk of MRHS students was taken up by more beneficial activities. The data that was received by the students through the text-message program Remind only confirmed the views shared by the parents, guardians, teachers, coaches, and administrators. Exactly one half of the responses from the seniors at MRHS mentioned extracurricular activities, and, including

those text messages about involvement with extracurricular activities, over 61 percent of the messages were associated with time being spent with peers.

The more “time adolescents spend in structured extracurricular activities, the less time they have to become involved in unsupervised activities” (Hancock, Dyk, & Jones, 2012, p. 87). Feldman and Matjasko (2005) expand on that concept, stating that adolescents’ membership in a group structures how the individual’s time is spent and sets values and standards that expand beyond the organized activity. In regard to the MRHS student participants, this relates directly to controls protection, which is social intolerance of deviance (Jessor, 2003). Based on the data received from the MRHS student participants, there was not a single text message that suggested tobacco, alcohol, drugs, risky driving, or any other behavior detrimental to their health or anyone else’s health. While Spears (2000) argues that adolescents “exhibit a disproportionate amount of reckless behavior, sensation seeking and risk taking” (p. 421), the data from the student participants showed that the importance of extracurricular activities and other community endeavors overshadowed other harmful actions.

To reiterate, it was difficult to label the students’ extended weekend activities as free time. Mr. Smith, the superintendent, implied that it would be challenging to find students who were not active, and the data proved his point. However, what was not difficult to notice and became highly apparent throughout the data collection and analysis processes was the continuous mention of youth group participation and students’ overall involvement with church related events. Nearly 12 percent of the responses from the

seniors mentioned church or youth group, and that topic was mentioned in all but two interviews.

A research study done by Sinha, Cnaan, and Gelles (2007) reported that youth participation in religious programs links adolescents to positive identity formation, relationships with role models, growth in school and work skills, and lasting positive relationships. According to Smith and Faris (2002), religious adolescents are less likely to use tobacco, alcohol, or drugs, are less likely to receive traffic tickets and take part in risky behavior, are less likely to commit crimes and cause problems in school, and are more likely to volunteer than non-religious peers. Smith and Faris concluded that regular service attendance and time devoted to youth groups is clearly associated with healthier, safer, and a more constructive lifestyle for teenagers. Mr. Peters stated that the youth group and religiosity surrounding MRHS's community is more than prevalent and is an extremely positive influence on the students. He said there is a very strong group of students involved with the youth group, which has been around for more than 15 years. He also mentioned that many of the adult coordinators of the youth group are teachers at MRHS. The fact that teachers are seen and participate in community events and organizations strengthens the relationship they have with the students, which is a critical aspect of being an effective educator and mentor. For the MRHS students, this is an aspect of support protection, which is the closeness and interest that the adolescents receive from not only their parents, but also the closeness and interest from teachers (Jessor, 2003). Villegas and Lucas (2007) stated that interaction between students and the teachers outside of the school walls helps build a rapport that transfers to academics. By

knowing the students' hobbies, interests, family, and lives in general, teachers show a level of passion that would be difficult to contain within the school hours.

Data suggests that the choices students make on extended weekends and the influence of those choices has already been set by the values of MRHS's community. While looking at the structure of the four-day school week, Mr. Smith, the superintendent, said he had been an administrator in communities that had far more risks than MRHS, and if he were employed at a school district that had more issues, then the framework of school scheduling would be rooted in a much different manner. Data of this research study conveys the interest and principles of extracurricular activities, family time, and religion as characteristics of the community. However, it is important to note that while the data for this dissertation study strongly supports MRHS student involvement in religion, athletics, and school clubs, there is unknown information about the students who are not involved with those pastimes and lifestyles.

Student Well-Being and the Four-Day School Week

In examining the first two research questions, the data provided somewhat objective feedback. This final research question, which in the researcher's opinion is the most significant, is far more subjective. In response to the final research question, which asks about the ways the four-day school week contributes to or detracts from student well-being, the bulk of input gained during this case study on extended weekends suggests the students' well-being as advancing, or, at the very least, remaining the same as it was during a five-day school week. The interview responses, text-message data, and overall positive tone shined a light on the constructive activities students are involved

with on three-day weekends. However, there were subtle comments that brought about concern for adolescent well-being.

Extracurricular Activities - When it comes to those involved in extracurricular activities, data suggests that the majority of students are excelling with a four-day school week and an extended weekend. According to Eccles, Barber, Stone, and Hunt (2003), extracurricular activities provide students with the opportunity to take part in social, physical, and intellectual skills, to advance a feeling of membership in community, to grow social networks with adults and peers, and to experience, overcome, and fail at challenges, all of which connect to the maturation leading to adulthood. Mahoney (2002) found that extracurricular activities significantly helped the well-being of adolescents living with a single parent, and relating directly to the small community surrounding MRHS, one research study showed that participation in extracurricular activities was more influential on student well-being in small schools than in larger schools (Feldman & Matjasko, 2005).

Sleep - Stemming off of the topic of extracurricular activities, findings from this study suggest those who are involved with sports and clubs are getting an extra day of rest. Because school related extracurricular activities are based on a predetermined and somewhat stringent schedule, the extended weekend did not offer further opportunities, but it did relieve stress from a traditional five-day school week. The standard school schedule resulted in many of the students missing class periods on Fridays due to travel and attendance at extracurricular activities. By having Fridays off, students rarely missed

class periods, had added homework, and worked off limited sleep at school. According to Fuligni and Hardway (2006), the length and quality of adolescent sleep associates with physical and emotion well-being. If an adolescent does not receive an adequate amount of sleep, the higher the level of depression and fatigue, and cognitive function and academic scores dramatically drop. With four-day school weeks and the extended weekends, the added reprieve from not falling behind on sleep supplements the overall benefits that organized activities have on adolescents.

Academics - Since most of MRHS's extracurricular events are held on Fridays and Saturdays, findings from this study indicate that the students involved with clubs and sports are not missing class periods. The four-day school week also limits the number of class periods a student would miss due to personal matters ranging from doctor visits to dental appointments. As far as academic results, as mentioned earlier, MRHS has been ranked as the top school in Montana for four out of the last five years (2016). This suggests that the students' motivation, no matter the length of the school week, remains high. According to Erylmaz (2011), if adolescents have a higher level of well-being, their ambition to learn increases, and that appears to be the case for MRHS students.

Peers - When it comes to those who are spending more time with peers, findings from this study suggest that the majority of students are excelling with a four-day school week and an extended weekend. The amount of time the MRHS students spend with peers has been highlighted throughout this dissertation study. The student participants emphasized this in their text messages, and the adult participants mentioned it in their

interviews. The amount of time adolescents spend with peers relates to a high level of happiness and self-esteem. According to Spears (2000), the amount of time high school students spend with friends provides an overall positive emotion that is linked to the happiest mental state for adolescents.

Religion - When it comes to those involved with youth groups and church oriented activities, data from this study suggests that the majority of students are excelling with a four-day school week and an extended weekend. This is a similar concept to those involved in sports or clubs, because it is not as though the numbers of those students have risen or fallen, but those endeavors are further emphasized and filling the students' extended weekends. Religious adolescents "are less likely than their peers to engage in risk behaviors (e.g., carrying weapons, getting into fights, drinking and driving, and drug use) and are more likely than their peers to engage in behaviors that enhance their health (e.g. proper nutrition, exercise and rest)" (Sinha, Cnaan, & Gelles, 2007 , p. 7-8). According to Pruitt (2009), rural adolescents are far more likely than urban adolescents to abuse substances and to engage in risky behavior, so the added priority on students' religious involvement could help curb this rural dilemma. Because religious practices are a prominent promoter of well-being (Witter, Stock, Okun, & Haring, 1985), religious involvement may help deter MRHS students from participating in detrimental behavior.

Family - When it comes to those who are spending more time with family, data from this study suggests that the majority of students are excelling with a four-day school

week and an extended weekend. According to Allen, Hauser, Bell, and O'Connor (1994), adolescents' extended time spent with parents has "been linked to a range of positive outcomes, including self-reports of better adjustment to separation, higher assertion and dating competence, greater resistance to peer pressure, higher self-esteem, and lower rates of reported loneliness after leaving home" (p. 179). Throughout this research study, each of the interviewees talked about increased time spent with family on extended weekends, and students' text messaged about watching movies with siblings, going to dinner for a mother's birthday, and going fishing with a father.

The "Other" Students – Arguably, "at risk" or otherwise marginalized youth—the students who fall outside the majority—are the ones whose well-being should generate the highest consideration, yet those were the students who brought the lowest amount of attention from the participants. Although the intention was to collect data on the entire senior class at MRHS, the focus of this dissertation study ended up centering on a small sample of participants. Data was not collected on students who were not involved with extracurricular activities, who were not involved with church related activities, who did not spend their extended weekends with friends and family. Whether the participants of this research study were answering questions based on the majority of students or were responding based on highlighting the positive, there were very few comments that mentioned struggling adolescents. One specific statement that was made highlighting the positives and setting aside the negatives came from the superintendent. While his intention was to accentuate the community as being centered on strong family dynamics,

there was an aspect of the statement that hinted at designating certain students as the

others:

This town is a family-oriented community. When you look at our free and reduced lunch percentage, if you look at research, you can typically tie family structure to free and reduced percentage. So the more that the nuclear family unit has broken down, typically the more likely that family is to qualify for free and reduced lunch. This town's family units are still typically intact. Kids still live with that nuclear family unit, a very large percentage that I am guessing is at about 85 percent, and you don't see that in most districts.

It is not as though Mr. Smith's statement is untrue or insensitive. A research study found that children from divorced families experience significantly lower levels of well-being than children from families that are intact (Amato & Keith, 1991). While the numbers of intact families of MRHS students are impressive for a rural community, particularly with the dismal statistics that show rural poverty and broken homes exceeds that of urban areas (Monk, 2007), there are still those students who do not fit on that side of the demographics. Of the 83 students enrolled at MRHS during the 2015-2016 school year, 12 of them were enrolled in free and reduced school lunch (OPI, 2016). While it is erroneous to suggest the well-being of those students is not just as high or higher than that of the rest of the student population, it is not inaccurate to question the concept that those students may not be receiving nutrients they need on three days now instead of two. Due to a lack of funding to provide nutritious meals, research states that impoverished adolescents living on an insufficient diet face consequences of poor immune systems and poor cognitive function and learning ability (Nelson, 2000). In this dissertation study, three teachers each stated that some students were far more tired on Mondays, which could relate back to a research study done by Berliner (2009). Berliner's research study

examined how impoverished students' tiredness and misbehavior was related to a lack of food on the weekends. In order to manage this, the school began sending impoverished students home with food for the weekends. It was not long before the teacher in Berliner's study noticed behavioral improvements from the students when the school week started.

Although there is a strong relation between rural adolescents, poverty, and substance abuse (Dunn et al. 2008; Williams, Barnes, Holman, & Hunt, 2014), tobacco, alcohol, and drug use were mostly talked about by the participants as something that does not happen around MRHS or as something that does not bring with it the attention it deserves. Mr. Lincoln, MRHS English teacher, assistant football coach, and track coach, said about students using substances, "They're not focused to be in an activity or focused on school, and they're going to do that to fill their time on weekdays as much as they would have anyways. You can say there is more opportunity, but if you're going to be involved in those activities, you're not focused with what's going on anyways." The principal's and superintendent's comments each had similar tones that kids will do kids' stuff and that those types of students would be partying no matter the day.

As dispiriting as those comments are, maybe that is the case. Mr. Brown shared a story about when he was employed at a school district in South Dakota where a student was killed in a drunk driving accident on a Wednesday night. "Apparently it doesn't matter if it was during the weekday or weekend," Mr. Brown said. "Knock on wood, but we haven't had any law enforcement issues or any tragedies like that here. It's a matter of time, I guess, because it happens everywhere at some point." As dismal as the prediction

is, statistics suggest the comment to be a valid indicator. According to Hingson (2000), one third of all unintentional injury and death of persons aged 1-34 years of age are alcohol related.

For that majority of the students mentioned by the participants, data suggests that the level of well-being during two-day weekends has maintained or exceeded with three-day weekends. But the concern is with the well-being of the “other” students, with the students who do not fit into the 80 percent involved with extracurricular activities, with the students who do not fit into the 85 percent with nuclear families, with the students who do not have a mother’s birthday to celebrate, with students who do not have a father to go fishing with, with students whose name is on the free and reduced lunch list.

Further Research

In order to gain a better understanding of four-day school weeks and three-day weekends, further research studies are required. MRHS meets the demographic classification of Montana schools that traditionally shift or have already transitioned to a shortened school week. MRHS is a rural school district, which coincides with the demographic of school using four-day school weeks. However, because this study focused on a single Montana school, there are uncertainties if the information directly equates to other school districts. It is also important to note that MRHS is an anomaly in regard to national data. MRHS has a higher level of students participating in extracurricular activities than the national average, is ranked as an elite academic setting,

has a below average number of students on free and reduced lunch, and, based on the data collected, has a lower level of poverty and substance abuse than other rural locations.

To strengthen the awareness of how four-day school weeks, particularly the three-day weekends, influence students' choices, activities, and overall well-being, a broader sample and population must be studied. MRHS is a school that recently transitioned to a four-day school week, which was a key element in this research study. This offered the opportunity for stakeholders to compare and contrast two-day and three-day weekend activities of the students, without too much time of separation. Ideally, further research on schools that shifted to a shortened school week in the not-too-distant past would continue to provide useful data.

Not only do other schools operating on four-day school weeks need to be looked at, but other classifications of stakeholders need to be investigated, too. This research study was done in a shortened timeframe during the last month of the 2015-2016 school year. Because of the short window for gaining data, the variety of participants became limited. The sample population for the interviews and focus group of this research study was formulated through modified snowball sampling with a desire to have maximum variation. The participants in this research study came from the suggestions of the superintendent, principal, and school secretary. Once again, due to the shortened timeframe to gather quality data, all of the participants for the interviews and focus group were employed at the school, which put a limit on the overall variation. It is not that the voices of employees is not highly important, because they are the ones who spend the most time with the students, but the voices of those who are not employed by the school

were left out. It is important to hear from families and other stakeholders of rural schools to get an understanding of their perception on students' extended weekend choices. In addition, given results from this dissertation study, future research might investigate the perceptions of local religious leaders, which suggests that religious connectedness enhances student well-being in districts with four-day school weeks. This will also help with participant bias. MRHS's recent transition to a shortened school week puts the spotlight on the staff, especially the administrators. Since the administrators are typically the ones who spearhead such a drastic calendar change, their responses in the interviews could side with the more favorable answers.

It is important to emphasize that although this study included data from only three student participants, there is great potential for the use of Remind and similar technology to advance research exploring student perceptions, voice, and behavior in the future. There was difficulty in gaining parental and student approval for the seniors to provide data, which resulted in only three students' involvement. While rural school class sizes typically only range from 2-20 students (OPI, 2014), data from additional student participants would provide a clearer picture of student experiences. Three meetings were held with the seniors at the MRHS library. The design and topic of this research study were thoroughly explained, as was the way of gaining data through the text-messaging application Remind. Each of the seniors earnestly agreed to participate in the research, and there was a general excitement about being involved. However, approval from parents and guardians proved to be difficult to secure given the timeframe. Emails and handouts were given to the parents; however, time was not allowed for the researcher to

actually meet with, explain, and answer questions about the intent of this research study. In order to acquire a more detailed portrayal of what activities students are participating in on extended weekends, a higher percentage of student participants is required. The voices of all students need to be recognized, especially the voices of at-risk students.

The ways in which a four-day school week and an extended weekend could conceivably influence a student population are daunting. However, by collecting considerable amounts of data that are similar to what has been gained through this research study, the benefits and disadvantages could be highlighted, and uncertainties could be replaced with the more predictable. Since the expansion of four-day school weeks is happening at a steady rate (Tharp, 2014), research has become essential.

Conclusion

Ensuring quality education of students is foundational to our American society. It is what lays the blueprint for the future. Therefore, it is not something to be taken lightly, and it is not something that can be changed with rash and impromptu decisions.

Adolescent choices are based upon a developing level of cognitive growth (Kaestner & Callison, 2009). While this level of growth is part of human nature, it does not mean that supervision and overall guidance are not a necessity. The educational system encourages or discourages progress or setback in students, and the format of academic calendars is a key component in determining the path.

For MRHS, there is little doubt that four-day school weeks are operating efficiently. From the academic scope, the school has been the most elite in the state of

Montana for four out of the last five years, with the most recent school year adding to the list of accolades. Aside from the high academic standards and results, the community is also surrounded by positive factors that give students the opportunity to succeed and encourages youth to become constructive members of society. From the moment the researcher began spending time at MRHS and the surrounding community, it was made clear that the stakeholders' views on the four-day school week were positive.

The school pride in MRHS's extracurricular activities extends beyond the school walls and into community gratification, with the welcome sign of the town standing alongside a sign distinguishing the school's state titles. The high level of confidence in extracurricular activities is better off with a four-day school week and extended weekends, mainly because students miss less class time.

Participants continuously mentioned students spending more time with family and spending extended weekends with community connection through youth group. There is a high level of protective factors surrounding MRHS, and data about a senior student spending a Friday afternoon fishing with his/her father is something that any community member should appreciate. However, there is still a level of unrest that comes with concluding this research study, and that level of doubt centers upon the well-being of the *other* students.

The participants of this research were active in the school and in the community as a whole, and the students who were involved in the text-messaging application were members of extracurricular activities and the workforce. However, that is not the case for all students. Once again, based on the researcher's experience at a rural Montana school

and as an educator in general, even the most well off communities and schools have struggling students (Furlong & Christenson, 2008). These are the students who do not have the support to go home to, who do not have meals waiting on the table, who are coping to get by on two-day weekends, and who would be faced with yet another day of getting by on a three-day weekend.

Although the topic was pretty much brushed aside by the participants of this research study, adolescents from all communities are exposed to underage tobacco use, underage drinking, testing and abusing substances, and behavior that is detrimental to their health. The countless statistics (Dunn et al., 2008; Pruitt, 2009; Spoth, Goldberg, Nepl, Trudeau, & Ramisetty-Miler, 2001; Williams, Barnes, Holman, & Hunt, 2014) show that rural adolescents are more likely than any other adolescent to use a substance, and they do so at a younger age. There is still uncertainty that if adding an extra day per week of unsupervised time to an adolescent's schedule could promote such behavior. Additional research to explore potential substance abuse during extended weekends is warranted.

Rural school districts are making the shift to four-day school weeks, and the findings from this dissertation study emphasize many benefits associated with shortened school calendars. By giving insight into this unstudied aspect associated with four-day school weeks, this research aids in influencing or discouraging school administrators and school boards from adapting to an alternative school calendar. The findings also give detailed description to community members, teachers, students, and parents/guardians on this movement in rural education. When it comes to adolescent well-being and the well-

being of a community as a whole, this research gives further understanding to what was unknown. The advantages of monetary savings, increased school attendance, increased morale, and academics directly translate to MRHS students. However, the question still remains if the increases for the majority of the student population are worth the potential decreases to students who already struggle.

REFERENCES CITED

- Allen, J. P., Hauser, S. T., Bell, K. L., & O'Connor, T. G. (1994). Longitudinal assessment of autonomy and relatedness in adolescent-family interactions as predictors of adolescent ego development and self-esteem. *Child Development*, 179-194.
- Amato, P. R., & Keith, B. (1991). Parental divorce and the well-being of children: A meta-analysis. *Psychological Bulletin*, 110(1), 26.
- Amschler, D. H., & McKenzie, J. F. (2005). Elementary students' sleep habits and teacher observations of sleep-related problems. *Journal Of School Health*, 75(2), 50.
- 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*.
- Arter, J., Chappuis, J., Chappuis, S., & Stiggins, R. (2012). *Classroom assessment for student learning: Doing it right—using it well*. Upper Saddle River, NJ: Pearson.
- Barber, B.L., Eccles, J.S., & Stone, M.R. (2001). Whatever happened to the jock, the brain, and the princess? Young adult pathways linked to adolescent activity involvement and social identity. *Journal of Adolescent Research*, 16, 429-455.
- Bauch, P. A. (2001). School-community partnerships in rural schools: Leadership, renewal, and a sense of place. *Peabody Journal of Education*, 76(2), 204-221.
- Berliner, D. C., Arizona State University, E.U., & University of Colorado at Boulder, E.C. (2009). Poverty and potential: Out-of-school factors and school success. *Education Policy Research Unit*.
- Blankenship, T. (1984). Update: These school systems swear by the four-day school week because students work harder and face fewer distractions. *American School Board Journal*, 171(8), 32-33.
- Bourke, L., & Geldens, P. (2007). What does wellbeing mean? Perspectives of wellbeing among young people & youth workers in rural Victoria. *Youth Studies Australia*, 26(1), 41-49.
- Broh, B.A. (2002). Linking extracurricular programming to academic achievement: Who benefits and why? *Sociology of Education*, 75, 69-91.
- Brown, B., & Childe Trends, I.D. (2001). Teens, jobs, and welfare: Implications for social policy. Child Trends Research Brief.

- Chapman, R. L., Buckley, L., Sheehan, M., & Shochet, I. (2013). School-based programs for increasing connectedness and reducing risk behavior: A systematic review. *Educational Psychology Review*, 25(1), 95-114.
- Charmaz, K. (2003). Grounded theory. *Qualitative Psychology: A Practical Guide to Research Methods*, 81-110.
- City-data. (2016). Retrieved March 08, 2016, from <http://www.city-data.com>
- Coakley, J. (2006). The good father: Parental expectations and youth sports. *Leisure Studies*, 25(2), 153-163.
- Cohen, J. (2006). Social, emotional, ethical, and academic education: Creating a climate for learning, participation in democracy, and well-being. *Harvard Educational Review*, 76(2), 201-237.
- Creswell, J. W. (2012). *Qualitative inquiry and research design: Choosing among five approaches*. Sage Publications (CA).
- Cripps, K., & Zyromski, B. (2009). Adolescents' psychological well-being and perceived parental involvement: Implications for parental involvement in middle schools. *RMLE Online: Research In Middle Level Education*, 33(4).
- Dam, A., & Colorado State Dept. of Education, D. s. (2006). The 4 day school week. *Colorado Department Of Education*.
- David, H., Demo, D. H., & Acock, A. C. (1996). Family structure, family process, and adolescent well-being. *Journal of Research on Adolescence*, 6, 457-488.
- Diener, E., & Suh, E. M. (2000). *Culture and subjective well-being*. MIT press.
- Dixon, A. (2011). Focus on the alternative school calendar: Year-round school programs and update on the four-day school week.
- Donis-Keller, C., & Silvernail, D. L. (2009). *Research brief: A review of the evidence on the four-day school week*. Center for Education Policy, Applied Research and Evaluation, University of Southern Maine.
- Dunn, M. S., Ilapogu, V., Taylor, L., Naney, C., Blackwell, R., Wilder, R., & Givens, C. (2008). Self-reported substance use and sexual behaviors among adolescents in a rural state. *Journal Of School Health*, 78(11), 587-593.

- Eccles, J. S., Barber, B. L., Stone, M., & Hunt, J. (2003). Extracurricular activities and adolescent development. *Journal of Social Issues, 59*(4), 865-889.
- Eryilmaz, A. (2015). Investigation of the relations between religious activities and subjective well-being of high school students. *Educational Sciences: Theory And Practice, 15*(2), 433-444.
- Eryilmaz, A. (2011). Satisfaction of needs and determining of life goals: A model of subjective well-being for adolescents in high school. *Educational Sciences: Theory and Practice, 11*(4), 1757-1764.
- Feldman, A. F., & Matjasko, J. L. (2005). The role of school-based extracurricular activities in adolescent development: A comprehensive review and future directions. *Review of Educational Research, 75*(2), 159-210.
- Fulgini, A. J., & Hardway, C. (2006). Daily variation in adolescents' sleep, activities, and psychological well-being. *Journal of Research on Adolescence, 16*(3), 353-378.
- Furlong, M. J., & Christenson, S. L. (2008). Engaging students at school and with learning: A relevant construct for all students. *Psychology in the Schools, 45*(5), 365-368.
- Gagnon, D., & Mattingly, M. J. (2012). Beginning teachers are more common in rural, high-poverty, and racially diverse schools. Issue Brief No. 53. *Carsey Institute*.
- Griffith, M., & Education Commission of the, S. (2011). What savings are produced by moving to a four-day school week?. *Education Commission Of The States*.
- Gullatt, D. E. (2006). Block scheduling: The effects on curriculum and student productivity. *NASSP Bulletin, 90*(3), 250-266.
- Hancock, D., Dyk, P. H., & Jones, K. (2012). Adolescent involvement in extracurricular activities: Influences on leadership skills. *Journal of Leadership Education, 11*(1), 84-101.
- Hermann, J., Sambrano, S., Springer, J. F., Nister, M., Sale, E., Brounstein, P. J., & ... Substance Abuse and Mental Health Services Administration (DHHS/PHS), R. P. (2002). The national cross-site evaluation of high-risk youth programs: findings on designing and implementing effective prevention programs for youth at high risk. *Monograph Series*.
- Hewitt, P. M., & Denny, G. S. (2011). The four-day school week: Impact on student academic performance. *Rural Educator, 32*(2), 23-31.

- Hofferth, S. L., & Sandberg, J. F. (2001). Changes in American children's time, 1981-1997. *Advances in Life Course Research*, 6, 193-229.
- Ingersoll, R. M. (2001). Teacher turnover and teacher shortages: An organizational analysis. *American Educational Research Journal*, 38(3), 499-534.
- Jessor, R. (2001). Problem-behavior theory. In *Risikoverhaltensweisen Jugendlicher* (pp. 61-78). VS Verlag für Sozialwissenschaften.
- Jessor, R. (1987). Risky driving and adolescent problem behavior: An extension of problem-behavior theory. *Alcohol, Drugs, and Driving*, 3(3-4), 1-11.
- Jessor, R., Turbin, M. S., Costa, F. M., Dong, Q., Zhang, H., & Wang, C. (2003). Adolescent problem behavior in China and the United States: A cross-national study of psychosocial protective factors. *Journal of Research on Adolescence*, 13(3), 329-360.
- Jimerson, S. R., Campos, E., & Greif, J. L. (2003). Toward an understanding of definitions and measures of school engagement and related terms. *The California School Psychologist*, 8, 7-27.
- Jowett, S., & Chaundy, V. (2004). An investigation into the impact of coach leadership and coach-athlete relationship on group cohesion. *Group Dynamics: Theory, Research, and Practice*, 8(4), 302.
- Kaestner, R. (2009). Adolescent cognitive and non-cognitive correlates of adult health (No. w14924). *National Bureau of Economic Research*.
- Kerr, M., & Stattin, H. (2000). What parents know, how they know it, and several forms of adolescent adjustment: Further support for a reinterpretation of monitoring. *Developmental Psychology*, 36(3), 366.
- Larson, R. W., & Verma, S. (1999). How children and adolescents spend time across the world: Work, play, and developmental opportunities. *Psychological bulletin*, 125(6), 701.
- Lerman, R. I. & Urban Inst., W.D. (2000). Are teens in low-income and welfare families working too much?. *New Federalism: National Survey of America's Families, Series B, No. B-25. Assessing the New Federalism: An Urban Institute Program To Assess Changing Social Policies*.
- Lindberg, L., Boggess, S., Porter, L., Williams, S., & Urban Inst., W. C. (2000). Teen risk-taking: A statistical portrait.

- Maggs, J. L., Almeida, D. M., & Galambos, N. L. (1995). Risky business: The paradoxical meaning of problem behavior for young adolescents. *The Journal of Early Adolescence*, 15(3), 344-362.
- Mahoney, J. L, Harris, A. L., & Eccles, J. S. (2006). Organized activity participation, positive youth development, and the over-scheduling hypothesis. *Social Policy Report: Giving Child and Youth Development Knowledge Away*, 20, 3-32.
- Mahoney, J., Scweder, A., & Stattin, H. (2002). Structured after-school activities as a moderator of depressed mood for adolescents with detached relations to their parents. *Journal of Community Psychology*, 30, 69-86.
- Marzano, Robert (2007). *The art and science of teaching*. Alexandria, VA: ASCD.
- Maxwell, K. A. (2002). Friends: The role of peer influence across adolescent risk behaviors. *Journal of Youth and Adolescence*, 31(4), 267-277.
- Milstein, M. M. (1993). An exploration of the relationship of school district restructuring to educator plateauing and resiliency.
- MT. (n.d.). State data. Retrieved March 04, 2016, from <http://mt.gov/>
- National Conference of State Legislature: Four-day school weeks (2015). Retrieved October 22, 2015, <http://www.ncsl.org/research/education/school-calendar-four-day-school-week->
- Nelson, M. (2000). Childhood nutrition and poverty. *Proceedings of the Nutrition Society*, 59(02), 307-315.
- Oberg, C. (2010). Guiding classroom instruction through performance assessment. *Journal Of Case Studies In Accreditation And Assessment*, 1.
- Partridge, M. D., & Rickman, D. S. (2008). Distance from urban agglomeration economies and rural poverty. *Journal of Regional Science*, 48(2), 285-310.
- Provasnik, S., KewalRamani, A., Coleman, M. M., Gilbertson, L., Herring, W., & Xie, Q. (2007). Status of education in rural America. NCES 2007-040. *National Center for Education Statistics*.
- Pruitt, L. R. (2009). The forgotten fifth: Rural youth and substance abuse. *Stanford Law & Policy Review*, 20, 259.

- Racz, S., McMahon, R. J., & Luthar, S. S. (2011). Risky behavior in affluent youth: Examining the co-occurrence and consequences of multiple problem behaviors. *Journal Of Child And Family Studies*, 20(1), 120-128.
- Raja, S. N., McGee, R., & Stanton, W. R. (1992). Perceived attachments to parents and peers and psychological well-being in adolescence. *Journal of Youth and Adolescence*, 21(4), 471-485.
- Reed, P., & Salazar, M. (1998). The influence of auxiliary staff in elementary school settings.
- Reinke, J. M., & Oregon State Dept. of Education, S. (1987). More with four: A look at the four day week in Oregon's small schools.
- Sadler, D. R. (1989). Formative assessment and the design of instructional systems. *Instructional Science*, 18(2), 119-144.
- Sagness, R. L., & Salzman, S. A. (1993). Evaluation of the four-day school week in Idaho suburban schools.
- Shann, M. H. (2001). Students' use of time outside of school: A case for after school programs for urban middle school youth. *Urban Review*, 33(4), 339-56.
- Siennick, S. E., & Osgood, D. (2012). Hanging out with which friends? Friendship level predictors of unstructured and unsupervised socializing in adolescence. *Journal Of Research On Adolescence (Wiley-Blackwell)*, 22(4), 646-661. doi:10.1111/j.1532-7795.2012.00812.x.
- Sikes, P. J. (1992). Imposed change and the experienced teacher. *Teacher Development and Educational Change*, 36-55.
- Sinha, J. W., Cnaan, R. A., & Gelles, R. J. (2007). Adolescent risk behaviors and religion: Findings from a national study. *Journal of Adolescence*, 30(2), 231-249.
- Smith, C., & Faris, R. (2002). Religion and American adolescent delinquency, risk behaviors and constructive social activities. *A Research Report of the National Study of Youth and Religion*.
- Spear, L. P. (2000). The adolescent brain and age-related behavioral manifestations. *Neuroscience & Biobehavioral Reviews*, 24(4), 417-463.
- Spoth, R., Goldberg, C., Neppl, T., Trudeau, L., & Ramisetty-Mikler, S. (2001). Rural-urban differences in the distribution of parent-reported risk factors for substance use among young adolescents. *Journal of Substance Abuse*, 13(4), 609-623.

- Steger, M. F., & Frazier, P. (2005). Meaning in life: One link in the chain from religiousness to well-being. *Journal of Counseling Psychology, 52*(4), 574.
- Steinberg, L., & Morris, A. S. (2001). Adolescent development. *Journal of Cognitive Education and Psychology, 2*(1), 55-87.
- Tharp, T. W. (2014). *A comparison of student achievement in rural schools with four and five day weeks* (Doctoral dissertation, Washington College).
- Tomlinson, C. A., & McTighe, J. (2006). *Integrating differentiated instruction & understanding by design: Connecting content and kids*. ASCD (VA).
- Wiggins, G., & McTighe, J. (2011). What is backward design? *Understanding by Design, 7-19*.
- Williams, R. J., Barnes, J. T., Holman, T., & Hunt, B. P. (2014). Substance use prevention among at-risk rural youth: Piloting the social ecological "one life" program. *Journal of At-Risk Issues, 18*(1), 19-26.
- Wilson, W. (1967). Correlates of avowed happiness. *Psychological Bulletin, 67*, 294-306.
- Witter, R. A., Stock, W. A., Okun, M. A., & Haring, M. J. (1985). Religion and subjective well-being in adulthood: A quantitative synthesis. *Review of Religious Research, 332-342*.
- Yarbrough, R., & Gilman, D. (2006). From five days to four. *Educational Leadership, 64*(2), 80-85.

APPENDICES

APPENDIX A

TEACHER/ADMINISTRATOR CONSENT FORM

SUBJECT CONSENT FORM FOR
PARTICIPATION IN HUMAN RESEARCH AT
MONTANA STATE UNIVERSITY

Project Title: The Four-Day School Week: Research on Extended Weekends

Purpose of the research study: You are being asked to participate in a research study to investigate the four-day school week, particularly the choices and activities students are making and participating on extended weekends.

It should be noted that this project has been reviewed and approved by MRHS School.

Voluntary participation: Your participation in this research is completely voluntary. There is no penalty for not participating, and participation or non-participation will not affect your standing in the workplace or employment.

Procedures involved: Your participation consists of the following components.

- 1) Participation in an interview
- 2) Participation in potential follow-up interviews

Risks and Benefits: There are no known risks to you for participating in this research. However, should you feel discomfort you may choose to not answer an interview question, and/or terminate your participation. There are no benefits to you associated with your participation.

Right to withdraw from the study: You have the right to withdraw from the study at anytime without consequence.

Alternatives: If you choose to not participate, MSU researcher will not request completion of the interview.

Source of Funding: NA

Cost to Subject: None

Confidentiality: The investigator will treat your identity with professional standards of confidentiality. Further, all your responses will remain anonymous, and any identifying information will not be associated with the responses. Your recorded responses to the questions will be typed into the computer, and your original recorded answers will be destroyed. Data gathered from this research may be presented in scientific outlets, but this information will remain entirely anonymous. Other individuals or participants might see your responses, but once again, your responses will be anonymous (identifying information will not be associated with the responses). Thus, anyone who sees your responses will only know that they are looking at "someone's" responses, not your responses in particular.

(please see other side)

Whom to contact if you have questions about the study: Participants are encouraged to ask the researcher any questions about the study in order to better understand the purpose, procedures, risks, benefits, etc. After the completion of reading through the consent form, you may contact Ryan Amys, Department of Education doctoral student (218-340-8181; ryan.amys@ecat.montana.edu) if you have additional questions or concerns.

Compensation: In the event your participation in this research directly results in emotional stress to you, Counseling & Psychological Services offers free counseling services to eligible individuals. Further information about this service may be obtained by calling Phone: (406) 994-4531. You may also contact Ryan Amys, Department of Education doctoral student (218-340-8181; ryan.amys@ecat.montana.edu) with any further questions or concerns.

Additional questions about the rights of human subjects can be answered by the Chairman of the Institutional Review Board, Mark Quinn, (406) 994-4707.

AUTHORIZATION: I have read the above and understand the discomforts, inconvenience and risk of this study. I, _____ (*printed name of participant*), agree to participate in this research. I understand that I may later refuse to participate, and that I may withdraw from the study at any time. I have received a copy of this consent form for my own records.

Signed: _____

Investigator: _____

Date: _____

APPENDIX B

PARENT/GUARDIAN CONSENT FORM

SUBJECT CONSENT FORM FOR
PARTICIPATION IN HUMAN RESEARCH AT
MONTANA STATE UNIVERSITY

Project Title: The Four-Day School Week: Research on Extended Weekends

My name is Ryan Amys, and I am a doctoral student at Montana State University. I am working on a research study to try to learn about students' choices and activities on extended weekends resulting from a four-day school week.

This study is being done with the support of MRHS. The MRHS superintendent and principal at your child's school have reviewed it.

Purpose of the research study: You are being asked to participate in a research study to investigate the four-day school week, particularly the choices and activities students are making and participating on extended weekends.

Voluntary participation: Your participation in this research is completely voluntary. There is no penalty for not participating, and participation or non-participation will not affect you in any way.

Procedures involved: Your participation consists of the following components.

- 1) Participation in a focus group
- 2) Participation in potential follow-up interviews

Risks and Benefits: There are no known risks to you for participating in this research. However, should you feel discomfort you may choose to not answer any question during the focus group or potential follow-up interviews, and/or terminate your participation. There are no benefits to you associated with your participation.

Right to withdraw from the study: You have the right to withdraw from the study at any time without consequence.

Alternatives: If you choose to not participate, MSU researcher will not request completion of the focus group.

Source of Funding: NA

Cost to Subject: None

(please see other side)

Confidentiality: The investigator will treat your identity with professional standards of confidentiality. Further, all your responses will remain anonymous, and any identifying information will not be associated with the responses. Your recorded responses to the questions will be typed into the computer, and your original recorded answers will be destroyed. Data gathered from this research may be presented in scientific outlets, but this information will remain entirely anonymous. Other individuals or participants might see your responses, but once again, your responses will be anonymous (identifying information will not be associated with the responses). Thus, anyone who sees your responses will only know that they are looking at "someone's" responses, not your responses in particular.

Whom to contact if you have questions about the study: Participants are encouraged to ask the researcher any questions about the study in order to better understand the purpose, procedures, risks, benefits, etc. After the completion of reading through the consent form, you may contact Ryan Amys, Department of Education doctoral student (218-340-8181; ryan.amys@ecat.montana.edu) if you have additional questions or concerns.

Compensation: In the event your participation in this research directly results in emotional stress to you, Counseling & Psychological Services offers free counseling services to eligible individuals. Further information about this service may be obtained by calling Phone: (406) 994-4531. You may also contact Ryan Amys, Department of Education doctoral student (218-340-8181; ryan.amys@ecat.montana.edu) with any further questions or concerns.

Additional questions about the rights of human subjects can be answered by the Chairman of the Institutional Review Board, Mark Quinn, (406) 994-4707.

AUTHORIZATION: I have read the above and understand the discomforts, inconvenience and risk of this study. I, _____ (*printed name of participant*), agree to participate in this research. I understand that I may later refuse to participate, and that I may withdraw from the study at any time. I have received a copy of this consent form for my own records.

Signed: _____

Researcher: _____

Date: _____

APPENDIX C

PARENT/GUARDIAN PERMISSION FORM

SUBJECT CONSENT FORM FOR
PARTICIPATION IN HUMAN RESEARCH AT
MONTANA STATE UNIVERSITY

Project Title: The Four-Day School Week: Research on Extended Weekends

My name is Ryan Amys, and I am a doctoral student in the Education Department at Montana State University. I am working on a research project to try to learn about the choices and activities students are making and participating in on extended weekends.

This study is being done with the support of the MRHS. The superintendent and principal at your child's school have reviewed it.

We would like to include your child in this research project. If they participate...

- Your child will take part in a text-messaging program called remind.com. This program will send text messages to your child during the weekends of May. The text messages will ask your child what they are doing. Your child's identity will be completely anonymous, and they can respond or not respond to the messages.

Free/Reduced Price Meal Eligibility: I also want to use free/reduced price meal eligibility status. This data will be provided by the Gardiner School District. The decision to allow or not allow access to this information will not affect eligibility for or participation in Child Nutrition Programs.

Confidentiality: The investigators will keep your child's identity private. Even though what we learn from this study could be used in a research report or journal article, all information will remain totally private. This means that anyone who reads about the study will only know that they are looking at "someone's" answers, not your child's responses. While the texting application will be anonymous, the small sample size means that participant confidentiality cannot be entirely guaranteed. In the case that the researcher learns about potentially life-threatening behaviors, he will contact Gardiner School District administrators to seek guidance. For example, this offers the opportunity for school leaders to talk to participants individually or as an entire group.

Risks and Benefits: There are no anticipated risks to your child's participation in this research. However, if you or your child feels uncomfortable, they can quit at anytime without any results. There are no benefits to you or your child related with participation.

Optional Consent: Your consent is optional, and your decision whether or not to allow your child to participate will not impact your relations with MSU or Gardiner School.

Questions or Concerns: You should contact me if you have any questions about the study. If you do have questions that may help you decide whether or not to have your child participate, please contact the researcher. The researcher should be able to answer your questions.

If your participation in this research directly results in emotional stress to you or your child, MSU Counseling & Psychological Services offers free counseling services to eligible individuals. Further information about this service may be obtained by calling (406) 994-4531.
(please see other side)

You are making a decision about allowing your son or daughter to participate in this study. Your signature below indicates that you have read the information given above, and have decided to allow him or her to participate. If you later decide that you wish to withdraw your permission, simply tell me. You may discontinue his or her participation at any time.

Researcher's contact information

Ryan Amys, doctoral student at MSU Department of Education (218-340-8181; ryan.amys@ecat.montana.edu)

The Chairman of the Institutional Review Board, Mark Quinn, (406) 994-4707 can answer additional questions about the rights of human subjects

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AUTHORIZATION: I have read the above and understand the discomforts, inconvenience and risk of this study. I, _____ (*printed name of parent or guardian*), related to the subject as _____ (your relationship to child), agree to participate of _____ (*printed name of child*) in this research. I understand that the subject or I may later choose not to participate, through his/her own action or mine, and that I may withdraw from the study at any time. I have received a copy of this form for my own records.

Parent or Guardian Signature:

Researcher:

Date:

APPENDIX D

STUDENT ASSENT FORM

Four-Day School Week Assent Form

My name is Ryan Amys, and I am a doctoral student in the Education Department at Montana State University. I am working on a research project to try to learn about the choices and activities students are making and participating in on extended weekends. I am asking you and other students to work with me to find out how the four-day school week is influencing your activities and choices on weekends.

If you decide you want to be in my study, you will be asked to participate in a texting program called remind.com. You will receive text messages at specific times during your weekends. The text messages will ask you what you are doing. If you decide to respond, your text messages will be completely anonymous. While the texting application will be anonymous, the small sample size means that participant confidentiality cannot be entirely guaranteed. In the case that the researcher learns about potentially life-threatening behaviors, he will contact Gardiner School District administrators to seek guidance. For example, this offers the opportunity for school leaders to talk to participants individually or as an entire group.

It is your decision if you want to respond to the text messages. If you decide to quit the study, all you have to do is not respond. You will not get in trouble with your administrators, teachers, parents, or guardians if you do not agree to be in this study.

Other people will not know if you are in my study. I will put things I learn about your weekend activities and choices together with things I learn about other students' activities, so no one can tell what things came from you. When I tell other people about my research, I will not use your name, so no one can tell whom we are talking about.

Your parents or guardian have to say it's OK for you to be in the study and explain the study to you. After they decide, you get to choose if you want to be in the study. If you want to be in the study now and change your mind later, that's OK. You can stop at any time.

My email address is ryan.amys@ecat.montana.edu. You or your parents can contact me if you have questions about the study or if you decide you don't want to be in the study any more.

If you have any additional questions, you can contact the Montana State University Institutional Review Board. The Institutional Review Board is the committee at Montana State University that makes sure research is done in a safe and ethical way. You can call the MSU Chairman of the Institutional Review Board, Mark Quinn at (406) 994-4707 if you have any other questions.

I will give you a copy of this form in case you want to ask questions later.

(please see other side)

Agreement

I have decided to be in the study even though I know that I don't have to do it. My parent(s) have explained the study to me, and Ryan Amys has answered all my questions.

Signature of Study Participant

Date

Signature of Researcher

Date

APPENDIX E

FOCUS GROUP INTERVIEW QUESTIONS

Parents and Guardians: Focus Group Interview Questions

What are high school students doing to fill their extended weekends?

What are your opinions about students' time spent with family?

What are your opinions about students' time spent with extracurricular activities? And, are the numbers of high school students participating in extracurricular activities increasing, decreasing, or staying the same?

What are your opinions about students' time spent working?

What are your views on students' time spent with friend? If more time is being spent with friends, what are they doing?

Do you feel as though the students are traveling out of town on weekends more often now? Please explain.

Do you feel as though the high school students are better off on Mondays now than they were after a two-day weekend? Please explain.

What are your opinions about students spending the longer weekends with activities associated with partying?

Explain protective factors and risk factors:

Models protection includes measures of models such as parental involvement in community groups and volunteer work, and peer models for health-enhancing behaviors such as engagement in regular exercise; controls protection includes individual-level measures of control such as attitudinal intolerance of deviance, and social environmental measures of controls such as predictable parental sanctions; and support protection includes measures of contextual supports such as family closeness and teacher interest in students. With regard to risk, models risk includes measures of models such as parental smoking, and peer models for alcohol use; opportunity risk includes opportunity measures such as availability of alcohol in the home and presence of gang activity in the neighborhood; and vulnerability risk includes measures of personal vulnerability such as felt stress and low self-esteem.

Do you feel as though there are more protective factors or risk factors in this community? Explain some of the protective and risk factors.

When compared with two-day weekends, what are the differences and similarities of what the high school students are doing to fill their time?

Now that extended weekends have been around for close to two years, have your initial thoughts about extended weekends and your child's activities changed? Please explain.

APPENDIX F

TEACHERS AND ADMINISTRATORS INTERVIEW QUESTIONS

Teachers and Administrators Interview Questions

What are high school students doing to fill their extended weekends?

What are your opinions about students' time spent with family?

What are your opinions about students' time spent with extracurricular activities? And, are the numbers of high school students participating in extracurricular activities increasing, decreasing, or staying the same?

What are your opinions about students' time spent working?

What are your views on students' time spent with friend? If more time is being spent with friends, what are they doing?

Do you feel as though the students are traveling out of town on weekends more often now? Please explain.

Do you feel as though the high school students are better off on Mondays now than they were after a two-day weekend? Please explain.

What are your opinions about students spending the longer weekends with activities associated with partying?

Explain protective factors and risk factors:

Models protection includes measures of models such as parental involvement in community groups and volunteer work, and peer models for health-enhancing behaviors such as engagement in regular exercise; controls protection includes individual-level measures of control such as attitudinal intolerance of deviance, and social environmental measures of controls such as predictable parental sanctions; and support protection includes measures of contextual supports such as family closeness and teacher interest in students. With regard to risk, models risk includes measures of models such as parental smoking, and peer models for alcohol use; opportunity risk includes opportunity measures such as availability of alcohol in the home and presence of gang activity in the neighborhood; and vulnerability risk includes measures of personal vulnerability such as felt stress and low self-esteem.

Do you feel as though there are more protective factors or risk factors in this community? Explain some of the protective and risk factors.

When compared with two-day weekends, what are the differences and similarities of what the high school students are doing to fill their time?

Now that extended weekends have been around for close to two years, have your initial thoughts about extended weekends and students' activities changed? Please explain.