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HARDING
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**The Effects of Participation in Collegiate Football on the Time Management Behavior and
Academic Performance of College Students**

Desiree Johnson

Harding University

Abstract

The unique demands of balancing rigorous athletic commitments and academic responsibilities present a challenge for college football players. There were three purposes of this study. The first purpose of this study sought to determine if there is a relationship between time management behavior and academic performance among college students. The second purpose of this study was to determine whether participation in collegiate football affected the time management behavior of college students, and the third purpose of this study was to determine if participation in collegiate football affected the academic performance among college students. Participants in the study were a convenience sample of 140 undergraduates at a small private Christian college in central Arkansas. The Time Management Behavior scale (TMBS) is a 32-item, five-point Likert-type scale that measures the extent to which time management behaviors are used. The time management behaviors that the TMBS measures are goal and priority setting, mechanics of time management, and preference. These factors are rated on a scale ranging from (0) seldomly true to (4) very true. Academic performance was collected and analyzed from self-reported GPAs from the participants. Data analysis included descriptive and inferential analysis. Findings from this study will contribute to a deeper understanding of the challenges faced by student-athletes in collegiate football programs. Ultimately, the study aimed to provide valuable insights that can enhance the overall student-athlete experience and promote success both on and off the field.

Keywords: Academic performance, Time management behavior, student-athlete

The Effects of Participation in Collegiate Football on the Time Management Behaviors and Academic Performance of College Students

In the 2021/2022 school year, approximately 500,000 student-athletes participated in the National College Athletics Association (NCAA) sports (NCAA, 2022). Of this number, about 74,000 were football players. According to the NCAA, a majority of college athletes would like to transition from participating in collegiate athletics to participating in professional sports. Furthermore, there is a tendency in the media to focus on the remarkable stories of athletes who effortlessly make the transition from collegiate athletics to professional football and other sports leagues. However, this smooth transition often only happens for some college athletes. For instance, of the approximately 74,000 NCAA football players in the 2022/2023 school year, only 254 enter the draft for professional leagues, while only 1.6% eventually make the transition from NCAA athletics to professional football either through the draft or as undrafted players (NCAA, 2022). With this level of expectations surrounding fulfilling a professional football career, the pressure of collegiate sports can make balancing these demands with the academic needs of college difficult. As noted by the NCAA, many college football players will spend an average of 31 hours per week on football activities and an extra 4-9 hours on game days. While students who do not participate in collegiate athletics may have ample time for studying, attending classes, and completing assignments, football players often have far less time to meet their academic obligations. These competing demands on their time often lead to an imbalance between their athletic and academic commitments.

Time Commitment Challenges for Student Athletes

Student-athletes allot more than twice the amount of time to activities outside the classroom than non-athlete students (Richards & Aries, 1999). Time management is crucial for student-athletes to balance their athletic commitments and academic responsibilities effectively. For athletes, time management is the biggest challenge in developing a separation between academic achievement and sports activities (McDougle & Capers, 2012). Student-athletes often experience significant time constraints due to their athletic obligations. They must divide their time for many reasons, including education, sports training, practices, traveling, games, social life, and family time (Simon et al., 2015). Participating in athletics can be a significant commitment for student-athletes. Those who spend over 10 hours a week participating in athletics can affect their academic success if their time is not well managed (Ayers et al., 2012). Student-athletes must be more responsible with their time due to the various features that they have to manage, such as their academic performance and sports success. In addition, they must consider other aspects of their life, such as team requirements and class participation, which usually must be dealt with simultaneously (Janse et al., 2011). An overcommitment to sport participation may lead some athletes to unhealthy practices within their sport and neglect of development in areas outside of sport (Horton & Mack, 2000). Student-athletes feel mismanagement when the exams begin to near, and they have to coup up with it to perform better academically because they are not using the time management skills to overcome their burden of studies and sports simultaneously (Simon et al., 2015).

Academic Performance between Student Athletes and Nonstudent Athletes

Academics have been the primary focus of the school environment; many students and parents are still determining if their children would benefit from participating in extracurricular activities (Aries et al., 2004). Bradley et al. (2013) noted that extracurricular activities play a role

in molding a young person into a well-rounded and disciplined individual. Some parents encourage their children to participate in sports for social and cognitive benefits (Aries et al., 2004), while others fear that the intense sport commitment may lower academic achievement (Comeaux & Harrison, 2011). Some athletes tend to feel pressure to obtain an athletic scholarship not only to get into college but to get through college financially. Therefore, their focus may shift away from academics and more toward success in athletics. There is a wide range of opinions about sports participation's effect on academic achievement and how the high level of commitment required to play college football can affect athletes' time management and academic performance. The strenuous training and travel involved in playing football can make it hard for athletes to maintain their academic performance. Likewise, there needs to be more research on the effects of collegiate football on the academic performance of non-athlete students. These studies are needed to understand the broader implications of athletics programs on campus.

Positive Effects of Participation in Collegiate Football on Academic Performance

Being involved in sports can have positive effects on academic performance. In fact, participating in sports can increase the learning efficiency of college students (Montecalbo-Ignacio et al., 2017). The most competitive athletes are known to be very motivated, and many are able to maintain a sense of balance between their respective commitments to their sport and their classroom responsibilities (Barlow & Hickey, 2014). Greendoefer and Blinde (1986) found that academics became more of a priority for student-athletes as they progressed from their freshman to senior year in college. A study by Martinez et al. (2020) found that a successful football program in a university can enhance the overall campus culture and increase student engagement.

The Challenges of Football Participation Among College Student Athletes

In contrast, Lindo et al. (2012) and Miqdadi et al. (2014) found in two separate studies that during a successful football season, academic performance was lower in student-athletes but enhanced among non-athlete students. While studies such as those completed by Wilson & Pritchard (2005) and Miles (2015) claim that there are no significant differences in academic achievement between student-athletes and non-athlete students, other research suggests that student-athletes, particularly those involved in high-profile sports such as football, may encounter challenges that impact their academic success (Emerson et al., 2012). Insler and Karam (2017) state that athletic participation modestly reduces student-athletes grades and, in turn, results in many student-athletes underperforming academically (Emerson et al., 2012). The time demands placed on college athletes hinder their performance in the classroom (Carodine et al., 2001) and decreases students' ability to achieve academically due to barriers such as travel commitments, days of practice, and required participation in weekly games (Robst & Keil, 2000). Based on their research, Adler & Adler (1985) suggest that students' involvement in college athletics negatively influences their academic performance. Student-athletes did not perform as well in terms of GPA as non-athlete students (Kohs, 2015) and were found to do three-tenths of a grade point worse than non-athlete students in three out of ten classes (Maloney & McCormick, 1993). The claims above help support the findings of Barlow & Hickey (2014), stating that there is a consistently widening gap in academic performance between athletes and non-athletes, with non-athletes earning a higher average GPA than athletes.

Eligibility Requirements for Football Participation

The rigorous demands of participating in collegiate football raise concerns about the potential impact on student athletes' academic performance and time management skills. Already

student-athletes must abide by the same academic standards as all other students, but student-athletes must also concede to all academic standards implicated by the National Collegiate Athletic Association or university as well (NCAA, 2012). According to NCAA bylaw 14.01.1, if a student-athlete does not meet all the criteria set in place by the NCAA, the student-athlete is ineligible to participate in athletics, and any scholarship money can be redacted (NCAA, 2012.). NCAA bylaw 14.1.7.2 states that all student-athletes must be full-time students, taking 12 or more credits per semester and completing 24 credits by the third semester (NCAA, 2012).

Furthermore, the NCAA requires student-athletes to prove they are pursuing an academic degree; to do so, student-athletes must declare a major by the end of their second year or fourth semester and submit documentation to the NCAA (NCAA, 2012). Research findings such as those reported by Reynolds et al. (2012) indicate that graduation rates are more likely to improve by placing a specific set of criteria on the academic achievement of student-athletes. Each university is required to have a minimum grade point average (GPA) required at the time of graduation. To maintain their eligibility, student-athletes at Division I and II universities must maintain a minimum grade point average of 2.5 (NCAA, 2012). In an effort to combat the athletic time commitment required of student-athletes, the NCAA limits the number of hours a student-athlete can commit to athletics. This limitation also includes any team meetings or activities. Since 1991, student-athlete time has been limited to four hours per day and 20 hours in a single week per NCAA bylaw 17.1.6. (NCAA, 2012).

Although the NCAA has a policy regarding how much time student-athletes can spend practicing, many collegiate teams do not follow this policy. (Ayers et al., 2012). In a study by Ayers et al. (2012), student-athletes from a Division I school reported spending an average of

31.25 hours per week on athletic-related activities. As a result, according to Aries et al. (2004), student-athletes may lack academic achievement because they do not have sufficient time to spend on their academics. If they are not held accountable, some student-athletes may adopt a spirit of complacency when admitted to an institution with strict eligibility requirements and may not continue to strive academically (Bageant, 2017).

Moreover, the pressure to excel both on the field and in the classroom can create significant mental stress. Student-athletes often face high expectations from coaches, teammates, family, and themselves. Striving for excellence in two different areas can lead to feelings of anxiety, burnout, and mental fatigue, making it even more challenging to concentrate on academic pursuits.

Purpose of Study

This study is a non-experimental causal-comparative design to determine if there is a relationship between time management and academic performance among student-athletes and non-athlete students. The dependent variables being measured are time management and academic performance. The independent variable in the study is participation in the university's collegiate football team. This study aimed to determine whether there is a correlation between time management behavior and academic performance among college students. This study also aimed to determine whether there are differences in the self-reported time management behaviors of collegiate football players and their non collegiate athlete peers and whether there are differences in the self-reported GPAs of collegiate football players and their non collegiate athlete peers.

Hypotheses

- 1) It is hypothesized there is a relationship between time management behavior and academic performance (GPA) among college students.
- 2) It is hypothesized that participation in collegiate football has an effect on the self-reported time management behavior of college students.
- 3) It is also hypothesized that participation in collegiate football has an effect on the academic performance (GPA) of college students.

Methods

Participants

The participants in the current study were 140 undergraduate college students. The participants from this study attend a division II private Christian university. The data was collected online using a survey posted on various social media platforms. All subjects completed the same survey. The demographic characteristics of the participants are presented in Table 1. All the participants were considered full-time students, meaning they were enrolled in 12 or more credits.

Table 1.

Demographic Characteristics of Students

	Collegiate Football Players <i>n</i> = 35 (25%)			Other College Students <i>n</i> = 105 (75%)			Total <i>n</i> (%)
	White <i>n</i> (%)	African American <i>n</i> (%)	Other <i>n</i> (%)	White <i>n</i> (%)	African American <i>n</i> (%)	Other <i>n</i> (%)	
Gender <i>n</i> = 63(45.7%)	17 (34)	14 (10)	4 (19)	22 (57)	2 (0)	4 (0)	63 (100)
Female <i>n</i> = 77(54.3%)	0 (0)	0 (0)	0 (0)	62 (37)	4 (0)	11(11)	77 (100)

Instrumentation

The instrument used for this study is the Time Management Behavior scale (TMBS). It is a five-point Likert-type scale that measures the extent to which time management behaviors are used. The time management behaviors that the TMBS measures are goal and priority setting, mechanics of time management, and preference. These factors are then rated on a scale ranging from (0) *seldomly true* to (4) *very true*. A review of the literature revealed that the three factors were validated by confirmatory factor analysis. The TMBS was found to have convergent validity (Claessens et al., 2007). To determine academic achievement, participants were asked to self-report their grade-point average. It was found that past studies asked students to self-report their GPA to determine academic achievement. Due to confidentiality policies, universities would not release the GPA of students; deeming self-reported GPAs by the participants was the most convenient way for obtaining information. No other existing scales to determine academic achievement at the collegiate level were found. Questions 1 through 4 consisted of multiple-choice questions to assess the demographics of the participants. Questions 5 and 6 consisted of open-ended questions to represent academic achievement through college majors and self-reported GPA. Question 7 is made up of 32 statements to assess time management behavior. For each question, participants selected a number 0 through 4 to represent the extent each statement corresponded with how the participants manage their time: (0) *Seldomly true* through (4) *Very true* (Macan, 1990).

Procedure

First, the survey was distributed. Once IRB approval was obtained, the survey was sent via email and uploaded onto multiple social media platforms to generate a larger sample size. All participants were asked to answer the questions on the survey as accurately as possible and to the

best of their knowledge. Participants completed the survey voluntarily, and all data obtained were kept entirely anonymous and confidential. The data from the survey was transferred to an Excel spreadsheet to be further analyzed.

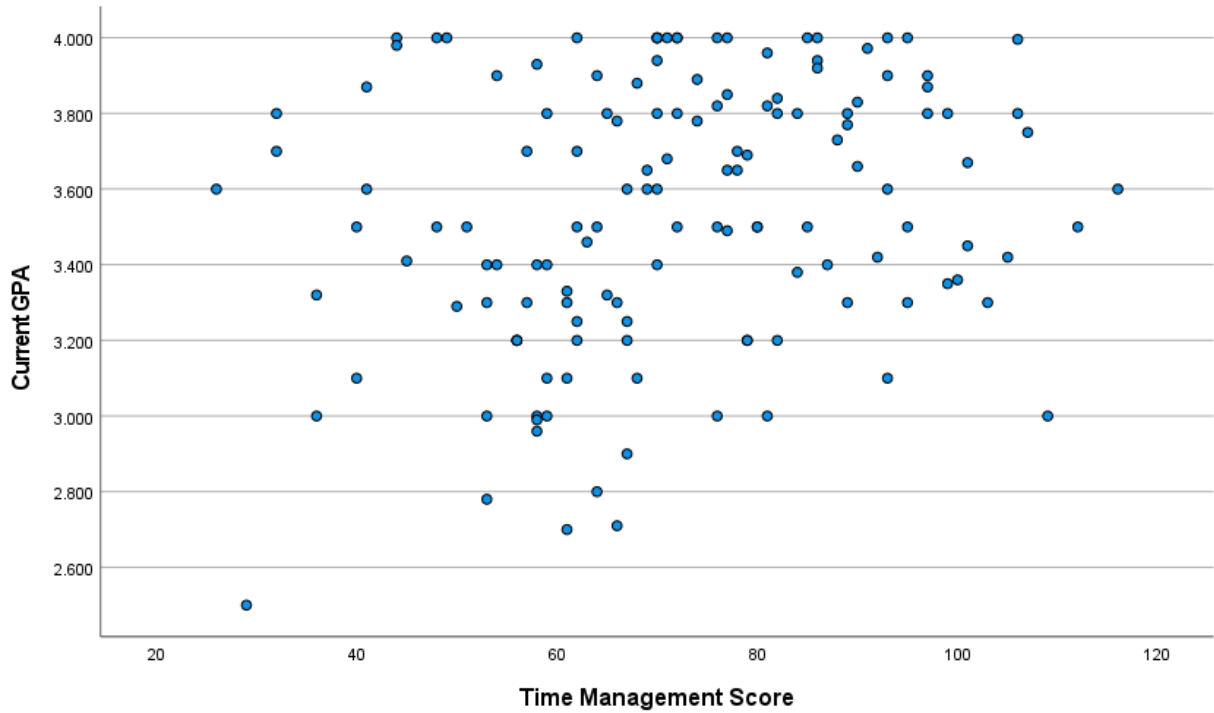
To analyze the data and test the hypotheses, the methods of data analysis used were the Pearson correlation and a one-way ANOVA. The Pearson correlation was used to determine the relationship between the time management behavior of college students and their academic performance. The one-way ANOVA was conducted to determine the effect participation in collegiate football had on time management behavior and academic performance. Each hypothesis was examined at an alpha level of 0.05.

Results

The first hypothesis in this study stated that there was a significant relationship between the time management behaviors of college students and their academic performance (GPA). To test this hypothesis, a Pearson correlation test was conducted. A weak correlation was found $r(137) = .24, p = .005$, (one-tailed), $r^2 = .06$, indicating a significant linear relationship between the two variables. Students with better time management behavior tend to have higher GPAs. The null hypothesis was rejected, and the alternative hypothesis was supported. See Figure 1.

Figure 1

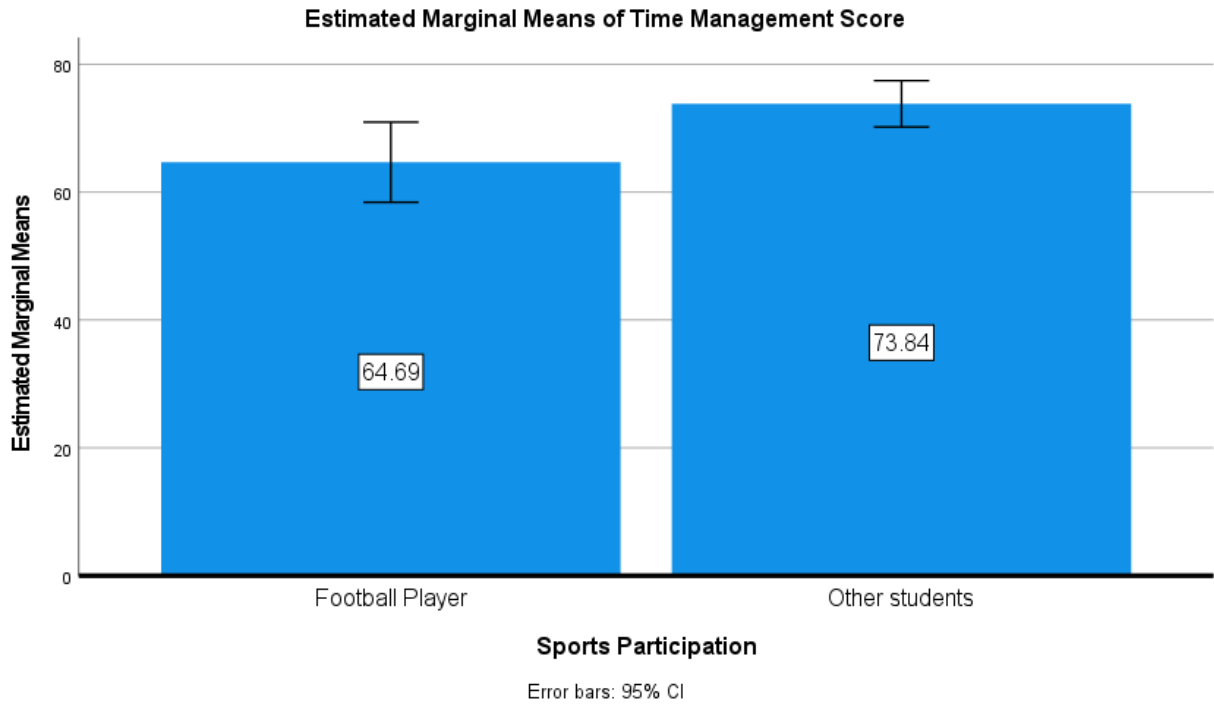
Time Management Behavior and Academic Performance (GPA) of College Students



The second hypothesis in this study stated that participation in collegiate football has an effect on the self-reported time management behavior of college students. To test this hypothesis, a one-way ANOVA was conducted comparing the time management behavior scores of football athletes and other college students. A significant difference was found among the groups $F(1,137) = 6.25, p = .014$. The null hypothesis was rejected, and the alternative hypothesis was supported. This analysis revealed that football players had lower time management scores ($M = 64.69, SD = 14.34$) than the other college students ($M = 73.84, SD = 19.96$). See Figure 2.

Figure 2

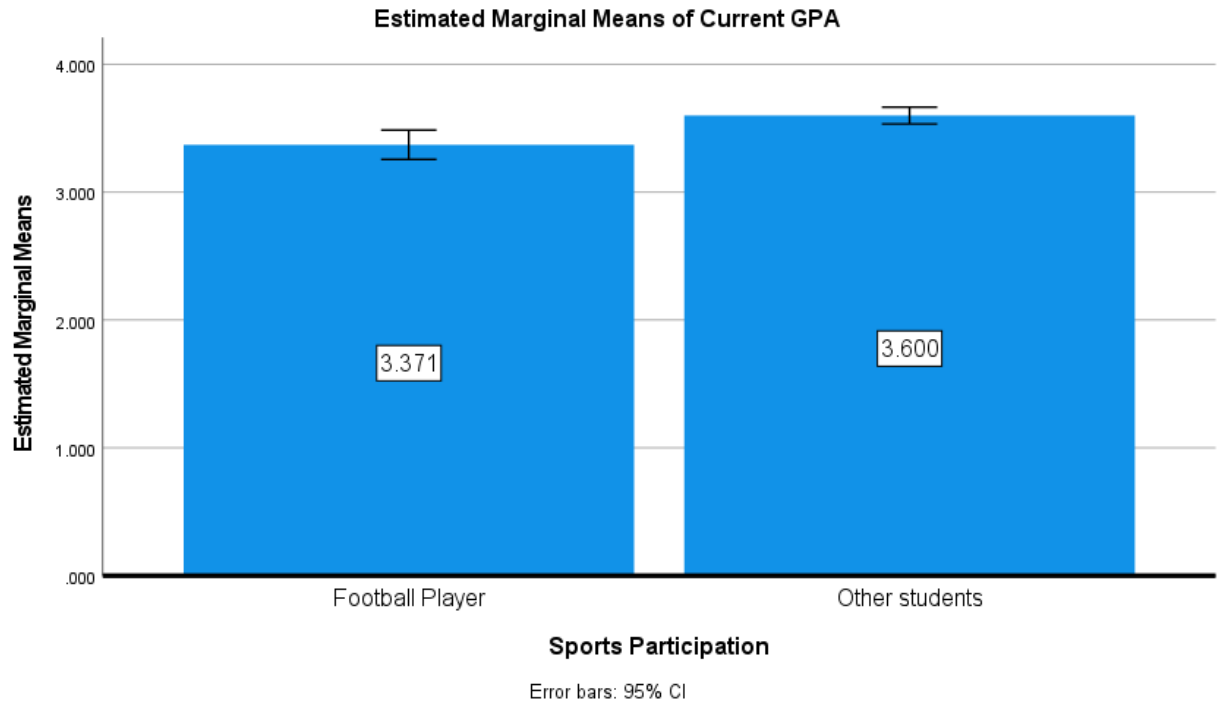
Time Management Behavior Scores Between Collegiate Football Players and Other Students



The final hypothesis in this study stated that participation in collegiate football has an effect on the academic performance (GPA) of college students. To test this hypothesis, a one-way ANOVA test was also conducted comparing the academic performance through self-reported GPA of football athletes and other college students. A significant difference was found among the groups $F(1,137) = 11.68, p < .001$. The null hypothesis was rejected, and the alternative hypothesis was supported. This analysis revealed that football players, on average, had lower academic performance ($M = 3.37, SD = .298$) than other college students ($M = 3.59, SD = .350$). See Figure 3.

Figure 3

Academic Performance (GPA) Between Collegiate Football Players and Other Students



Discussion

Findings

This study revealed a weak but positive correlation between time management behavior and academic performance. Students with better time management behavior also tend to have higher academic performance. These findings affirm the work of Rashid et al. (2020), which revealed effective time management leads to greater academic performance. Collegiate football players appear to have weaker time management behavior than other college students. Other authors have noted similar time management challenges among college athletes. For instance, Simon et al. (2015) and Insler and Karam (2017) revealed that student-athletes experience significant time constraints due to their athletic obligations. Similarly, in this study, participation in collegiate football was found to have a negative relationship with time management and academic performance. In other words, collegiate football players, on average, had lower time

management scores and GPAs when compared to other college students. These results differ from those of Montecalbo-Ignacio et al. (2017), who found that participating in sports can increase the learning efficiency of student-athletes. Overall, participation in collegiate athletics seems to pose time management and academic performance challenges for football players.

Limitations

Despite the findings from this study, there were several limitations. The sample was both imbalanced in size and structured as a convenience sample. While this study consisted of 140 participants, the division between the number of collegiate football players and other college students is quite large, with other college students being the majority. Both of these conditions limit the generalizability of this study's data to the broader population. However, the number of collegiate football players in the sample was not enough to conclude a significant representation of all collegiate football players. Increasing the number of college football players in the sample may be one way to heighten the quality of the sample.

Second, the self-reporting nature of the TMBS survey and academic performance in the form of GPA limits the internal validity since students might feel pressured to answer the questions in a way that makes them look better but does not reflect reality. Third, the findings from this study are indicative of only one NCAA Division II small private university in Arkansas. The data collected from teams that are a part of the NCAA Division I conference or even larger and public universities may yield different findings.

Lastly, although a correlation between time management and academic performance was found, causation between the two variables cannot be inferred without further research.

Implications and Suggestions for Practice

The greatest implication of this study is the need for coaches to implement different strategies to help increase time management behavior among collegiate football players. While this study did not analyze a causal relationship between time management behavior and academic performance, the positive correlation between the two variables is worth considering. If the ultimate goal of a collegiate football team is to excel athletically, coaches must also do whatever possible to help the athlete excel academically, which gives them the ability to play. Increasing time management behavior through establishing deadlines, setting realistic goals, and promoting the use of time management tools such as calendars could help improve the players' time management behavior. The effort to increase time management behavior among collegiate football players should be a collaborative effort between coaches, professors, and players. Activities such as prioritizing deadlines, time management workshops, and requiring players to attend scheduled tutoring sessions may create opportunities for increased time management behaviors from the player, which in turn may increase academic performance (Britton and Tesser, 1991). The results of Britton and Tesser's (1991) study imply that increasing time management may lead to an increase in academic performance, indicating that time management skills are needed for collegiate athletes. For example, Misra & McKean's findings were similar to that of this current study stating that there is an encouraging relationship between time management skills and academic success. One of the encouraging relationships discussed in Misra and McKean's study was the participants' feelings of being able to distinguish between a waste of time and productive time and being able to be more in control of their time (Misra and McKean, 2000). Overall, an increase in time management behavior provides academic support for the collegiate football player. Being that student-athletes have greater potential to have full

college careers, where they can earn a college degree, all while still being able to enjoy and succeed in their sport.

Suggestions for Future Studies

Future research studying this phenomenon should expand to look at athletes from all different athletic conferences in Division I, as well as Division II and III. Future research should also attempt to balance the number of participants for the study. While the goal of this study was to balance the sports participation ratio, it was unattained. A 50:50 ratio of collegiate football players to other college students would be a better representation of the overall population. Another area for future research should explore the differential impacts of collegiate sports participation from different sports on academic success within demographic groups such as female versus male students or different college majors. This study included multiple demographic characteristics but did not explore whether time management and academic performance differed by demographic groups. Future research could implement specific programs or schedule regimens for certain demographic groups to analyze the impact of collegiate sports participation on time management behavior and academic performance.

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