# The Time Usage of College Music Majors, Non-Music Majors, and Marching Band Participants

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#### Abstract

College marching bands face recruitment challenges each year. Many high school band students may not participate in college marching band due to concerns about adequate study time. This research was a case study that investigated the time usage of selected college students at one university. This study compared the time usage skills of four groups of undergraduate students: (a) music majors in marching band, (b) non-music majors in marching band, (c) music majors not in marching band, and (d) non-music majors not in marching band. The following research questions were addressed: (1) How do marching band members, music majors, and non-music undergraduates use their time? (2) How much time do marching band students allocate for studying compared with non-marching band students? (3) How much time do music majors in marching band devote to practice compared with music majors not in marching band? (4) How much time do marching band members reserve for leisure-related activities compared with students not in marching band? (5) Have college music majors ever been told that marching band takes too much time? If so, is there a relationship between those students and marching band participation? Participants (N = 80) were undergraduate students at a large southern university in the United States. Data were collected through a researcher-designed time log. Results of this study indicated that non-marching band students had more leisure time than marching band students. This study may also indicate that marching band students have adequate time for study and homework. Further research investigating marching band students' time usage seems warranted.

#### **Keywords**

college, marching band, time, recruitment

## **Review of Literature**

Student recruitment and enrollment is a major concern for American institutions of higher education. According to the American Association of Collegiate Registrars and Admissions Officers, student enrollment is a continuing challenge for admissions and registration professionals (Supiano, 2012). Enrollment fluctuations, particularly declining figures, capture the attention of administrators, taxpayers, and university admissions offices. While enrollment is trending up for minority students (Fischer, 2007; Porter, 2006) and some small colleges (Beja, 2009), enrollment rates are dropping at colleges in Virginia, Maryland, and California (Anderson, 2014; Fain, 2007). The U.S. Census Bureau (2014) reported that college enrollment declined by nearly half a million (463,000) between 2012 and 2013. In addition, the National Student Clearinghouse indicated that general college enrollment was declining annually from 2012 to 2014 (Lenderman, 2013). In efforts to increase enrollment, administrators may attempt to identify aspects of student life and organizations that attract students to colleges and universities. One such organization may be the college marching band.

Extant research shows that many college students choose a university because of the marching band program (Madsen, Plack, & Dunnigan, 2007). For some students, the desire to wear a specific university marching band uniform can outweigh academic and financial considerations (Dunnigan, 2007). Successful marching band programs also operate as a positive public relations vehicle for colleges and universities. Visible marching bands, performing on large regional and national stages, serve as powerful recruitment tools for universities. School administrators have realized the impact of marching bands at school and sporting events, providing espirit de corps for those in attendance, including prospective college students (Buckton, 1929; Garrison, 1986; Lee, 1955; Revelli, 1979; Wickes, 1978). Despite the abundance of university concert bands and other instrumental ensembles, the general public often perceives the appearances and

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performances of marching bands as representative of the value and quality of entire music programs (Foster, 1978). In turn, marching bands may become an effective recruiting vehicle for colleges and universities. The reputation of performing ensembles, including marching bands, can be an important factor for incoming freshman during the college choice process (Carlson, 1999).

Although marching bands draw students to universities and music departments, the responsibility for marching band recruitment belongs to the band director. Band directors use a variety of recruitment strategies to attract incoming freshman, often promoting the many benefits of membership. Research shows that students in college marching bands receive a musical education (Revelli, 1979), develop effective teaching skills (Legette, 1988; Richards, 2012), acquire leadership experience (Shellahamer, Swearingen, & Woods, 1986), engage in social interactions (Kelly, 2009; Richards, 2012), and expend physical energy (Cowen, 2006; Edwards, 2008).

However, during the recruitment process, band directors often face a recurring challenge: convincing prospective students that the benefits of participation outweigh the considerable time commitment. Many freshmen that participated in high school marching bands choose not to continue participation, citing concerns for adequate study time (Fuller, 1995; Moder, 2013). Freshmen are often steered away from college band by well-intentioned parents and high school guidance counselors (Bellomy, 2014). These adults are often concerned that marching band participation will not allow enough study time for students. In addition, music majors may opt out of marching band due to concerns regarding a lack of individual music practice time.

Marching band participation may benefit students by providing leadership opportunities. Undergraduate students who gain leadership roles in marching bands learn to lead others, delegate small responsibilities, and plan efficiently (Buckton, 1929; MacKenzie, 1990). Inefficient planning, particularly by college students, may lead to poor time use and anxiety, which is a growing concern for university counseling centers in the United States (Wristen, 2013). Nonefficient time usage may have an effect on college students' academic stress and personal anxiety (Bonhomme, 2007; Misra & McKean, 2000). Strategies for efficient time use can be learned through formal instruction or participation in a program that contains a regular schedule with specific goal-oriented tasks (Kendrick & Kendrick, 1988). Marching band participation may provide the regular scheduling and focus on goal achievement needed for the development of efficient time usage.

Many students choose to enroll in college marching band despite taking time away from study and practice time. Students may be able to negotiate the time commitment with good time management. While researchers have investigated the time use of college students (Babcock & Marks, 2010; Guillaume & Khachikian, 2011; Welker & Wadzuk, 2012), few have investigated the time use of college marching band members. The current study may aid the recruitment efforts of college marching band directors by providing empirical data to use in response to students who are concerned that band participation may impede study and practice time.

The purpose of this research was to investigate the time usage of undergraduate students in college marching bands. Specifically, this study compared the time usage skills of four groups of undergraduate students: (a) music majors in marching band, (b) non-music majors in marching band, (c) music majors not in marching band, and (d) non-music majors not in marching band. The following research questions were addressed:

**Research Question 1:** How do marching band members, music majors, and non-music undergraduates use their time?

**Research Question 2:** How much time do marching band students allocate for studying compared with non–marching band students?

**Research Question 3:** How much time do music majors in marching band devote to practice compared with music majors not in marching band?

**Research Question 4:** How much time do marching band members reserve for leisure-related activities compared with students not in marching band?

**Research Question 5:** Have college music majors ever been told that marching band takes too much time? If so, is there a relationship between those students and marching band participation?

# Method

Participants (N = 80) were undergraduate students during a fall semester at a large southern university in the United States. Participants in this study were recruited from four targeted courses at the university: Music in the Western Culture, Symphonic Band, Concert Band, and Marching Band. These courses were chosen due to ease of access and for the large amount of possible participants in each course, which aided recruitment and administration of the dependent measure. The Institutional Review Board (IRB) at the institution of the study granted research and recruitment approval.

During recruitment meetings for the study, students were provided an informational letter. Following the meetings, students in each course were asked to voluntarily sign consent forms, indicating their interest to participate in the study. Participants were also asked to voluntarily complete an anonymous prestudy questionnaire by providing their email address and phone number, used later in a reliability check. Participants were grouped and placed into four groups: (a) music majors in marching band, (b) non-music majors in marching band, (c) music majors not in marching band, and (d) non-music majors not in marching band. Participants in the fourth group were not members of any wind band at the university.

Friday 11/7	/14			12:20 – 1:10 PM	Class	Marching Band	Sleeping
Midnight - 1:00	Class	Marching Band	Sleeping		Eating	Non-MB Rehearsal	TV
AM	Eating	Non-MB Rehearsal	TV		Internet/Phone	Practice Alone	Work
	Internet/Phone	Practice Alone	Work		Leisure	Study/Homework	Other
	Leisure	Study/Homework	Other	1:25 – 2:15 PM	Class	Marching Band	Sleeping
1:00-2:00 AM	Class	Marching Band	Sleeping		Eating	Non-MB Rehearsal	TV
	Eating	Non-MB Rehearsal	TV		Internet/Phone	Practice Alone	Work
	Internet/Phone	Practice Alone	Work		Leisure	Study/Homework	Other
	Leisure	Study/Homework	Other	2:30 - 3:45 PM	Class	Marching Band	Sleeping
2:00 - 3:00 AM	Class	Marching Band	Sleeping		Eating	Non-MB Rehearsal	TV
	Fating	Non-MB Rehearsal	TV		Internet/Phone	Practice Alone	Work
	Internet/Phone	Practice Alone	Work		Leisure	Study/Homework	Other
	Leisure	Study/Homework	Other	4:00 - 5:00 PM	Class	Marching Band	Sleeping
3:00 - 4:00 AM	Class	Marching Band	Slaaning		Eating	Non-MB Rehearsal	TV
5.00 - 4.00 /114	Eating	Non MR Rohoarcol	TV		Internet/Phone	Practice Alone	Work
	Lating	Dreatice Alone	Work		Leisure	Study/Homework	Other
	Internet/Phone	Fractice Alone	Other	5:00 - 6:00 PM	Class	Marching Band	Sleeping
4:00 5:00 AM	Class	Study/Homework	Other		Fating	Non-MB Rehearsal	TV
4:00 - 5:00 AM	Class	Marching Band	Sleeping		Internet/Phone	Practice Alone	Work
	Eating	Non-MB Renearsal	IV I		Leisure	Study/Homework	Other
	Internet/Phone	Practice Alone	WORK	6:00 - 7:00 PM	Class	Marching Band	Sleening
	Leisure	Study/Homework	Other	0.000 7.000 7.00	Eating	Non MB Pahaarcal	TV
5:00 - 6:00 AM	Class	Marching Band	Sleeping		Internet/Phone	Prostice Alone	Work
	Eating	Non-MB Rehearsal	TV		L ojeuro	Study/Homowork	Other
	Internet/Phone	Practice Alone	Work	7-00 8-00 PM	Class	Maashing Dand	Classing
	Leisure	Study/Homework	Other	7.00 - 8.00 FM	Class	Marching Band	Sleeping
6:00 – 7:00 AM	Class	Marching Band	Sleeping		Eating	Non-MB Renearsal	1 V
	Eating	Non-MB Rehearsal	TV		Internet/Phone	Practice Alone	Work
	Internet/Phone	Practice Alone	Work		Leisure	Study/Homework	Other
	Leisure	Study/Homework	Other	8:00 – 9:00 PM	Class	Marching Band	Sleeping
7:00 - 8:00 AM	Class	Marching Band	Sleeping		Eating	Non-MB Rehearsal	TV
	Eating	Non-MB Rehearsal	TV		Internet/Phone	Practice Alone	Work
	Internet/Phone	Practice Alone	Work		Leisure	Study/Homework	Other
	Leisure	Study/Homework	Other	9:00 -10:00 PM	Class	Marching Band	Sleeping
8:00 - 8:50 AM	Class	Marching Band	Sleeping		Eating	Non-MB Rehearsal	TV
	Eating	Non-MB Rehearsal	TV		Internet/Phone	Practice Alone	Work
	Internet/Phone	Practice Alone	Work		Leisure	Study/Homework	Other
	Leisure	Study/Homework	Other	10:00-11:00 PM	Class	Marching Band	Sleeping
9:05 - 9:55 AM	Class	Marching Band	Sleening		Eating	Non-MB Rehearsal	TV
	Eating	Non-MB Rehearsal	TV		Internet/Phone	Practice Alone	Work
	Internet/Phone	Practice Alone	Work		Leisure	Study/Homework	Other
	Leisure	Study/Homework	Other	11:00 Midnight	Class	Manahing Dand	Classing
10:10 - 11:00 AM	Class	Marching Band	Sleeping	11.00 - Midnight	Eating	Non MB Reheared	TV
	Eating	Non-MB Reheared	TV		Lating	Dreatice Alene	I V Work
	Internet/Dhone	Practice Alone	Work		Internet/Phone	Study/Henry	WORK
	L aisura	Studu/Homowork	Other		Leisure	Study/Homework	Other
11.15 12.05 05 4	Leisure	Study/Homework	Other				
11:13 – 12:05 PM	Class	Marching Band	Sleeping				
	Eating	Non-MB Rehearsal	TV				
	Internet/Phone	Practice Alone	Work				
	Leisure	Study/Homework	Other				

**Figure I.** Marching band time log copy. *Note.* MB = marching band.

Based on prior research investigating the time use of adults (Bryant & Gerner, 1981; Gautheir & Furstenberg, 2002; Thorndike, 1937) and college students (Babcock & Marks, 2010; Bernhard, 2005; Guillaume & Khachikian, 2011; Welker & Wadzuk, 2012; Werner, 1929), a time log (paper, booklet style) was constructed by the researcher (see Figure 1). Three different time logs were designed, with each time log tailored to the possible daily activities for each group of participants. Time logs were designed to record activities for 1 week.

Time logs provided a simple format for participants to easily and quickly record activities in several categories for 1 week. Similar to Nielsen TV diaries, time logs were printed on letter-size paper, folded, and stapled in half (The Nielsen Company, 2014). Each page contained a 12-hr segment of time. The time log also contained a series of several demographic questions, a set of directions, and a brief definition of the listed activities. The lists of daily activities were based on prior research that involved the use of time logs and diaries (Avis, Bathmaker, & Parsons, 2001; Corti, 1993; Crosbie, 2006; Kendrick & Kendrick, 1988; Welker & Wadzuk, 2012). All marching band participants, as well as music major participants not in marching band, completed a one-question poststudy questionnaire. The questionnaire asked participants if they had ever been told that marching band takes too much time. In an investigation of a primary concern that students have of marching band participation (the amount of time they will commit to marching band), it seems helpful to investigate the origins of that concern.



Figure 2. Total hours engaged in each activity for all four participant groups.

Purposeful deception was necessary to promote scientific validity and obtain unbiased data. During recruitment and distribution meetings, participants were told that the purpose of the study was to investigate the daily stress of students living on and off campus. Participants were informed of the true purpose of this study immediately before time logs were collected. In an effort to minimize dishonest or inaccurate recording, the researcher conducted a reliability check. During recruitment meetings and prior to time log distribution, the researcher asked participants to voluntarily supply their cell phone number. Participants were informed that this information would be kept confidential and be used to improve recording accuracy in the time logs. Twice during the recording period, participants who supplied a cell phone number received a text message, asking them what activity they were doing at the time. Responding participants were given a three-digit research code and were instructed to write it inside their time log. After receiving all responses, cell phone numbers were deleted, leaving research codes as the sole identifier. Text message responses were later compared with data recorded in time logs, using the research code to match the data. While it is difficult to ensure entirely accurate participant responses, an email reminder and text messages may have mitigated fraudulent recording and prompted students to record accurate activities in each time log. A gift card lottery was also conducted as an incentive for participants who returned completed time logs.

# Results

A total of 390 time logs were distributed. In all, 134 completed time logs were returned (34.3%), including 75 marching band, non-music major time logs; 21 marching band, music major time logs; 20 non-marching band, music major time logs; and 18 non-marching band, non-music major time logs. The overall response rate was higher than expected based on previous studies utilizing time logs (Bailey, Grabowski, & Link, 2009; Welker & Wadzuk, 2012), but lower than other research utilizing time logs (Crosbie, 2006; Gershuny, 2002).

To ensure balanced group populations, 21 of 74 completed time logs from marching band, non-music major participants were selected randomly for data analysis, using a recognized website (www.random.org). The following number of time logs were used for data analysis in this study: 21 marching band, music major time logs; 21 marching band, non-music major time logs; 20 non-marching band time logs; and 18 non-music major, non-marching band time logs (N = 80). Data analysis included participants' demographic responses and hourly category responses for the entire 7-day recording period, resulting in approximately 80,000 data points. All remaining time logs not randomly selected were eliminated from data analysis.

To establish reliability of time log data, participants (n = 39) responded to text message inquires. Each response was assigned an anonymous code, which were later matched with returned time logs. Using an established formula (agreements / [agreements + disagreements], Madsen & Madsen, 1998), reliability of participant responses was found to be .87.

Time log data were analyzed to address Research Question 1. Mean scores were calculated for the amount of hours each participant group spent in each activity (see Figure 2). Table 1 provides a list of mean scores (number of hours during the 1-week recording period) for each group of participants. Overall, the top three activities were Sleeping (M = 52.04),

		MB	Non-MB		
Activity category	Music major	Non-music major	Music major	Non-music major	
Class	8.62	8.61	9.85	9.05	
Eating	15.14	14.38	14.8	13.61	
Internet/phone	9.85	6.71	10.75	21.11	
Leisure	16.19	23.04	28.6	35.16	
MB	24.8	25.38	0	0	
Non-MB rehearsals	4.28	2.57	4.85	0	
Practice alone	6.81	0.19	12.8	0	
Study/homework	10.8	16.09	12.85	17.88	
Sleeping	50.23	50.28	52.8	54.88	
TV	4.71	5	6.1	10.94	
Work	0.23	2.19	2.8	1.27	
Other	17.33	14.42	19	15.05	

<b>Table 1.</b> Amount of Hours Engaged in Each Activity, Sorted by Participant Gro	lable I.	able	I.Amount o	f Hours	Engaged in	1 Each	Activity.	Sorted b	oy Partic	idant Gro	udd
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Note. MB = marching band.

Table 2.	Activities	During \	Weekday M	B Rehearsals:	Mean
Scores.					

Selected group	М	SD
Non-MB, music major		
Leisure	2.7	1.98
Practice alone	1.75	2.2
Eating	1.15	0.98
Other	0.95	1.04
Non-MB rehearsal	0.85	1.07
Study/homework	0.65	0.92
Internet/phone	0.55	1.23
Work	0.4	1.23
Class	0.35	0.67
TV	0.3	0.75
Sleeping	0.15	0.3
MB	0	0
Non-MB, Non-music major		
Leisure	2.27	1.94
Internet/phone	1.33	1.55
Study/homework	1.27	1.46
Other	1.11	1.65
Eating	I	1.36
TV	0.72	0.94
Class	0.61	I
Sleeping	0.22	0.84
Work	0.16	0.51
MB	0	0
Non-MB rehearsal	0	0
Practice alone	0	0

Note. MB = marching band.

Leisure (M = 25.74), and Other (M = 16.45). Mean scores were also calculated for all four groups of participants during the hours of weekday marching band rehearsals (4:00 to 6:00 p.m.). Table 2 provides a list of mean scores for all activities during weekday marching band rehearsals. The top activity for all non-marching band participants was Leisure (M = 2.53).

To aid data analysis pertaining to Research Question 2, participants were placed into two large groups: marching band participants and non-marching band participants. Mean scores were calculated for the amount of Study/Homework hours allocated by marching band participants (M = 13.45) and non-marching band participants (M = 15.23). For heuristic analysis, chi-square tests were conducted with alpha level adjusted to compensate for alpha inflation. No significant difference was found between the hours allocated for Sstudy/Homework and marching band and non-marching band participants ( $\times^2 (3, 80) = 0.14, p \ge .01$ ).

To examine the amount of time allocated by all four groups of participants in all traditional classroom academic-related activities, two categories were combined: Class and Study/ Homework (see Figure 3). Ensemble rehearsal times, including marching band activities, were not included, as the amount of ensemble activities may have skewed results for this particular analysis. Mean scores were tabulated for the amount of hours allocated for academic-related activities by marching band, music majors (M = 19.42); marching band, non-music majors (M = 24.71); non-marching band, music majors (M = 22.7); and non-marching band, non-music majors (M = 26.94).

Time log data were also used to investigate Research Question 3. Mean scores were calculated for data recorded in the Practice Alone category. Data analysis indicated the Practice Alone mean score for non-marching band, music majors (M = 12.85) was higher than marching band, music majors (M = 6.81). In addition, all activity categories related to instrumental music performance (Marching Band, Non-Marching Band Rehearsal, Practice Alone) were combined, resulting in an overall Instrumental Playing Opportunity category. A mean score was calculated to determine which group of music majors accumulated the most Instrumental Playing Opportunity time. Results indicated that marching



Figure 3. Total hours engaged in combined categories for all four participant groups.

band, music majors (M = 35.9) devoted more time to Instrumental Playing Opportunity activities than non-marching band, music majors (M = 17.65).

For data analysis regarding Research Question 4, participants were placed into two large groups: marching band participants and non-marching band participants. Mean scores were calculated for the amount of leisure hours reserved by the two large groups of participants. Marching band participants engaged in fewer leisure hours (M = 19.61) than non-marching band participants (M = 31.71). To examine the amount of free time accumulated by all marching band and non-marching band participants, three categories were combined (Internet/Phone, Leisure, and TV). Mean scores were calculated for the amount of leisure-related activities (free time) recorded by marching band participants (M = 32.76) and non-marching band participants (M = 55.76).

To address Research Question 5, participants completed a poststudy questionnaire. Research Question 5 addressed two groups: marching band members and college music majors; thus, only participants in those groups were invited to complete the poststudy questionnaire. Of the participants surveyed, 68.4% of marching band members (music majors and non-music majors) indicated that others have told them that marching band takes too much time. In all, 85% of music majors not in marching band indicated that they have been told that marching band takes too much time.

# Discussion

The first research question sought to determine how select undergraduate students spent their time. During the duration of this study, participants spent the most time sleeping. While there was no significant difference in mean scores, non-marching band participants went to sleep later in the evening and slept later into the morning than marching band participants. This may be a result of marching band-related activities that occurred, especially a morning marching band practice that occurred on the Saturday during the study. Participants in this study seemed to acquire adequate sleep time, on average sleeping for over 8 hr per night. These results are comparable with research by Guillaume and Khachikian (2011) that indicated college students sleep for 8.1 hr per day. The results of this study contrast with previous research that indicated college students are sleep deprived (Knowlden & Sharma, 2014).

After sleeping, participants spent the second-most time engaged in leisure activities. The amount of time participants spent in leisure was followed by time spent in the "Other" category. Particular activities in the "Other" category were not identified. Participants were not asked to write in specific activities, as open-ended questions may have lowered the expectation for complete confidentiality.

Fuller (1995) and Moder (2013) independently found that music students are often reluctant to participate in marching band because of the many rehearsal requirements. The marching band in this study rehearsed every weekday from 4:00 to 6:00 p.m. Results of this study indicated that nonmarching band students spent most of their time on weekdays from 4:00 to 6:00 p.m. engaged in leisure activities; thus, it appears that they did not use the majority of these 2 hr to study. However, non-marching band music majors did spend an average of 1.75 hr in individual practice during this time, the second-highest mean score for the group. Specific leisure activities for non-marching band, non-music major participants during this time (4:00 to 6:00 p.m.) included surfing the Internet and talking on the phone.

The second research question investigated participants? study time. Although marching band activities consumed an average of 25 hr per participant for the week, marching band students still found time to study. In fact, there was no significant difference in the study times of students in marching band and students not in marching band. In addition, there was no significant difference in the amount of time each group of participants spent in traditional (nonrehearsal) classroom courses. The present study also compared the time use of participants by combining all traditional academic-related activities, including traditional class time, study, and homework. Ensemble rehearsal times, including marching band activities, were not included in the analysis. Again, there was no difference between groups for the time spent participating in academic tasks. Despite the time commitment of marching band participation, marching band students still attended traditional classroom courses and spent time studying at a rate similar to non-marching band students.

The third research question was designed to examine the practice time of marching band and non-marching band music majors. Results showed that non-marching band music majors practiced more than marching band music majors. This may be a result of the amount of music performance majors in each group. In all, 35% of non-marching band music majors, compared with 9% of marching band music majors.

Although marching band music majors did not devote as much time in individual practice as non-marching band music majors, total Instrumental Playing Opportunity time was significantly greater for marching band music majors. However, marching band rehearsals may not be as musically concentrated as traditional wind band rehearsals, due to possible differences in repertoire and the addition of visual components in marching bands. While marching band participants may not have spent all rehearsal time playing their instruments, it is likely that the music majors in individual practice were also not spending the entire time practicing. Research has shown that musicians exhibit sizable amounts of off-task behaviors during individual practice (Madsen & Geringer, 1981). It should be noted that during the time of this study, the marching band rehearsed 5 days a week, 2 hr each day. In addition, the study occurred during homecoming weekend at the university that included a parade, pep rally, pregame rehearsals, and football game. The amount of music rehearsals and performance opportunities were greater for music majors in marching band compared with music majors not in marching band.

Research Question 4 investigated the amount of time that participants spent in leisure activities. Results of this study indicated that non-marching band students spent more time occupied in leisure-related activities than marching band students. Leisure-related activities included watching television, surfing the Internet, and talking on the phone.

The final research question sought to determine if college music students had ever been told that marching band participation takes up too much time. Bellomy (2014) found that some high school students were advised by guidance counselors and parents to not join marching band in college, due to the large time commitment. In the present study, 85% of non-marching band music majors indicated that, before entering college, they were told marching band takes too much time, compared with 68.4% of music majors in marching band. A higher percentage of music majors were told that marching band takes too much time, compared with those students who chose to participate in marching band. Band directors would be well served to remain cognizant of the possible origins of influence that may discourage marching band participation including family members, guidance counselors, and college orientation leaders.

# Conclusion

Marching band students appear to have adequate time to study for their traditional coursework, even with the sizable amount of weekly rehearsals and weekend performances by the participants in this study. Some non–marching band participants in this study did not always use the hours that marching band rehearses for academic-related activities. Although marching band music majors may devote less time to practice than non–marching band music majors, participation in college marching band allows much opportunity for instrumental playing for music majors. Finally, there may be outside factors influencing college music students' decisions to participate in marching band.

No previous research investigating the time usage of collegiate marching band students is known to exist. In addition, little research has investigated the time use of college music majors. Effective time use is important to the success of all college students. Further research investigating the time usage of band students seems warranted.

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#### References

- Anderson, N. (2014, January 22). Community college enrollment falls in Maryland and Virginia, echoing national trend. *The Washington Post*. Retrieved from http://www.washingtonpost. com/local/education/community-college-enrollment-falls-inmaryland-and-virginia-echoing-national-trend/2014/01/22/ b77188a0-82b4-11e3-bbe5-6a2a3141e3a9\_story.html
- Avis, J., Bathmaker, A., & Parsons, J. (2001). Reflections from a time log diary: Towards an analysis of the labour process within further education. *Journal of Vocational Education & Training*, 53, 61-80. doi:10.1080/13636820100200143

- Babcock, P. S., & Marks, M. (2010). The falling time cost of college: Evidence from half a century of time use data. *The National Bureau of Economic Research*. Retrieved from http:// www.nber.org/papers/w15954
- Bailey, J. T., Grabowski, G., & Link, M. W. (2009). When easy doesn't do it: An attempt to simplify a mailed diary survey. *American Statistical Society*. Retrieved from http://www. amstat.org/sections/srms/proceedings/y2009/Files/400044.pdf
- Beja, M. (2009, July 20). Small colleges expect slight enrollment bump this fall. *The Chronicle of Higher Education*. Retrieved from http://chronicle.com/article/Small-Colleges-Expect-Slight/47097/
- Bellomy, K. (2014). The University of Florida. *Halftime Magazine*, 8, 15-18.
- Bernhard, H. C. (2005). Burnout and the college music education major. *Journal of Music Teacher Education*, 15, 43-51. doi:10 .1177/10570837050150010107
- Bonhomme, G. (2007). The time management skills of at-risk African American college students: Practices, experience, and context (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses. (UMI No. 304699327)
- Bryant, W. K., & Gerner, J. L. (1981). Television use by adults and children: A multivariate analysis. *Journal of Consumer Research*, 8, 154-161. doi:10.1086/208851
- Buckton, L. V. (1929). College and university bands: Their organization and administration. New York, NY: J.J. Little and Ives.
- Carlson, M. C. (1999). Undergraduate music student recruiting practices and strategies in public colleges and universities (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses. (UMI No. 304512837)
- Corti, L. (1993, March 1). Using diaries in social research. Retrieved from http://sru.soc.surrey.ac.uk/SRU2.html
- Cowen, V. S. (2006). The contribution of marching band participation to overall physical activity for a sample of university students. *Perceptual & Motor Skills*, 103, 457-460. doi:10.2466/ pms.103.2.457-460
- Crosbie, T. (2006). Using activity diaries: Some methodological lessons. Retrieved from http://jrp.icaap.org/index.php/jrp/article/view/22/42
- Dunnigan, P. (2007). *Marching band techniques*. Northfield, IL: The Instrumentalist Publishing Company.
- Edwards, J. (2008). *Testing a tenor player's physical reaction to marching* [Video file]. Retrieved from http://www.youtube. com/watch?v=0Cdc-Ga K00
- Fain, P. (2007, December 14). Enrollment declining, college president resigns. *The Chronicle of Higher Education*. Retrieved from http://chroniclecareers.com/article/Enrollment-Declining-College/40153/
- Fischer, K. (2007, July 6). Black enrollment grows in South. *The Chronicle of Higher Education*. Retrieved from http://chronicle.com/article/Black-Enrollment-Grows-in/20629/
- Foster, R. E. (1978). *Multiple-option marching band techniques*. Port Washington, NY: Alfred Publishing.
- Fuller, J. A. (1995). A descriptive analysis of the eleven big ten conference marching band programs (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses. (UMI No. 304201006)
- Garrison, P. K. (1986). The value of marching band. *Music Educators Journal*, 72, 48-52. doi:10.2307/3396614

- Gautheir, A. H., & Furstenberg, F. F. (2002). The transition to adulthood: A time use perspective. Annals of the American Academy of Political and Social Science, 580, 153-171. doi:10.1177/0002716202580001007
- Gershuny, J. (2002). Mass media, leisure and home IT: A panel time diary approach. *IT & Society*, *1*, 53-66.
- Guillaume, D., & Khachikian, S. (2011). The effect of time-ontask on student grades and grade expectation. Assessment and Evaluation in Higher Education, 36, 251-261. doi:10.1080/02602930903311708
- Kelly, S. (2009). *Teaching music in American society*. New York, NY: Routledge.
- Kendrick, J. W., & Kendrick, J. B. (1988). Personal productivity: How to increase your satisfaction in living. Armonk, NY: M. E. Sharp.
- Knowlden, A. P., & Sharma, M. (2014). Health belief structural equation model predicting sleep behavior of employed college students. *Familiy and Community Health*, 37(4), 271-278. doi:10.1097/FCH.00000000000043
- Lee, J. (1955). *Modern marching band techniques*. Winona, MN: Hal Leonard Music.
- Legette, L. D. (1988). Marching band techniques courses: A survey of their usefulness to first and second year high school band directors (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses. (UMI No. 303668564)
- Lenderman, D. (2013, May 17). Data show increasing pace of college enrollment declines. Retrieved from https://www. insidehighered.com/news/2013/05/17/data-show-increasingpace-college-enrollment-declines
- MacKenzie, R. A. (1990). *Teamwork through time management*. Chicago, IL: The Dartnell Corporation.
- Madsen, C. K., & Geringer, J. (1981). The effect of a distraction Index on improving practice attentiveness and musical performance. *Bulletin of the Council for Research in Music Education*, 66/67, 46-52.
- Madsen, C. K., & Madsen, C. H. (1998). *Teaching discipline: A positive approach for educational development* (4th ed.). Raleigh, NC: Contemporary.
- Madsen, C. K., Plack, D., & Dunnigan, P. (2007). The marching band as a recruiter for the university. *Journal of Band Research*, 43, 54-62.
- Misra, R., & McKean, M. (2000). College students' academic stress and its relation to their anxiety, time management, and leisure satisfaction. *American Journal of Health Studies*, 16(1), 41.
- Moder, J. A. (2013). Factors influencing non-music majors' decisions to participate in collegiate bands (Doctoral dissertation). The University of Missouri-Kansas City.
- The Nielsen Company. (2014). *Nielsen TV diary support*. Retrieved from http://tvdiary.nielsen.com/content/panel/tvdiary7-en-feb2014/home.html
- Porter, J. R. (2006, November 10). Minority student enrollment climbs. *The Chronicle of Higher Education*. Retrieved from http://chronicle.com/article/Minority-Student-Enrollment/33150/
- Revelli, W. (1979). Marching is an educational plus. *The School Musician*, 51, 8-7, 60-61.
- Richards, E. W. (2012). The influence of marching band participation on the development of effective teaching skills (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses. (UMI No. 3539609)

- Shellahamer, B., Swearingen, J., & Woods, J. (1986). *The marching band program: Principles and practices*.Oskaloosa, IA: C. L. Barnhouse Company.
- Supiano, B. (2012, March 29). A time of challenges and opportunities in admissions and registration. *The Chronicle of Higher Education*. Retrieved from http://chronicle.com/blogs/ headcount/a-time-of-challenges-and-opportunities-in-admissions-and-registration/29781
- Thorndike, E. L. (1937). How we spend our time and what we spend it for. *Scientific Monthly*, *44*, 464-469.
- U.S. Census Bureau. (2014). College enrollment declines for second year in a row, Census Bureau reports. Retrieved from http://www.census.gov/newsroom/press-releases/2014/cb14-177.html
- Welker, A. L., & Wadzuk, B. (2012). How students spend their time. Journal of Professional Issues in Engineering Education

and Practice, 138, 198-206. doi:10.1061/(ASCE)EI.1943-5541.0000105

- Werner, O. H. (1929). *Every college student's problems*. New York, NY: Silver, Burdett.
- Wickes, F. B. (1978). The greatest booster of morale. *Music Educators Journal*, 65(4), 26.
- Wristen, B. G. (2013). Depression and anxiety in university music students. Update: Applications of Research in Music Education, 31, 20-27. doi:10.1177/8755123312473613

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