



# Motivational climate and academic achievement of student athletes: Basis for development program

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## ABSTRACT

This study was conducted to determine the significant relationship of motivational climate and the academic achievement of college athletes through which a sports development program could be developed. This was conducted to N=201 students through an adopted but modified questionnaire. Statistical tools used for this study were the mean, standard deviation and Pearson-r. It utilized the non-experimental quantitative research design employing correlational technique. Results of the study showed that the overall level of motivational climate was high while the overall mean of student-athletes academic achievement was fair. All indicators resulted to high: ego-involving climate and task-involving climate. Further, it was found that there was a significant relationship between motivational climate and student-athletes academic achievement. However, while the motivational climate is found to be high, it has also been shown that the overall academic achievement of student-athletes is interpreted as fair. This implies that despite the fact that there was a high level of motivation provided to the athletes, they still perceived their academic performance as fair and satisfactory. As such, a well-balanced academic and athletic participation must be observed. Hence, this study recommends that athletic administrators and coaches must deal with the problem of insufficient time spent on classwork and excessive time in practices and competitions and develop programs that promote a balanced academic and athletic participations among student-athletes.

**Keywords:** Academic achievement, motivational climate, student-athletes

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## INTRODUCTION

College students enter the athletic program for various reasons, but one of the most common reasons is that they would like to sustain their schooling since the school provides scholarships to athletes (Woods, 2011). As athletes, the motivation from their relationship with their coaches and co-athletes plays a vital role in their success in sports. Unsurprisingly, several authors such as Jowett (2000) have stressed the importance of building an effective coach-athlete relationship, as the quality of this relationship is a crucial determinant of athletes' satisfaction, motivation and improved performance (Mageau and Vallerand, 2003). Still, on the contrary, it does not guarantee their success in their academic endeavor. Most often, the former is the priority and even becomes the source of the latter's problem. Aggravating it may be, but most institutions still need a program that will provide athletes with support or assistance to run in case of a problem with their academic performance.

Colleges and universities struggle with balancing educational and athletic components of their institutions (Pine, 2010). In the paper of Putler and Wolfe (1999), the authors pointed out that the public perception is that university athletic programs are out of control. There are opposing points of views. Despite the viewpoint taken, athletics provides opportunities for increased institutional benefits such as: national exposure, increased enrollment and revenue, and more diversity. These benefits encourage athletic directors and academic administrators to promote athletics, and some would argue at the expense of traditional students (Yasser, 1993).

Compared to ordinary college students, athletes are confronted by a wide range of physical and psychological challenges as they belong to a particular population (Gaston, 2014). However, there exists a stigma that most student-athletes are only in school to participate in their respective sports. With their divided time and energy, most often, their schooling could be better (Gaston-Gayles, 2014). Issues with the academic achievement of athletes are troubling since they only have their education to fall back on after sports

and make a life out of that knowledge.

In the national arena, people in the academe are in a quandary because participation in sports may reduce the time available for studying and learning (Montecalbo and Cardenas, 2015). However, sports enthusiasts claim that sports participation could motivate student-athletes to achieve harder, improve students' academic grades, develop an awareness of the benefits of good health, fitness, and exercise, and understand the spirit of teamwork, sportsmanship, and camaraderie (Montecalbo-Ignacio, Iii, and Buot, 2017).

In order to address this gap, this study dealt with motivational climate and academic achievement of student-athletes: basis for sports enhancement program, would be the first to be conducted in Davao Oriental State College of Science and Technology (DOSCSST). Student-athletes were the chosen respondents of the study since the researcher is interested in determining the different aspects of their motivation in sports and academics. Moreover, the researcher had direct contact with them and access to them as the College Sports Coordinator. The study's findings would help craft an intervention program for college athletes. Moreover, the college will present the study in a forum and research colloquium to address all concerns.

In an effort to address the existing gap in understanding the interplay between motivational climate and academic achievement among student-athletes, this study focuses on these variables as a foundation for a sports enhancement program. This research, a pioneering effort at Davao Oriental State College of Science and Technology (DOSCSST), specifically targets student-athletes, recognizing their unique position at the intersection of sports and academics. Given the researcher's role as the College Sports Coordinator, there is a valuable opportunity for direct engagement and access to the student-athlete population. The primary aim of this study is to elucidate the different aspects of student-athletes' motivation in both their academic and sporting endeavors. By doing so, the findings are expected to inform the development of targeted intervention programs designed

to support and enhance the performance of college athletes.

This study explores the levels of motivational climate, particularly in terms of task-involving and ego-involving climates, and assesses the academic achievements of the student-athletes. Furthermore, it examines the relationship between these motivational climates and academic performance to determine if a significant connection exists. Based on these findings, the study aims to propose specific sports development programs. The outcomes will not only contribute to the academic discourse but will also be presented in a forum and research colloquium at DOSCST to address and discuss pertinent issues and possible interventions for the enhancement of sports programs at the collegiate level.

## METHODOLOGY

### Research design

This study utilized a quantitative research design. Quantitative research involves collecting and analyzing numerical data to describe, explain, and predict variables. Quantitative research describes current situations, establishes relationships, or explains causal relationships between variables. A descriptive research design is one in which the independent variable is not manipulated, and respondents are not randomly assigned. In short, the researcher does not interfere or manipulate any variable as it occurs naturally. This is so because its purpose is to describe and interpret the status of individuals, events, or conditions. This design is used when the researcher decides the problem to be investigated, decides on the variables to include in the study, collects data, analyzes the data, and makes conclusions based on the results. It is also used to report summary data, such as measures of central tendency, or to analyze correlations between and among variables (De Vaus, 2016).

This research design is appropriate to the present study because it presented conceptions of the respondents in answer to the questions stipulated in the questionnaire. Data were presented using

frequency distribution, Mean, percentage, and standard deviation. Further, this research design is appropriate for the study because it tries to determine the relationship of the independent variable, motivational climate, to the dependent variable, student athletes' academic achievement.

### Study area

This study was conducted at the Davao Oriental State College of Science and Technology (DOSCST) in Mati City, Davao Oriental. DOSCST is a tertiary academic institution created by virtue of Republic Act No. 6807 and is mandated to provide academic programs in science and technology, agriculture, engineering, teacher education, technical education and other areas as may be instituted on the basis of national, regional and local development goals. The study was started from February 2019 to April 2019. In carrying out its mandate, DOSCST's outcomes include provision of relevant and quality tertiary education, achievement of inclusive growth and access of deserving but poor students to quality tertiary education, conduct of higher education research to promote economic productivity and innovation, and develop sports and athletic program for its students and the community.

To reach out to potential and deserving students, it offers scholarships in academics, government and non-government scholarship grants and government and non-scholarship grants. Specifically, students with special skills in dance, chorale, band, arts, theatre, sports, literary, combo, visual arts were also given scholarship grants. In terms of its sports program, it is supervised by a Sports Coordinator who serves and acts as the immediate in-charge in the supervision of evaluation of identified qualified athletes, the supervision of trainings of athletes, coordination with other state colleges and universities on schedule of sports events and competitions and other functions relative to sports in the school and outside of the school. Moreover, it also sees to it the welfare of athletes and their concerns including their academic responsibilities and problems.

## Participants

The study's respondents were the 201 athletes in the three campuses of the said school. The sampling method used in this study as complete/total enumeration or a census method. A census studies every unit, everyone, or everything in a population. The census method refers to the full enumeration of a universe. A universe may be a place, a group of people, or a specific locality through which data are collected. Hence, in this study, all student-athletes on three campuses were the respondents.

## Data collection and analysis

This study utilized an adapted version of the Perceived Motivational Climate in Sport Questionnaire (PMCSQ) designed by Newton et al. (2000) to determine the level to which college athletes perceive the motivational climate of their team. The PMCSQ consists of a 21-21-item inventory with two subscales measuring ego- involving 12 items, and task which has nine items of motivational climates. It used the Likert-5 point scale to score the motivational climate: 1-Never, 2-Seldom, 3-sometimes, 4-often, and 5-always. Since it is an adapted and modified questionnaire, it underwent pilot testing among 30 college student- athletes from different schools. The tool obtained in indicator ego is .75 and task is .78, respectively, so the instrument is reliable.

The following statistical tools were used for data analysis and interpretation. Mean was used to determine the student-athletes' motivational climate and academic motivation. Standard Deviation was used to measure the spread of scores in the data. Pearson-r was also used to determine the significant relationship between motivational climate and academic motivation of student-athletes. The University of the Immaculate Conception- Research Ethics Committee (UIC-REC) reviewed and evaluated whether the research abides and observes ethical research protocols. Participation in the study is voluntary to preserve the principle of respect for persons. No scheme nor any means of bribery or force or any act of compulsion nor giving of favors was employed. Each participant's decision to participate was honored, as stipulated in the protocol.

## RESULTS

### Level of the motivational climate of the student athletes

Presented in Table 1 is the level of the motivational climate of the student-athletes. As shown, the motivational climate of the student-athletes gained an overall mean score of 4.12, which is interpreted as high, with a standard deviation of .493.

**Table 1.** Level of motivational climate of the student athletes.

Motivational climate ego involving climate	SD	Mean	Description
1. Players feel good when they do better than their teammates.	4.43	0.88	High
2. Players are punished for mistakes.	3.84	1.12	High
3. Players are taken out for mistakes.	4.33	0.93	High
4. The coach pays the most attention to the star.	4.19	0.91	High
5. Doing better than others is important.	4.20	0.81	High
6. The coach favors some players	4.16	0.95	High
7. Only the top players get noticed.	4.46	0.78	High
8. Players are afraid to make mistakes.	4.04	0.94	High
9. Only a few players can be the stars.	4.18	0.87	High
10. Each player's improvement is important.	4.50	0.76	Very high
11. Players like playing good teams.	3.96	1.09	High
12. Only the best players are praised.	4.15	0.93	High
<b>Category mean</b>	<b>4.20</b>	<b>0.51</b>	<b>High</b>
<b>Task - involving climate</b>			
1. Out-playing teammates is essential.	3.82	1.13	High
2. Players are encouraged to outplay teammates	4.63	1.19	High

3.	Everyone wants to be the high scorer.	3.99	1.14	High
4.	Trying hard is rewarded.	3.80	1.10	High
5.	The coach focuses on skill improvement.	4.17	0.96	High
6.	Players try to learn new skills.	4.33	0.84	High
7.	Players are encouraged to work on their weaknesses.	4.18	0.98	High
8.	The coach wants us to try new skills.	4.24	0.89	High
9.	Most players get to play in the games.	4.19	0.96	High
<b>Category mean</b>		<b>4.04</b>	<b>0.63</b>	<b>High</b>
<b>Overall mean</b>		<b>4.12</b>	<b>0.93</b>	<b>High</b>

Attitudes	Mean	Descriptive rating
Cognitive component	4.45	Very high
Affective component	4.46	Very high
Behavioral component	4.45	Very high
<b>Overall mean</b>	<b>4.45</b>	<b>Very high</b>

Moreover, presented in the same table is the overall mean of ego involving climate with 4.20 interpreted as high, higher than the mean of the task- involving climate. This means that most respondents were more motivated in situations emphasizing interpersonal competition, normative feedback, public evaluation, and social comparison. The highest among the items is each player’s improvement, which is essential, with a mean of 4.50 and a standard deviation of .762, interpreted as very high. This means that this condition of motivational climate is very highly motivating. The lowest is players are punished for mistakes with a 3.84 mean and a standard deviation of 1.120, interpreted as high.

On the other hand, the task-involving environment obtained an overall mean of 4.04, indicating that students are frequently motivated in an environment that

encourages effort, learning, mastery of the task, and participation.

Meanwhile, findings also show that the item on ‘players tried to learn new skills’ obtained the highest mean of 4.33 with a standard deviation of .845, interpreted as high. The lowest is that players are encouraged to outplay teammates, with a mean of 3.63 and 1.190 standard deviations interpreted as high.

**Academic achievement of student athletes**

Table 2 shows the overall mean of the academic achievement of student-athletes. It can be gleaned from the table that the academic achievement of student-athletes obtained an overall mean of 2.48, interpreted as fair, with a standard deviation of .637.

**Table 2.** Academic achievement of student athletes.

Range	Frequency	Percentage	Description
1.00 - 1.25	3	1.49	Excellence
1.26 – 1.50	7	3.48	Outstanding
1.51 – 2.00	36	17.91	Very good
2.01 – 2.50	63	31.34	Good
2.51 – 2.75	49	24.37	Fair
2.76 – 3.00	20	9.95	Pass
3.01 – 4.00	17	8.46	Conditional
4.01 – 5.00	6	2.98	Failure



### Relationship between motivational climate and academic achievement of student athletes

Revealed in Table 3 are the data indicating the significance of the relationships between motivational climate levels and student-athlete grades. As shown, the *p*-value of ego-involving climate and student-athletes' grades is

0.000 less than 0.01 level of significance with its *r*-value of 0.461.

Moreover, Table 3 presents data for the significant relationship between task-involving climate and student-athletes' grades. As presented, the *p*-value of 0.000 is less than the 0.05 significance level, and its *r*-value of 0.884 signifies a significant relationship.

**Table 3.** Relationship between level of motivational climate and student-athletes' grades.

Variables being paired	Pearson-r	<i>p</i> -value	Remarks
Ego-involving climate and grade	0.461**	.000	Significant
Task-involving climate and grade	0.884**	.000	Significant
Motivational climate and grade	0.822**	.000	Significant

Finally, Table 3 contains the significant relationship between the overall mean of motivational climate and student-athletes' grades or academic achievement. It can be gleaned that the *p*-value of 0.000 is less than the 0.01 level of significance, with an *R*-value of 0.822 indicating that a significant relationship exists.

## DISCUSSION

### Level of the motivational climate of the student athletes

As found in this study, the motivational climate of the student-athletes gained was interpreted as high. This means that the students perceived the motivational environment of their school as highly motivating. The said findings concurred with the study of Granero-Gallegos et al. (2018) when the proponent found that, in contexts where the motivational climate is high, students enjoyed practicing their sport more and put more effort into training. Other studies have shown the improved psychological well-being of players subjected to a mastery-oriented motivational climate compared to a more competitive training climate, which has been related to anxiety and reduced satisfaction with their sport (Balaguer et al., 1999; Balaguer et al., 2002; Pensgaard and Roberts, 2000; Duda, 2001; Vazou et al., 2006).

Moreover, the overall mean of ego-involving climate was also found as high, higher than the mean of the task-involving climate. This means that most respondents were more motivated in situations emphasizing interpersonal competition, normative feedback, public evaluation, and social comparison. Indicative in the results that the condition of motivational climate is highly motivating. In the study by Balaguer et al. (2002), it was observed that when handball players perceived an intensely task-oriented motivational climate, their performance and self-satisfaction with this performance improved, and their image of the coach was even better. In contrast, the perception of an ego-oriented motivational climate was negatively associated with ratings of their coach, yet in general, positively associated with satisfaction with their team's results.

On the other hand, the results on task-involving environment indicate that students are frequently motivated in an environment that encourages effort, learning, mastery of the task, and participation. This finding supports the study of Butler (2007), who found that students who prefer a task-orientation climate see success using effort as pleasurable and the goal of participating in a challenging task as an end. Furthermore, Ames (2012) found that in a climate where ego involvement prevails, the level of ability is construed

concerning the performances of others. That is, one must perform better than others on a particular task. Conclusively, the condition of motivational climate is very highly motivating. This finding concurs with Duda and Balaguer (2007) that athletes who endorse task goals are more resilient and confident because they do not primarily need to be better than others to feel good about themselves.

### **Academic achievement of student athletes**

It can be gleaned from the results that the academic achievement of student-athletes was interpreted as fair. This indicates that student-athletes perceived their academic performance as satisfactory. Significantly, Horton (2009) emphasized that athletes have long been perceived to be less prepared, less motivated, and less intelligent than the general student population. As such, according to some researchers, the time demands of athletics force athletes to sacrifice attention to academics thus play a negative role in academic achievement (Aries, McCarthy, Salovey, and Banaji, 2004).

### **Relationship between motivational climate and academic achievement of student athletes**

Remarkably, results found that there is a significant relationship that exists between ego involving climate and student-athletes' grades. This means that student-athletes are motivated when their psychological well-being as athletes is taken care of and given optimum importance, which thus affects their grades. Also, a significant relationship between task-involving climate and student-athletes' grades is present. This means that the kind of motivation students receive from the challenges set by their being athletes and the value they put in their chosen sports affect their academic endeavors. This is consistent with the study of Gritit (2014), which states that participation in athletics is highly beneficial to students' academic achievement. Moreover, they developed impressive time management skills, felt motivated to complete their degree, were motivated to attend classes, and experienced a smoother transition into the college lifestyle.

An earlier study of Biddle (1984) stressed that the disparaging attitudes and behaviors experienced by some student athletes affect their academic performance and sometimes their will to remain in school.

Finally, there is also significant relationship between the overall mean of motivational climate and student-athletes' grades or academic achievement. This finding supports the idea of Tudor (2014) and Grillo (2011), who found that motivational climate predicts academic success in student-athletes. On the other hand, Barkoukis et al. (2007) found that the dimensions of motivational climate predicted achievement goals differently depending on which orientation dimension student-athletes considered the strongest predictor. Having a balanced life in pursuing sports as well as performing well academically helps mold students in a way that is befitting of them. As stressed by Yanik (2018), the importance of joining teams for the sake of skill improvement was emphasized. Most importantly, a team needs balance which pulls and pushes them collectively. In other words, it is imperative that a well-balanced academic and athletic life for student-athletes should be promoted and maintained (Chen, Mason, Middleton, & Salazar, 2013). Simons and Rheenen (2014) noted that student-athletes must balance time between practicing their sport and studying for good academic results. Thus, they are sometimes challenged with the heavy obligations they face, making them more flexible committing to both over time.

Notably, the findings established the theoretical base of the study that motivational climate, ego, and task correspond to how athletes define success and judge their competence in particular sports or activities and that their desire to learn, a valuing of education, and confidence in their capacities and attributes result in high-quality learning and conceptual understanding, as well as enhanced personal growth and adjustment.

### **CONCLUSION**

With the findings of this study, it can be concluded that the level of

motivational climate is found to be high. This indicates that students enjoyed practicing their sport more and put more effort into training, where interpersonal competition, normative feedback, public evaluation, and social comparison are high.

As such, in order to sustain this high level of motivational climate, orchestrating sports competitions that promote sportsmanship and fair-play is recommended in order to allow the students to be holistically incentivized—they are acquainted with other students who play the same sports, as well as be rewarded and recognized by the school for their efforts. For team sports, this strengthens the teamwork and camaraderie the students initially possess, in which are reflected by their play. This affirms various studies that emphasized the importance of joining teams for the sake of skill improvement. Most importantly, a team needs balance which pulls and pushes them collectively.

However, while the motivational climate is found to be high, it has also been shown that the overall academic achievement of student-athletes is interpreted as fair. This implies that despite the fact that there is a high level of motivation provided to the athletes, they still perceived their academic performance as fair and satisfactory. This result can be attributed to the factor that athletes have extracurricular schedules and priorities at the top of their academic classes. As such, a well-balanced academic and athletic participation must be observed. In other words, it is imperative that a well-balanced academic and athletic life for student-athletes should be promoted and maintained. It is highly recommended that athletic administrators and coaches must deal with the problem of insufficient time spent on classwork and excessive time in practices and competitions and develop programs that promote a balanced academic and athletic participations among student-athletes. As can be noted, student-athletes must balance time between practicing their sport and studying for good academic results. Thus, they are sometimes challenged with the heavy obligations they face, making them more flexible committing to both over time. Oftentimes, they are

conflicted with schedules and must prioritize one over the other. This would then require continuous perseverance and effort, a difficult task to handle early on if not properly managed.

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