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Sports Stressors and Academic Performance of Student-Athletes in Selected Colleges of Education in Ghana

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ABSTRACT: *The purpose of this study was to investigate the effects of sports stressors and academic performance of student-athletes in selected colleges of education in Ghana. The study was guided by two (4) specific objectives: (a) To assess the influence of sporting stress on the academic performance of student-athletes in Colleges of Education in Ghana; (b) To compare the GPA of student-athletes in the year of competitive sports and the year of no competitive sports in the Colleges of Education in Ghana and (e) to recommend ways of managing stress to enhance student athlete's academic performance. The study adopted a cross-sectional survey design, in which both quantitative and qualitative data were collected. The study was conducted in Ghana. Simple random sampling was used to select student-athletes while purposive sampling was used to select tutors. The target population for this study was 12 tutors and 768 student-athletes in six (6) Ghana Colleges of Education. The total sample size for the study was 335 (12 tutors & 323 students-athletes). The instruments for data collection were a questionnaire, an interview guide and document analyses. Both, descriptive and inferential statistical analyses were done using Statistical Package for Social Sciences (SPSS version 20). Descriptive statistics summarized, organized and described the responses when addressing study objectives through the use of means, standard deviations, frequencies, and percentages. Inferential statistics such as ANOVA and Point biserial were used to test the formulated null hypotheses. All hypotheses were tested at $p<0.05$ alpha level of significance. The study found that competitive sports stressors have a statistically significant influence on the academic performance of student-athletes in colleges of education in Ghana. The study also revealed that competitive sports stress has a statistically significant influence on the academic performance of student-athletes, especially the females, in colleges of education in Ghana. This study therefore, recommends that female student-athletes be given scholarships to motivate and enhance other female students' participation in competitive sports. The study also recommends that colleges of Education in Ghana introduce stress management strategies to address stressors' link to academic performance of student-athlete.*

KEYWORDS: sports stressors, academic performance, student-athletes, colleges of education, Ghana

INTRODUCTION

The effects of psychological stress on an athlete's performance (at all ages and levels of competition) have been widely researched and discussed in scientific literature (Hamlin et al., 2019). While physical

stressors can play a significant role in how well an athlete is able to compete, psychological stressors can also significantly impact on an athlete's ability to perform. Some of the main stressors, both physical and psychological, for athletes include their performance and the outcomes of competitions (Nicholls et al., 2016).

Similarly, Hamlin et al. (2019) stated that "young athletes experience the highest stress when they perform poorly, make mistakes, and when they perceive pressure from parents, coaches, and teammates" his stress can have a negative effect on an athlete's physical state, increasing the risk of injury, the development of acute illness, and overtraining or burnout (Hamlin et al., 2019). In addition to the adverse physical effects of stress on an athlete, stress can also create an unhealthy mental state for athletes, increasing the risk for the development of anxiety or depression-related illnesses (Lopes Dos Santos et al., 2020).

A coach's behavior and interactions with athletes can also be an added stressor for an athlete (Nicholls et al., 2016). While those who compete in athletics are subjected to a significant number of stressors, for student-athletes, the number of stressors is greatly increased. According to Hamlin et al. (2019), "Athletes who are also involved in university study are very prone to study-related stressors such as coursework demands, study/life balance, and financial strain.

In addition to the stress of practices and competitions (i.e., physical fatigue), students face additional unique stressors such as practice and competitions scheduling conflicts, new coaching and training environments, student-sport identity issues, and negative perceptions from faculty and peers (Parker et al., 2018). The number of individuals who face stress as collegiate student-athletes is larger than one might think. According to the NCAA, approximately five to six percent of the eight million high school scholar-athletes will play collegiate sports. While this percentage may appear small, it characterizes approximately 400,000 to 500,000 young adults who play college sports (Cross & Fouke, 2019). For many Americans, the mental toll on our student-athletes is a significant concern. According to surveys conducted, "three in four Americans worry that the big business of collegiate athletics clashes with educational values, negatively affecting the athletes" (Lipka, 2006).

This "business model" of college athletics—in which student-athletes are recruited and paid to compete to afford higher education—is not a minor concern. Many student-athletes have reported feeling pressured to prioritize sports over academics. In many ways, "the current higher education system still largely perceives academics and athletics as polarized, unequal, and separate entities" (Cross & Fouke, 2019).

Many student-athletes have felt pressured to choose athletics over academic performance, even regarding their choice of a major. Factors that influence choice of major for many collegiate athletes include class workload, daily homework, team practice times, and competitions schedules, travelling for athletics, social life, and family (Cross & Fouke, 2019). As student-athletes struggle to juggle the various responsibilities that come with being both a student and an athlete, they report that academic requirements are the most significant source of their stress.

However, this is often due not to the academic stress itself, but to the time management that is required to balance academics and athletics (Lopes Dos Santos et al., 2020). Due to the stressors that many student-athletes face, a large number turn to various coping mechanisms to manage their stress. Coping mechanisms are defined as behaviors intended to manage stress (Moeller et al., 2020). For some athletes, diet is a way to cope with stress. The competitive environment of athletics leads to the development of eating disorders for many athletes, males and females alike (Defeciani, 2015). The transition from high school to college for athletes places an added pressure and expectation to excel in their respective sports, leading to a higher rate of eating disorders among athletes than the general population (Deficiani, 2015). Coinciding with an increase in eating disorders is an increase in number of athletes who experience mood disorders compared to non-athletes (Shannon et al., 2019).

Even though athletes are more susceptible to mood disorders compared to their non athlete counterparts, "stigma may be higher among athletes compared to non-athlete peers. Stigma, coupled with a culture that emphasizes toughness and the minimization of perceived weakness may contribute, in part, to under-recognition of mental illness in the athletic population" (Uphill et al., 2016). An added consequence to the stress load faced by student-athletes is a reduction in the amount of sleep each student-athlete receives each night. According to Taylor et al., (2016), "Empirical evidence demonstrates that reduced sleep negatively influences athletic/academic performance and various indices of morbidity" (p. 2). This decreased performance in both athletics and academics can have a snowball effect on the psychological stress that many athletes face, as a decrease in athletic and academic performance can further compound the effects of stress.

In athletes and non-athletes alike, "high levels of stress cause different alteration in students, such as deficits in attention and concentration, difficulty memorizing and solving problems, low productivity and poor academic performance" (Gallego et al., 2014). To mitigate the effects of this stress, a variety of techniques and treatments have been researched and proposed in the literature. One such technique is that of mindfulness. For many athletes, mindfulness has been shown to be an effective technique for minimizing the effects of stress as it has been shown to decrease cortisol levels.

The findings of Moeller et al. (2020) "suggest that students who report higher levels of mindfulness appear to be better adjusted across several domains of functioning. As such, efforts to foster mindfulness in college students may support well- being and protect emerging adults from the potentially harmful effects of stress" (p. 7). Similar research has demonstrated that MBST is an effective method of reducing stress in students and student-athletes by incorporating elements of students' lives. According to Voss et al. (2020), MBST has been shown to have a measurable and positive impact on students' health regarding physiological data (i.e., HRV & BP). One reason that mindfulness interventions are successful in mitigating stress is the fact that engaging with mindfulness helps athletes foster perceptions of competence in mental health self-management, which is beneficial in stress regulation and well-being (Shannon et al., 2019).

In a similar manner of coping with stress, student-athletes must appraise what their level of control is over their circumstances and sort their level of control into three categories: that which is controllable-by-self, controllable-by-others, and uncontrollable-by-anyone (Nicholls et al., 2016). A related vein of thought, attribution-theory, posits that motivation may be an effective way to ensure success for

student- athletes by encouraging them to take responsibility for the stress-inducing factors that they can control (Parker et al., 2018).

By helping students shift attributions in both academics and athletics, high-stress student-athletes are more likely to feel in control when confronted with stressful circumstances, which also motivates them to perform better (Parker et al., 2018). Coaches and professors alike must aid student-athletes in recognizing ways in which they can manage the stress in their lives. For example, viewpoints must be instilled in athletes such as that all athletes are scholars, athletes should pursue academics above athletes, athletics are only one facet of an athlete's identity, and athletes must see themselves as active participants in the academic process (Cross & Fouke, 2019).

In this way, athletes can gain a broader perspective in their role as both a student and an athlete, as they will be able to understand aspects of their roles that they are able to control. Similarly, coaches must interact with athletes in a way that athletes perceive as being positive or supportive (Nicholls et al., 2016). Because the athlete/coach relationship is so important to student-athletes and can have such an important impact on their stress levels and mental health, coaches must be aware of how their interactions with athletes can both positivity and negatively affect their self-image and psychological stress levels. Ultimately, professors and coaches alike must come alongside student-athletes to help them recognize their potential as they balance the stresses of both academics and athletics.

There has been an increase in collegiate graduation rates for student-athletes. Approximately 86% of student-athletes graduated in 2015 with a total of 16,565 more student-athletes graduating from 2001 to 2015. Even with the increase in graduation rates (Gaston-Gayles, 2004), student-athletes continue to have difficulty excelling academically throughout their college career. Studies indicate that on average student-athletes report lower grades, lower overall grade point averages, lower SAT (scholastic aptitude test) scores, and spent less time completing school work than their non-athlete peers.

It has been reported that student-athletes, on athletic scholarships, receive on the average 0.13 points lower than walk-on athletes and 0.20 points lower than non-athletes on graded assignments. This decrease in performance may be due to academic stressors. Academic stressors are not new to the athletic-academic world. As stressors continue to increase and academic performance continues to decrease, the NCAA is persistent in pursuing measures to improve academic performance. The NCAA continues to adjust the student-athletes initial eligibility standards. The standards are to increase the likelihood of graduation. Currently the initial standards are based on a sliding scale that combines the GPA of sixteen 4 approved core courses with the SAT or ACT score.

In order to participate and receive an athletic scholarship, the student must minimally meet the sliding scale criteria that starts at a GPA of 2.3 on the approved core courses with a 900 SAT or 75 ACT. This was done in an effort to reduce academic stress and increase collegiate preparation for the first-year athletic participation of student-athletes (National Collegiate Athletic Association.

The NCAA has also created the Academic Progress Rate (APR). The APR makes student-athletes and college administration accountable for academic performance through a team-based metric that

accounts for student-athlete eligibility and retention during each academic term (National Collegiate Athletic Association. The APR rewards superior academic performance and penalizes teams that do not reach certain academic requirements. For example, an athletic team that has shown superior academic performance may be rewarded into a bowl game if their athletic record is equal to that of another team, whose APR is not as good.

Rewards and penalties are imposed by the Division I Committee on Academic Performance. With continued efforts to support student-athletes, the NCAA created the Challenging Athletic Minds for Personal Success, CHAMPS/Life Skills Program. CHAMPS consists of three programs: academic commitment, athletic commitment, and commitment to personal development. The program was created to increase success for all student-athletes. CHAMPS helps student-athletes with necessary skills needed to excel in college, commit to their academics, and create life skills for after college 5 (Davoren & Hwang, 2014).

While studying the lives of athletes and the functions of athletics, considerable research has been devoted to examining academic success in student-athletes and life stress of college students, but few studies have examined the causes or associations of academic stress in student-athletes. The purpose of this study was to determine how the following variables relate to academic stress and perceived stress either through correlations or differences demographics, academic classification, major or field of study, athletic scholarship status, and season of sport (in-season/out of season).

To assess this relationship, an online questionnaire, including two perceived stress scales, was collected at the beginning of the spring academic semester. This study will provide athletic administrators a point of reference related to academic stress which should allow the administrators an opportunity to better serve their student-athletes. Research has shown a correlation between the decrease of academic stressors and the increase in academic success and a reduction of college student life stress (Gaston-Gayles, 2004). By recognizing these academic stressors, interventions may be created to decrease academic stress levels and eliminate the imbalance between athletics and academics. This thesis paper examines academic stress in collegiate student-athletes.

The influence of stress on student athletes are manifold. Incidentally, stress can bring about effects that are physiological, behavioral and even psychological in nature (Mwakoghu, 2011). Physiological effects involve the interplay of certain hormones that cause a certain response in the body of the affected person leading to effects such as increase in the rate at which the heart beats and subsequently resulting in more sweating. At the same time, stress is believed to be able to affect the body's immune system leading to frequent colds and flues.

On the other hand, behavioral effects of stress can result in one being moody, quiet or jumpy, excitable, or even irritable (Chebbet, 2012) and so it has been noted that this may lead to drinking or smoking and even too much use of internet and television. Psychologically, stress may decrease a student's interest and ability to work or interact effectively with other people and to make good decisions. This may cause anxiety and depression. Empirical evidence exists to show that stress often causes mental health (Thawabie & Qaisy 2012).

Fundamentally, collegiate athletes have two major roles they must balance as part of their commitment to a university: being a college student and an athlete. Academic performance is a significant source of stress for most college students. This stress may be further compounded among collegiate athletes based on their need to be successful in the classroom, while simultaneously excelling in their respective sport (Hamlin et al., 2019).

Interestingly, it was not academic rigor that was viewed by the athletes as the largest source of direct stress; rather, the athletes surveyed reported time management as being their biggest challenge related to academic performance. This further corroborates the findings of Hamlin et al. (2019). The investigators reported that during periods of the academic year in which levels of perceived academic stress were at their highest, students had trouble managing sport practices and studying.

These stressors were also associated with a decrease in energy levels and overall sleep quality. These factors may significantly increase the collegiate athlete's susceptibility to illness and injury (Hamlin et al., 2019). For this reason, coaches should be aware of and sensitive to the stressor's athletes experience as part of the cyclical nature of the academic year and attempt to help athletes find solutions to balancing athletic and academic demands. Collegiate athletes tend to be more committed to sports development and may view their academic career as a contingency plan to their athletic career, rather than a source of personal development. As a result, collegiate athletes often, but certainly not always, prioritize athletic participation over their academic responsibilities (Miller & Kerr, 2002; Cosh & Tully, 2014, 2015).

Nonetheless, scholarships are usually predicated on both athletic and academic performance. For instance, the National Collegiate Athletic Association (NCAA) requires collegiate athletes to achieve and maintain a certain grade point average (GPA). Furthermore, they are also often required to also uphold a certain GPA to maintain an athletic scholarship. The pressure to maintain both high levels of academic and athletic performance may increase the likelihood of triggering mental health issues (i.e., anxiety and depression) (Li et al., 2017; Moreland et al., 2018).

Mental health issues are a significant concern among college students. There has been an increased emphasis placed on the mental health of collegiate athletes in recent years. Based on the 2019 National College Health Assessment survey from the American College Health Association (ACHA) consisting of 67,972 participants, 27.8% of college students reported anxiety, and 20.2% reported experiencing depression which negatively affected their academic performance (American College Health Association American College Health Association-National College Health Assessment II, 2019).

Approximately 65.7% (50.7% males and 71.8% females) reported feeling overwhelming anxiety in the past 12 months, and 45.1% (37.1% males and 47.6% females) reported feeling so depressed that it was difficult for them to function. However, only 24.3% (13% males and 28.4% females) reported being diagnosed and treated by a professional in the past 12 months. Collegiate athletes are not immune to these types of issues. According to information presented by the NCAA, many certified athletic trainers anecdotally state that anxiety is an issue affecting the collegiate-athlete population. However, despite the fact that collegiate athletes are exposed to numerous stressors, they are less likely to seek

help at a university counseling center than non-athletes, which could be related to stigmas that surround mental health services.

This not only has significant implications related to their psychological well-being, but also their physiological health, and consequently their performance. In their study, athletes reporting high tension/anxiety had a higher rate of injury. It has been suggested that the occurrence of stress and anxiety may cause physiological responses, such as an increase in muscle tension, physical fatigue, and a decrease in neurocognitive and perception processes that can lead to physical injuries. For this reason, it is reasonable to consider that academic stressors may potentiate effects of stress and result in injury and illness in collegiate athletes. Periods of more intense academic stress increase the susceptibility to illness or injury (Mann et al., 2016; Hamlin et al., 2019). For example, Hamlin et al. (2019) investigated levels of perceived stress, training loads, injury, and illness incidence in 182 collegiate athletes for the period of one academic year. The highest levels of stress and incidence of illness arise during the examination weeks occurring within the competitive season.

In addition, the authors also reported the odds ratio, which is the occurrence of the outcome of interest (i.e., injury), based off the given exposure to the variables of interest (i.e., perceived mood, sleep duration, increased academic stress, and energy levels). Based on a logistic regression, they found that each of the four variables (i.e., mood, energy, sleep duration, and academic stress) was related to the collegiate athletes' likelihood to incur injuries.

In summary, decreased levels of perceived mood (odds ratio of 0.89, 0.85–0.0.94 CI) and sleep duration (odds ratio of 0.94, 0.91–0.97 CI), and increased academic stress (odds ratio of 0.91, 0.88–0.94 CI) and energy levels (odds ratio of 1.07, 1.01–1.14 CI), were able to predict injury in these athletes. This corroborates Mann et al. (2016) who found NCAA Division I football athletes at a Bowl Championship Subdivision university were more likely to become ill or injured during an academically stressful period (i.e., midterm exams or other common test weeks) than during a non-testing week (odds ratio of 1.78 for high academic stress).

The athletes were also less likely to get injured during training camp (odds ratio of 3.65 for training camp). Freshmen collegiate athletes may be especially more susceptible to mental health issues than older students. Their transition includes not only the academic environment with its requirements and expectations, but also the adaptation to working with a new coach and teammates. While some stressors are recurrent and inherent in academic life (e.g., attending classes, homework, etc.), others are more situational (e.g., exams, midterms, projects) and may be anticipated by the strength and conditioning coach.

The domain of athletics can expose collegiate athletes to additional stressors that are specific to their cohort (e.g., sport-specific, team vs. individual sport). Time spent training (e.g., physical conditioning and sports practice), competition schedules (e.g., travel time, missing class), dealing with injuries (e.g., physical therapy/rehabilitation, etc.), sport-specific social support (e.g., teammates, coaches) and playing status (e.g., starting, a non-starter, being benched, etc.) are just a few of the additional challenges collegiate athletes must confront relative to their dual role of being a student and an athlete.

Collegiate athletes who view the demands of stressors from academics and sports as a positive challenge (i.e., an individual's self-confidence or belief in oneself to accomplish the task outweighs any anxiety or emotional worry that is felt) may potentially increase learning capacity and competency. However, when these demands are perceived as exceeding the athlete's capacity, this stress can be detrimental to the student's mental and physical health as well as to sport performance. As previously stated, time management has been shown to be a challenge to collegiate athletes. The NCAA rules state that collegiate athletes may only engage in required athletic activities for 4 hour per day and 20 hour per week during in-season and 8 hours per week during off-season throughout the academic year. Although these rules have been clearly outlined, the most recent NCAA GOALS study reported alarming numbers regarding time commitment to athletic-related activities. Data from over 21,000 collegiate athletes from 600 schools across Divisions I, II, and III were included in this study.

Although a breakdown of time commitments was not provided, collegiate athletes reported dedicating up to 34 hours per week to athletics (e.g., practices, weight training, meetings with coaches, tactical training, competitions, etc.), in addition to spending between 38.5 and 40 hour per week working on academic-related tasks. This report also showed a notable trend related to athletes spending an increase of 2 more athletics-related hours per week compared to the 2010 GOALS study, along with a decrease of 2 hour of personal time (from 19.5 hour per week in 2010 to 17.1 in 2015).

Furthermore, 66% of Division I and II and 50% of Division III athletes reported spending as much or more time in their practices during the off-season as during the competitive season. These numbers show how important it is for collegiate athletes to develop time management skills to be successful in both academics and athletics. Overall, most collegiate athletes have expressed a need to find time to enjoy their college experience outside of athletic obligations. Despite that, because of the increasing demand for excellence in academics and athletics, collegiate athletes' free time with family and friends is often scarce. Consequently, trainers, coaches, and teammates will likely be the primary source of their weekly social interactivity. Social interactions within their sport have also been found to relate to factors that may impact an athlete's perceived stress. Interactions with coaches and trainers can be effective or deleterious to an athlete. Effective coaching includes a coaching style that allows for a boost of the athlete's motivation, self-esteem, and efficacy in addition to mitigating the effects of anxiety.

On the other hand, poor coaching (i.e., the opposite of effective coaching) can have detrimental psychological effects on an athlete (Gearity & Murray, 2011). In a closer examination of the concept of poor coaching practices, Gearity and Murray (2011) interviewed athletes about their experiences of receiving poor coaching. Following analysis of the interviews, the authors identified the main themes of the "coach being uncaring and unfair," "practicing poor teaching inhibiting athlete's mental skills," and "athlete coping." They stated that inhibition of an athlete's mental skills and coping are associated with the psychological well-being of an athlete. Also, poor coaching may result in mental skills inhibition, distraction, insecurity, and ultimately team division (Gearity & Murray, 2011). This combination of factors may compound the negative impacts of stress in athletes and might be especially important for in injured athletes. Injured athletes have previously been reported to have elevated stress as a result of heightened worry about returning to pre-competition status, isolation from teammates if the injury is over a long period of time and/or reduced mood or depressive symptoms. In

addition, athletes who experience prolonged negative thoughts may be more likely to have decreased rehabilitation attendance or adherence, worse functional outcomes from rehabilitation (e.g., on measures of proprioception, muscular endurance, and agility), and worse post-injury performance.
Sports involvement is one of the ways in which one can take part in an organized physical activity and one which is increasingly becoming popular. At the moment, about 46,000 students at college level are known to be athletes and the number keeps rising (COESA, 2018). According to Maniam (2014) among the reasons for taking part in sports include entertainment, health reasons, social reasons as well as an opportunity for personal development. This research intends finding consistent positive associations between sports participation and academic performance, which will indicate the establishment of a positive relationship between sports and academic performance.

Coaches must be proactive in the selection of athletes so as to comply with academic standards and success. The most academically successful student athletes are both intrinsically and extrinsically motivated. Such students receive the support of lecturers, coaches and family members. Students who get support from the college and lecturers are more committed to their own success (Horton, 2009). Similarly, studies such as Fox et al. (2010) have established some correlation between sporting and academic achievement as those participating in athletics appeared to outperform the others not necessarily involved in athletics in terms of academic performance. For instance, one study, the students attending college attendance was 97% higher than those others who were not involved in sports with other studies indicating a positive influence in terms of engagement with schoolwork though not actual academic performance (Knifsend & Graham, 2012).

The effects that psychological stress have on an athlete's performance (at all ages and levels of competition) has been widely researched and discussed in scientific literature (Hamlin et al., 2019; Lipka, 2006). While physical stressors can play a significant role in how well an athlete is able to compete, psychological stressors also can significantly impact an athlete's ability to perform. Some of the main stressors, both physical and psychological, for athletes include their performance and the outcomes of competitions (Nicholls et al., 2016). Hamlin et al. (2019) similarly stated that "young athletes experience the highest stress when they perform poorly, make mistakes, and when they perceive pressure from parents, coaches, and teammates. This stress can have a negative effect on an athlete's physical state, increasing the risk of injury, the development of acute illness, and overtraining or burnout (Hamlin et al., 2019). In addition to the adverse physical effects of stress on an athlete, stress can also create an unhealthy mental state for athletes, increasing the risk for the development of anxiety or depression-related illnesses (Lopes Dos Santos et al., 2020).

Finally, a coach's behavior and interactions with athletes can also be an added stressor for an athlete (Nicholls et al., 2016). While those who compete in athletics are subjected to a significant number of stressors, for student-athletes, the number of stressors is greatly increased. According to Hamlin et al. (2019), "Athletes who are also involved in university study are very prone to study-related stressors such as coursework demands, study/life balance, and financial strain" (p. 2). In addition to the stress of practices and competitions (i.e., physical fatigue), students face additional unique stressors such as practice and competitions scheduling conflicts, new coaching and training environments, student-sport identity issues, and negative perceptions from faculty and peers (Parker et al., 2018). The number of individuals who face stress as collegiate student-athletes is larger than one might think. According to

the NCAA, approximately five to six percent of the eight million high school scholar-athletes will play collegiate sports.

While this percentage may appear small, it characterizes approximately 400,000 to 500,000 young adults who play college sports (Cross & Fouke, 2019). For many Americans, the mental toll on our student-athletes is a significant concern. According to surveys conducted, "three in four Americans worry that the big business of collegiate athletics clashes with educational values, negatively affecting the athletes" (Lipka, 2006). This "business model" of college athletics-in which student-athletes are recruited and paid to compete to afford higher education-is not a minor concern. Many student-athletes have reported feeling pressured to prioritize sports over academics. In many ways, "the current higher education system still largely perceives academics and athletics as polarized, unequal, and separate entities" (Cross & Fouke, 2019). Many student-athletes have felt pressured to choose athletics over academic performance, even regarding their choice of a major.

Factors that influence choice of major for many collegiate athletes include class workload, daily homework, team practice times, and competitions schedules, travelling for athletics, social life, and family (Cross & Fouke, 2019). As student-athletes struggle to juggle the various responsibilities that come with being both a student and an athlete, they report that academic requirements are the most significant source of their stress. However, this is often due not to the academic stress itself, but to the time management that is required to balance academics and athletics (Lopes Dos Santos et al., 2020). Due to the stressors that many student-athletes face, a large number turn to various coping mechanisms to manage their stress. Coping mechanisms are defined as behaviors intended to manage stress (Moeller et al., 2020). For some athletes, diet is a way to cope with stress. The competitive environment of athletics leads to the development of eating disorders for many athletes, males and females alike (Defeciani, 2015). The transition from high school to college for athletes places an added pressure and expectation to excel in their respective sports, leading to a higher rate of eating disorders among athletes than the general population (Deficiani, 2015).

Coinciding with an increase in eating disorders is an increase in number of athletes who experience mood disorders compared to non-athletes (Shannon et al., 2019). Even though athletes are more susceptible to mood disorders compared to their non-athlete counterparts, "stigma may be higher among athletes compared to non-athlete peers. Stigma, coupled with a culture that emphasizes toughness and the minimization of perceived weakness may contribute, in part, to under-recognition of mental illness in the athletic population" (Uphill et al., 2016). An added consequence to the stress load faced by student-athletes is a reduction in the amount of sleep each student-athlete receives each night. According to Taylor et al., (2016), "Empirical evidence demonstrates that reduced sleep negatively influences athletic/academic performance and various indices of morbidity" (p. 2). This decreased performance in both athletics and academics can have a snowball effect on the psychological stress that many athletes face, as a decrease in athletic and academic performance can further compound the effects of stress. In athletes and non-athletes alike, "high levels of stress cause different alteration in students, such as deficits in attention and concentration, difficulty memorizing and solving problems, low productivity and poor academic performance" (Gallego et al., 2014).

To mitigate the effects of this stress, a variety of techniques and treatments have been researched and proposed in the literature. One such technique is that of mindfulness. For many athletes, mindfulness has been shown to be an effective technique for minimizing the effects of stress as it has been shown to decrease cortisol levels. The findings of Moeller et al. (2020) "suggest that students who report higher levels of mindfulness appear to be better adjusted across several domains of functioning. As such, efforts to foster mindfulness in college students may support well- being and protect emerging adults from the potentially harmful effects of stress. Similar research has demonstrated that MBST is an effective method of reducing stress in students and student-athletes by incorporating elements of students' lives. According to Voss et al. (2020), MBST has been shown to have a measurable and positive impact on students' health regarding physiological data (i.e., HRV & BP).

One reason that mindfulness interventions are successful in mitigating stress is the fact that engaging with mindfulness helps athlete's foster perceptions of competence in mental health self-management, which is beneficial in stress regulation and well-being (Shannon et al., 2019). In a similar manner of coping with stress, student-athletes must appraise what their level of control is over their circumstances and sort their level of control into three categories: that which is controllable-by-self, controllable-by others, and uncontrollable-by-anyone (Nicholls et al. 2016). A related vein of thought, attribution-theory, posits that motivation may be an effective way to ensure success for student-athletes by encouraging them to take responsibility for the stress-inducing factors that they can control (Parker et al., 2018). By helping students shift attributions in both academics and athletics, high-stress student-athletes are more likely to feel in control when confronted with stressful circumstances, which also motivates them to perform better (Parker et al., 2018).

Coaches and professors alike must aid student-athletes in recognizing ways in which they can manage the stress in their lives. For example, viewpoints must be instilled in athletes such as that all athletes are scholars, athletes should pursue academics above athletes, athletics are only one facet of an athlete's identity, and athletes must see themselves as active participants in the academic process (Cross & Fouke, 2019). In this way, athletes can gain a broader perspective in their role as both a student and an athlete, as they will be able to understand aspects of their roles that they are able to control.

Similarly, coaches must interact with athletes in a way that athletes perceive as being positive or supportive (Nicholls et al., 2016). Because the athlete/coach relationship is so important to student-athletes and can have such an important impact on their stress levels and mental health, coaches must be aware of how their interactions with athletes can both positivity and negatively affect their self-image and psychological stress levels. Ultimately, professors and coaches alike must come alongside student-athletes to help them recognize their potential as they balance the stresses of both academics and athletics.

Statement of the Problem

Ideally, student-athletes should be able to take part in sports competitions as well as academic activities without much challenge. There have been studies concerning the role of stress on students in tertiary institutions. The role of stress emanating from participation in sports on academic performance has

become a common topic of discussion among Ghanaian Colleges of Education of student-athletes in Ghana Colleges of Education. There have been contentions that the stress student-athletes encounter before, during and after competing in inter-hall, inter-collegiate and inter-zone colleges of education games and sports festival is a major cause of poor academic performance among trainee teachers.

The Colleges of Education Sports Association (COESA) in its 2018 biannual report affirmed receiving parents' complaints that participation in sports competitions remained the student-athlete' biggest stressor. The most common questions seldom addressed in literature are: (i) To what extent does stress from sports participation influence academic performance among student-athletes? (ii). Do student-athletes' academic performances reveal a gender bias in the coping strategies of sports-related stress? These are the two most relevant in the study.

There are multiple factors which influence stress among student-athletes (Khan et al, 2013). However, the influence of the stress emanating from sports participation on the academic performance of student-athletes in Ghanaian Colleges of Education has remained relatively unexplored. Thus, exposing a huge information-gap in knowledge. This study sought to bridge this gap. Stress can influence academic performance either negatively or positively, hence the need for this study to reveal the scope of the influence; and to determine the best strategies to manage negative influences and maintain positive influences among student-athletes in the Colleges of Education in Ghana

Objectives of the Study

The study was guided by the following specific objectives:

i. To assess the influence of sporting stress on the academic performance of student-athletes in Colleges of Education in Ghana.
ii. To compare the GPA of student-athletes in the year of competitive sports and the year of no competitive sports in the Colleges of Education in Ghana.

Hypotheses

The study tested the following null hypotheses:

i. $H_0$3. Competitive sports stress has no statistically significant influence on the academic performance of student-athletes in colleges of education in Ghana.

Research Design

According to Saunders et al. (2012), a research design is a general map of how the researcher intends to go about answering the study questions. Saunders et. al. (2012), state that a research design is a general map of how the researcher intends to go about answering the study questions. It is the edifice of the research design which really outlines exactly what the researcher seeks to find from the study and how he or she will carry out the study (Muzenda, 2014).

This study employed the cross-sectional survey design to collect both quantitative and qualitative data from student-athletes and tutors. The cross-sectional survey design was used because it allows a large amount of data to be collected within a short time (Rose et al., 2015). According to Zangirolami-Raimundo et. al. (2018). The aim of cross-sectional studies is to obtain reliable data that make it possible to generate, robust conclusions, and create new hypotheses that can be investigated with new research.

Cross-sectional studies measure simultaneously the exposure and health outcome in a given population and in a given geographical area at a certain time (Hemed,2015). Zheng (2015) states that a cross-sectional survey is a type of research design in which the researcher collects data on only a small portion of the population to obtain large information about the sampled elements of the population as a whole.

Both quantitative and qualitative data were collected in this study. The quantitative data collected was positive in reporting the demographic data of the respondents and it also offered the researcher an opportunity to test the null hypotheses formulated in order to ascertain the relationship between the independent variables and dependent variables. The qualitative data, on the other hand, enabled the researcher to collect in-depth knowledge about the problem under investigation. The purpose of collecting both quantitative and qualitative data simultaneously is to sustain the strength and improve the limitations of the two designs (Creswell, 2014).

Target Population of the Study

The population of interest for the study is comprised of the individuals, dyads, groups, organizations, or other entities one seeks to understand and to whom or to which the study results may be generalized or transferred and is the principal group about which the research is concerned. Populations create boundaries for the scope of a study and provide environmental and context cues for the reader. Such boundaries place natural delimitations upon the research to afford the study the proper focus so as not to present a one-size-fits-all set of results (Salkind, 2010).

The definition of boundaries also allows the researcher to clearly identify subpopulations, such as the target population, sampling frame, and sample, and to ensure alignment between these groups within the research (Salkind, 2010). A target population is an entire group about which some information is required to be ascertained. The target population refers to all the elements that will meet the particular conditions outlined for a research study (Alvi, 2016).

The target population can also be referred to as a group of persons with distinctive features the researcher wants to study and collect data from (Arthur-Nyarko, 2017). This study targeted 12 tutors and 768 student-athletes in six (6) Ghana Colleges of Education. Table1 indicates the target population for the study.

Table 1: Target Population

Participants	Population
Student-athletes	768
Tutors	12
Total	**780**

Sampling Techniques

The sample size in research is motivated by the level of accuracy attached to the research results, the target population, and whether the population differs greatly in terms of its features. Considering the determinants stated by the author, the study used simple random and purposive sampling techniques in sample selection.

Simple random sampling was used to randomly select student-athletes in the colleges targeted. Simple random sampling was used because the researcher cannot collect data from all the students in the 36 colleges of education in the three zones (Alvi, 2016). Simple random sampling is a technique of sampling in which each individual in a target population has an equal probability of inclusion in the sample (Taherdoost, 2016).

There are many tutors in the Colleges of Education teaching various courses. Purposive sampling was, therefore, used to select only Physical Education tutors to provide necessary information for the study because they were the best people that may know the influence of sports stress on the academic performance of student-athletes. Burke and Christensen (2014) state that purposive sampling is a non-probability form of sampling.

Purposive sampling is sometimes called judgmental sampling. In purposive sampling, the researchers indicate the features of a population of interest. According to Etikan, et.al. (2016), purposive sampling comprises recognition and selection of participants or groups of participants that are expert and up-to-date with a phenomenon of interest.

Sample Size

A sample is a collection of individuals from a population one is interested to study (Malone & Coyne, 2016). To arrive at sample size for this study the Yamane formula (as cited in Israel, 1992) at a 95% confidence level and e= 0.05, to take care of sample error and degree of variability was used. The said formula is thus presented:

$$n = \frac{N}{1 + N(e)^2}$$

Where *n* is the sample size, N is the population size, and *e* is the level of precision/sampling error. Using the formula above, with a student-athlete population of 768, the study will arrive at 263 as a sample size for students. The sample size will, however, be adjusted by 23% to make up for instances of nonresponse by some members of the chosen sample (Israel, 1992). Therefore, the sample size for the study will be 323 students. Table 2 shows the sample grid of the sample size.

Table 2: Sample Grid

Participants	**Sample Size**
Student-athletes	323
Tutors	12
Total	**335**

Research Instruments

According to Anum (2017), research instruments are the instruments or tools that aid a researcher to collect data. Research instruments are what a researcher uses for collecting information (data) to answer research questions and these include questionnaires, interview guides, and document analysis (Kok Eng, 2013). The study employed a questionnaire, interview guide, and document analysis.

A questionnaire is simply a list of mimeographed or printed questions that is completed by or for a respondent to give his opinion'. A questionnaire enables quantitative data to be collected in a standardized way so that the data are internally consistent and coherent for analysis (Roopa & Rani 2012). Mugenda and Mugenda (2012) observed that questionnaire is administered to a population to ascertain information needed for research.

In this study, a questionnaire was used to collect data from student-athletes. The questionnaire. The interview was used to accrue data from Ghana Colleges of Education tutors. According to Rowley (2012), an interview is a face-to-face oral interaction in which an individual, the interviewer, tries to obtain data from and gain comprehension of another individual, the interviewee.

Interviews are a method of data collection that involves two or more people exchanging information through a series of questions and answers. It is essentially the oral, in-person administration of a questionnaire to each member of the sample. In this process, the interviewer can observe certain aspects of a person's behavior, such as his manner of speaking, poise, tendency, etc. (Sahoo, 2021). The questions may be pre-decided. Invariably it is seen that for data collection, the interview method includes only open-ended questions. The questions are designed by a researcher to elicit information from interview participants on a specific topic or set of topics (Sahoo, 2022).

Documents analysis will be used to analyse student athletes' academic performance in semesters where there are sports and games competitions and semesters during which there are no sports and games. Student-athletes end of semester results will be analysed. Document analysis is a research method for rigorously and systematically analysing the contents of written documents. The approach is used in

political science research to facilitate impartial and consistent analysis of written policies (Wach, 2013).

According to (2009), document analysis is a systematic procedure for reviewing or evaluating documents, thus both printed and electronic (computer-based and Internet-transmitted) material. Document analysis requires that data be examined and interpreted in order to elicit meaning, gain understanding, and develop empirical knowledge (Bowen,2009). Documents that may be used for systematic evaluation as part of a study take a variety of forms.

They include advertisements; agendas, attendance registers, and minutes of meetings; manuals; background papers; books and brochures; diaries and journals; event programs (i.e., printed outlines); letters and memoranda; maps and charts; newspapers (clippings/articles); press releases; program proposals, application forms, and summaries; radio and television program scripts; organisational or institutional reports; survey data; and various public records. Scrapbooks and photo albums can also furnish documentary material for research purposes.

Data Collection Procedures

Questionnaires will be distributed to student-athletes with the help of the research assistants that will be trained in the colleges of education targeted. The decision to use research assistants is to ensure that data collection is done in a short period of time. The researcher will conduct in-depth interviews with tutors in their various colleges. Before undertaking the interview, the researcher will make a visit to the informants so as to:

i. Seek informed consent to have an interview with them.
ii. Explain the aim of the research to the informants
iii. Seek for an appointment date and time appropriate for the interview.

Permission will be sought from the interviewees to record the conversation during the time of the interview. If they decline, efforts will be made to detail immediately after each interview, responses obtained.

Data Collection Techniques

The instruments used for data collection were a questionnaire, interview guide and document analysis. First of all, for the researcher to meet the logistical concerns of the study and to make sure that ethical issues were addressed, the researcher started the data collection procedure by collecting proposal approval letter from the Dean of Graduate School, Kenyatta University, after the Board of Graduate School approval of the proposal. The researcher then wrote a permission letter and attached a copy of Kenyatta University Graduate School research approval letter to the Principals of Colleges of Education in Ghana in order to obtain a research permit.

The researcher obtained the research permit from the principals to collect data from the selected Colleges of Education in the target population. The researcher trained 2 research assistants in each

college that helped to explain how to fill the questionnaire and the purpose of the study. The questionnaire was distributed to student-athletes with the help of the research assistants that were trained in each college. The number of copies of the questionnaire issued out varied from place to place depending on the accessible population available.

The researcher conducted interview with sports tutors. Prior to the interview, the researcher visited the interviewee in order to:

i. Seek their consent.
ii. Explain the motive of the research to him/her.
iii. Seek for an appointment date and time.

The interview guide was sent to the interviewee for him/her to prepare. Permission was sought from the interviewee to record the conversation during the time of the interview with textile graduates. Interviewees were interviewed in their workplaces. The researcher also collected and analysed the results of student-athletes in the year of competitive sports and the year of no competition sports.

DATA ANALYSIS AND PRESENTATION

The data collected were analysed quantitatively and qualitatively to address the objectives of the study. Descriptive and inferential statistics were employed in quantitative data analysis. The descriptive statistics were used to summarize, organize and describe the responses through the use of pie charts and tables. The inferential statistics such as a one-way-analysis of variance (ANOVA) and point-biserial correlation, were used to test the formulated null hypotheses for the study. The aim of using the inferential statistical tools employed in this study was based on the type of hypotheses tested. The analyses were carried out in the following order:

Analysis of objective one and hypothesis one: To identify and discuss the sports stressors linked to the academic performance of student-athletes in Colleges of Education was analyzed using the descriptive test such as percentages count of the responses. The null hypothesis one (competitive sports stressors have no statistically significant influence on the academic performance of student-athletes in colleges of education in Ghana) was tested using a one-way-analysis of variance (ANOVA) at $p < 0.05$ alpha level of significance.

Analysis of objective two and hypothesis two: to assess the influence of sporting stress on the academic performance of student-athletes in Colleges of Education in Ghana was analysed using the descriptive test such as percentages count of the responses. The null hypothesis two (competitive sports stress has no statistically significant influence on the academic performance of student-athletes in colleges of education in Ghana) was tested using point-biserial correlation.

Analysis of objective three: to compare the GPA of student-athletes in the year of competitive sports and the year of no competitive sports in the Colleges of Education in Ghana was analysed using document analysis. Hypothesis was not formulated for objective three because it was only qualitative data needed. Apart from demographic data, most of the quantitative data in the questionnaire were

obtained on a 5- point Likert scale that ranged from Strongly Agree to Strongly Disagree. The Strongly Agree (SA) and Agree (A) categories were integrated into an Agree group, whilst the Strongly Disagree (SD) and Disagree (D) were added to form a Disagree Category. The not sure category was maintained.

The interview guides and document analysis data were transliterated to create records. The write-out of raw information was coded by hand under the various themes. The information was matched up and grouped in accordance with resemblances so as to develop categories. Table 3 summarizes research objectives/ hypotheses and measuring statistical tools.

Table 3: Objective, Data Collection Tool and Measuring Statistical Tool

Objectives/ Hypotheses	Data Collection Tools	Measuring Statistical Tool
i. To identify and discuss the sports stressors linked to the academic performance of student-athletes in Colleges of Education.	i. Questionnaire ii. Interview guide	Percentages
$H_0$1		One-way ANOVA
ii. To assess the influences of stress on the academic performance of student-athletes in Colleges of Education.	i. Questionnaire ii. Interview guide	Percentages
$H_0$2		Point-biserial correlation coefficient
iii. To compare the GPA of student-athletes in the year of competitive sports and the year of no competitive sports in the Colleges of Education in Ghana.	Document analysis	

Data Processing and Analysis

The data collected in this study were of two sets; quantitative and qualitative data. Accordingly, qualitative data were analyzed manually while quantitative data was analyzed quantitatively. For data from questionnaires, the researcher used the Statistical Package for Social Sciences (SPSS) for the analyses and use both descriptive and inferential statistics for analyses. Descriptive statistics were used to summarize, organize and describe the responses and address study objectives through the use of percentages. Inferential statistics such as ANOVA and point biserial were used to test the null hypotheses formulated.

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FINDINGS AND DISCUSSIONS

Findings

Objective one: To Assess the Influences of Stress on the Academic Performance of Student-Athletes in Colleges of Education in Ghana.

The first objective of this study was to assess the influences of stress on the academic performance of student-athletes in Colleges of Education in Ghana. To measure this objective, descriptive and inferential statistical analyses were done followed by qualitative data analysis. The student-athletes were asked to designate their level of agreement or disagreement with statements. The results of their responses are shown below.

Descriptive Data Analysis

This section provides data on the effects of stress from competitive sports and the academic performance of student-athletes. The majority of the student-athletes (68.56%) agreed that stress from competitive sports affects their academic performance whilst (31.44%) of them disagreed with the statement. The finding showed that stress from competitive sports participation has negative effects on the academic performance of the student-athletes in Ghana Colleges of Education. Figure 1 provides a summary of the responses.

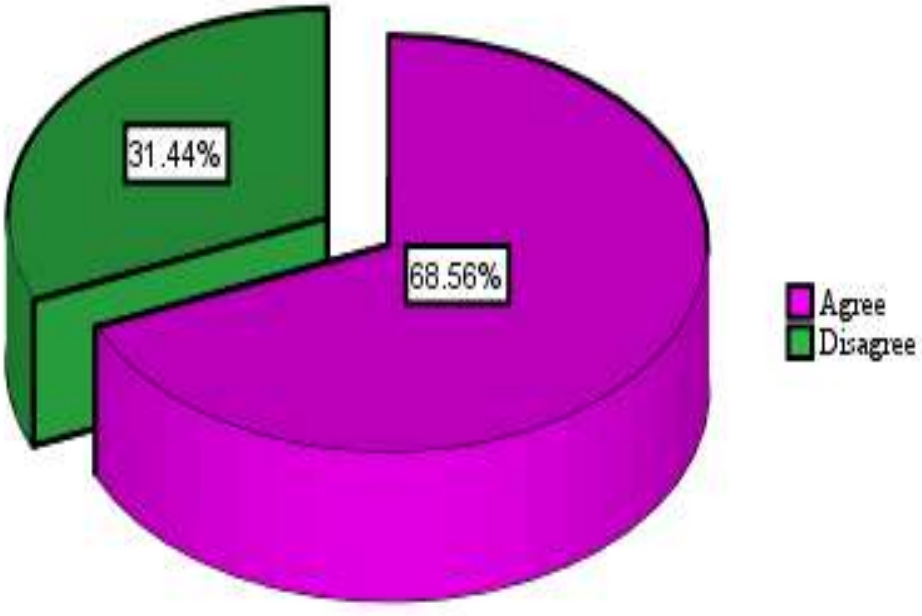

Figure 1: Stress from Sports and Academic Performance of Student-Athletes.

Findings from whether students who do not engage in competitive sports perform well academically than student-athletes because they do not suffer stress indicated that saw the majority of the

respondents (63.21%) disagreed with the statement, (30.43%) were not sure while (6.355%) agreed with the statement. The findings are indicated in Figure 2

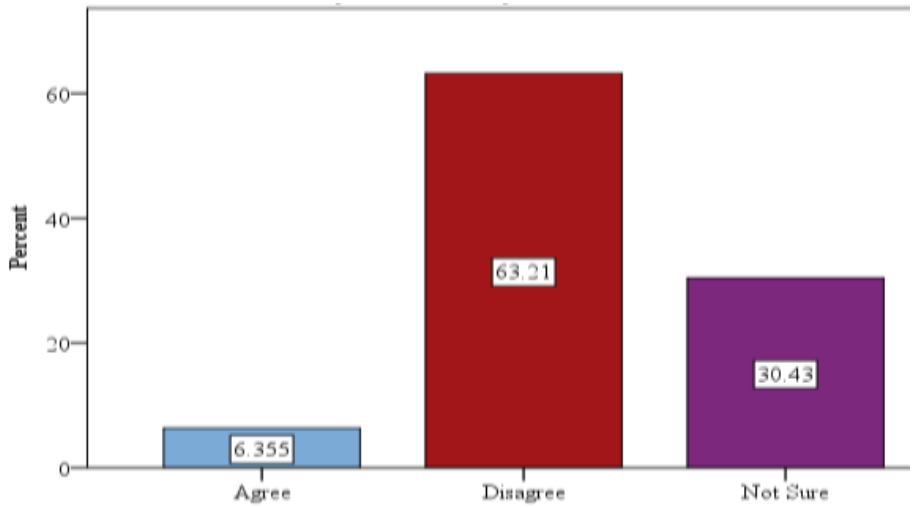

Figure 2: Results on Students Who Do Not Engage in Competitive Sports Perform Well Academically than Student-Athletes.

The results on if student-athletes focus on academic performance reduces stress from competitive sports indicated that a higher number 247 (82.61%) agreed with the statement while 52 (17.39%) agreed with the statement. This finding showed that student-athletes were not stressed when they do not combine competitive sports participation with their academic activities hence, they perform better academically. Figure 3 displays the findings.

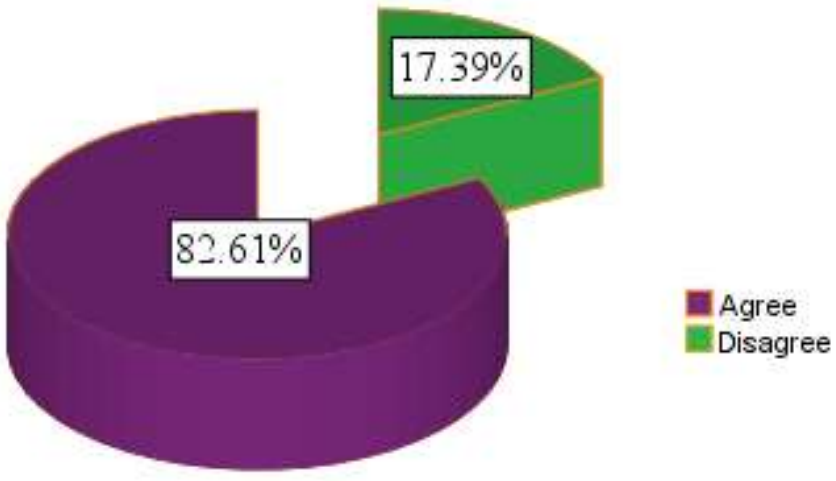

Figure 3: Results on student-athletes focus on academic performance reduces stress from competitive sports

The findings on whether stress from competitive sports makes student-athletes easily feel edgy and worried during learning showed that the majority 201 (67.22%) agreed with the statement while 98

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(32.78%) disagreed with the statement. The findings simply mean that stress from competitive sports makes student-athletes easily feel edgy and worried during learning. Figure 4 shows the findings.

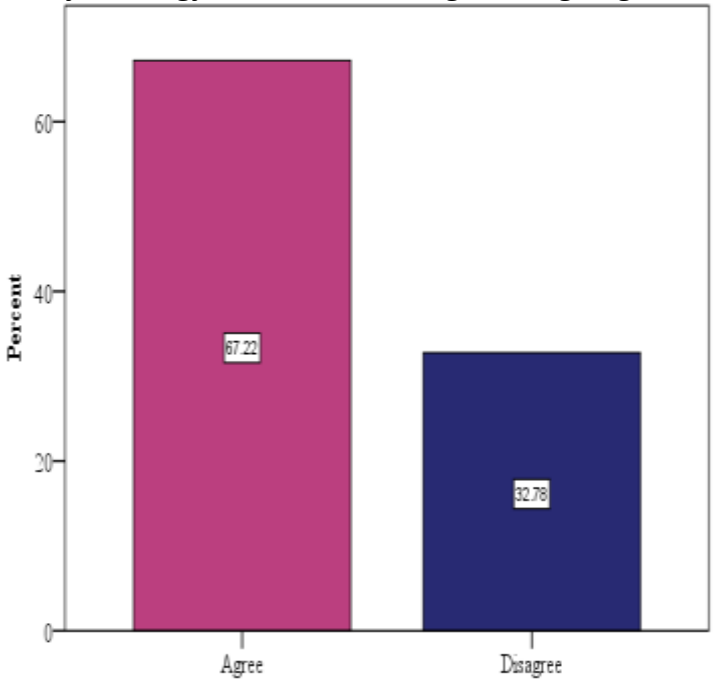

Figure 4: Results on Stress from Competitive Sports Makes Student-Athletes Easily Feel Edgy and Worried During Learning.

In figure 5 majority 230 (76.923%) of the student-athletes agreed that they habitually realize it is not too easy to cope with academic activities due to stress from competitive sports participation whilst a fewer number 69 (23.077%) disagreed with the statement. The results indicate that student-athletes did not easily cope with academic activities due to stress from competitive sports participation.

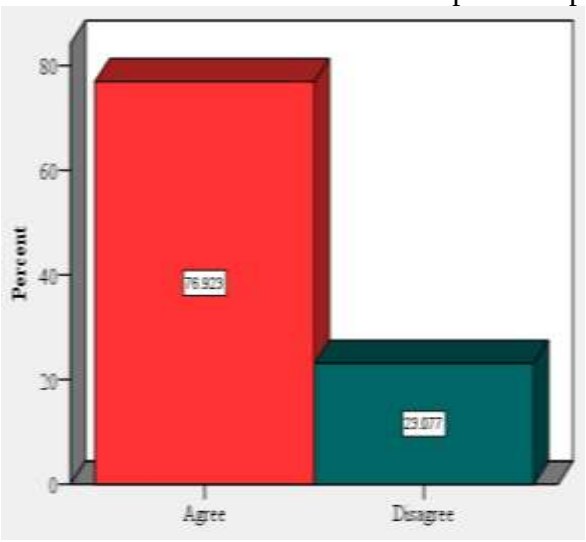

Figure 5: Results on Difficulties in Coping with Academic Activities Due To Stress from Competitive Sports Participation

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In Figure 6 majority 282 (94.31%) of the student-athletes agreed that their academic performance may be good enough if they can manage or control stress from competitive sports whilst a smaller number of them 17 (5.69%) were not sure with the statement. The findings show that student-athletes can perform well if proper measures are put in place to help them manage their stress from competitive sports well.

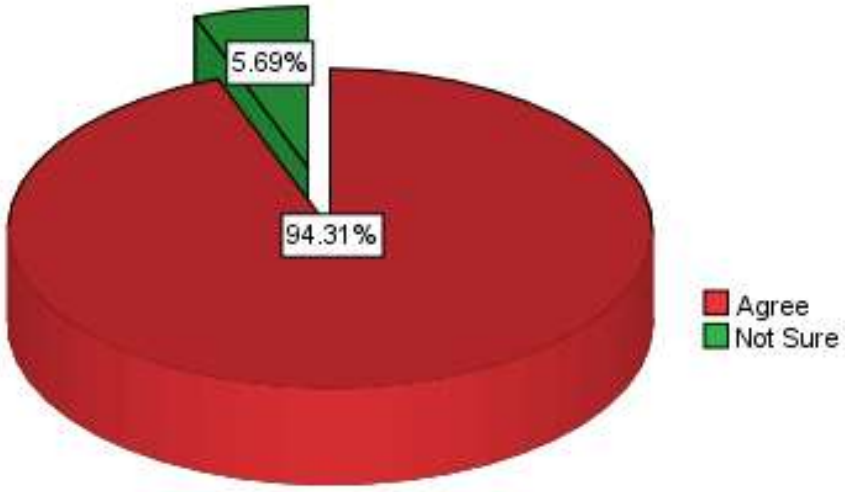

Figure 6: Results on Stress Management and Academic Performance of Student-Athletes.

The results in Figure 7 showed that majority 253 (84.62%) of the student-athletes agreed that Sports can really give stress that can reduce your GPA whilst a lesser number of them 46 (15.38%) were not sure with the statement. The findings show Sports can really give stress that can reduce your GPA of student-athletes.

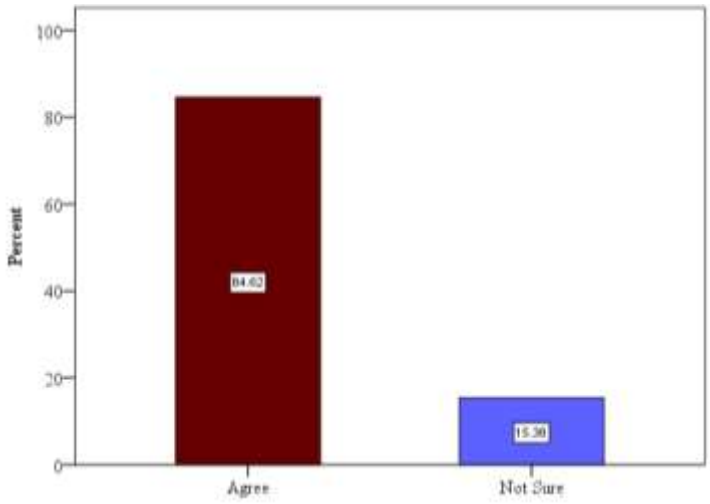

Figure 7: Results on Participation in Competitive Sports and Student-Athletes GPA

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Hypothesis Testing

To establish if stress from competitive sports has a statistically significant influence on the academic performance of student-athletes in Colleges of Education in Ghana, a set of sub-null hypotheses was formulated from H_03. The H_02 and sub-null hypotheses were as follows:

H_02. Competitive sports stress has no statistically significant influence on the academic performance of student-athletes in colleges of education in Ghana.

i. $H_03.1$ Good stress management has no statistically significant influence on the academic performance of student-athletes.
ii. $H_03.2$ Stress from competitive sports has no statistically significant influence on student-athletes edgy and worried during learning.

H_0 *3.1* was to establish if good stress management has no statistically significant influence on the academic performance of student-athletes. To test $H_03.1$ Point-biserial correlation coefficient was used. The results are presented in Table 4.

Table 4: Point-Biserial Results on the Influence of Good Stress Management on Academic Performance of Student-Athletes.

Variable	Point-Biserial Correlation (*r*)	Sig. (2-tailed)
H_02.1 Good stress management has no statistically significant influence on the academic performance of student-athletes.	.531**	.001

*****. Correlation is significant at the 0.01 level (2-tailed). N= 299***

The findings in Table 4 show that good stress management has a statistically significant influence on the academic performance of student-athletes (r = .531, n = 299, p =. 01). $H_03.1$ which states good stress management has no statistically significant influence on academic performance of student-athletes was rejected and the conclusion was that good stress management has a statistically significant influence on academic performance of student-athletes.

$H_03.2$ was to ascertain if stress from competitive sports has a statistically significant influence on student-athletes edgy and worried during learning. This sub-null hypothesis ($H_03.2$) was tested using a Point-biserial correlation coefficient and the findings are presented in Table 5.

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Table 5: Point-Biserial Results on the Influence of Competitive Sports on Student-Athletes Edgy and Worried During Learning.

Variable	Point-Biserial Correlation (*r*)	Sig. (2-tailed)
H_0*2.2* Stress from competitive sports has no statistically significant influence on student-athletes edgy and worried during learning.	.187**	.001

. Correlation is significant at the 0.01 level (2-tailed). N= 299

The findings in Table 5 indicate that stress from competitive sports has a statistically significant influence on student-athletes edgy and worried during learning (r = .187, n = 299, p =. 01). The H_0*3.2* which states stress from competitive sports has no statistically significant influence on student-athletes edgy and worried during learning was rejected. The study, therefore, concluded that stress from competitive sports has a statistically significant influence on student-athletes edgy and worried during learning.

Objective two: To Compare the GPA of Student-Athletes in the Year of Competitive Sports and the Year of No Competitive Sports in the Colleges of Education in Ghana.

The second objective of this study was to compare the GPA of student-athletes in the year of competitive sports and the year of no competitive sports in the Colleges of Education in Ghana. To achieve this objective, the researcher first performed descriptive analyses followed by qualitative data analysis (document analyses).

Descriptive Data Analysis

In figure 8, 294 (98.33%) of the student-athletes agreed that they performed well academically in the year of no competitive sports than in the year of competitive sports because they were not stressed in the year of no competitive sports while 5 (1.67%) of the student-athletes were not sure of the statement. The findings implied that stress from competitive sports had negative effects on the academic performance of student-athletes in Colleges of Education in Ghana.

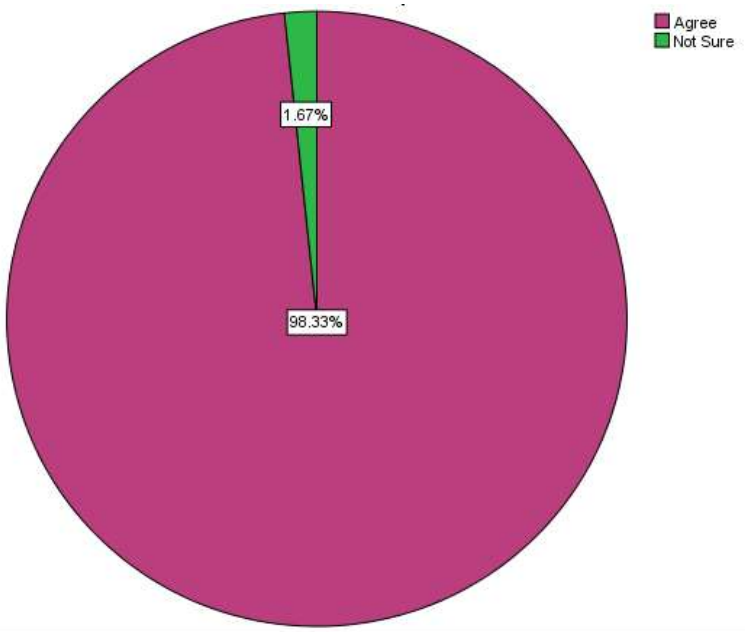

Figure 8: Results of student-athletes performance in the year of competitive sports and years of no competitive sports

Documents Analyses

Document analysis was used to compare students' academic performance in the semester of no competitive sports and the semester of competitive sports. The analysis indicated that student-athletes performance better in the semester of no competitive sports than the semester of competitive sports participation because they did not suffer stress in the semester of no competitive sports. The results from the document analysis are presented in Table 6.

Table 6 Students' GPA in the Semester of Competitive Sports

Students	GPA in Semester of no Competitive Sports	GPA in Semester of Competitive Sports
1	2.7	2.3
2	3.0	2.3
3	2.3	2.1
4	2.5	2.5
5	2.7	2.5
6	2.5	2.4
7	2.4	2.2
8	2.5	2.3
9	2.4	2.2

10	2.5	2.4
11	2.5	2.2
12	2.9	2.5
13	3.0	2.4
14	2.4	2.3
15	2.8	2.2
16	3.1	2.4
17	2.5	2.3
18	2.4	2.3
19	2.4	2.3
20	2.5	2.3
21	2.3	2.1
22	2.4	2.3
23	2.3	2.1
24	2.5	2.4
25	2.4	2.3
26	2.5	2.4
27	2.4	2.3
28	2.4	2.2
29	2.3	2.1
30	2.2	2.4
31	2.3	2.2
32	2.5	2.4
33	2.4	2.4
34	2.6	2.5
35	2.5	2.4
36	2.5	2.4
37	2.6	2.5
38	2.6	2.5
39	2.5	2.4
40	3.3	2.5
41	2.8	2.5
42	2.4	2.3
43	2.5	2.2
44	2.3	2.4
45	2.5	2.4
46	2.2	2.4
47	2.4	2.3
48	2.4	2.2

49	3.0	2.4
50	2.5	2.3
51	3.2	2.4
52	2.5	2.4
53	2.5	2.3
54	2.3	2.1
55	2.7	2.5
56	2.2	2.0
57	2.4	2.2
58	2.4	2.2
59	2.2	2.5
60	2.5	2.4
61	2.6	2.5
62	2.5	2.4
63	2.8	2.5
64	2.6	2.4
65	2.8	2.5
66	2.4	2.5
67	3.2	2.4
68	3.1	2.5
69	3.2	2.3
70	3.2	2.2
71	3.1	2.5
72	3.2	2.4
73	2.6	2.4
74	2.6	2.3
75	2.5	2.2
76	2.3	2.5
77	2.5	2.3
78	2.4	2.4
79	2.6	2.3
80	2.5	2.4
81	2.8	2.4
82	2.9	2.4
83	2.4	2.2
84	2.6	2.5
85	2.5	2.3
86	2.8	2.4
87	2.9	2.5

88	2.4	2.3
89	2.8	2.5
90	2.9	2.4
91	2.7	2.5
92	2.9	2.5
93	2.8	2.5
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296	3.3	2.9
279	3.4	2.9
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CONCLUSIONS AND RECOMMENDATIONS

The study concluded that competitive sports stress has a statistically significant influence on the academic performance of student-athletes in colleges of education in Ghana. The study also concluded that student-athletes performed better in the semester of no competitive sports participation than in the semester of competitive sports participation. The study recommended that Colleges of Education in Ghana should have stress management facilities to address stressors link to academic performance of student-athletes.

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