LaSance: Mental Health in Female College Athletes

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Introduction

College athletics is a part of everyone's life at some point or another; whether it is being a fan of the game, friends of the athletes, or the athletes themselves, they play a central role in the life of most college students. The team members and coaches, however, are the only ones who truly understand what goes on behind the scenes of an athletic program. The fans see the team as they perform in a game: excited, passionate, and driven to be the best; but the truth is that a majority of athletic teams across the country have athletes struggling with mental illness. Over the past decade, "The professional consensus is that the incidence of anxiety and depression among scholastic athletes has increased,' says sports psychologist, Marshall Mintz who has worked with teenagers for 30 years" (Flanagan, 2019). Mental illness and depressive symptoms are not the first thing that come to mind when someone mentions collegiate sports, so why is it such a common problem? Physical activity and sports participation at the collegiate level can result in some of the best times in a person's life. Sports give people a support system, a set schedule, and a sense of accomplishment, all of which lead to better mental health.

There is, however, a fine line between working hard to be competitive and overtraining to the point of exhaustion and defeat. Being a college athlete requires commitment and an intense focus and it is common that athletes are too fixated on their performance to recognize their mental illness symptoms for what they are; so it is up to the NCAA as well as each individual school's training staff to help these athletes in every way possible. All athletes are not affected by the demands of their sport in the same manner. There are several factors that are connected with mental illness that are dependent on the university, athlete, as well as the team culture and coaching behaviors. In this paper, I will discuss the life of a typical college athlete and the stressors that are the main factors that can lead to mental health issues. In addition to these

athlete only stressors, collegiate athletes are susceptible to the same stressors felt by every college student and these also have potential to cause problems. The effects of mental illness felt by collegiate athletes are typically more dangerous because stigmas surrounding mental illness in athletes discourage them from reaching out for help. It is the responsibility of universities to properly train their athletic training staff and coaching staff to notice symptoms of mental illness in order to get athletes the help they need before their mental illness becomes too dangerous.

Multiple studies have led to the discovery that it is typical for female athletes to have significantly increased levels of depressive symptoms in comparison to regular college students while male athletes had the opposite result and typically experience lower levels (Storch, Storch, Killiany, & Roberti, 2005). However there is not enough research surrounding this discovery and it needs to be explored further before a paper can be more centered on female athletes. The few studies that have come to this conclusion may have confounding factors that explain the discrepancy in mental health between female and male athletes – one such example is that female athletes might be more forthcoming with their experiences whereas male athletes have not come forward with similar experiences. This can be explained by the stigmas that are innate in athletes from the time they first start in youth sports. Typically, the male gender as a whole is stereotyped as not being allowed to be emotional and compound that with mental illness stigmas in athletes and it is likely many male athletes that are suffering did not feel comfortable admitting it. This shortcoming in the research is further proof that the NCAA and other athletic associations as a whole need to look further into their athletes to make sure they are getting any care they could need. Different potential programs and screenings that can help universities and

organizations in recognizing different indicators of an athlete that could be predisposed to having a mental health episode.

College Athletes

The main form of mental illness that will be looked at in relation to college athletes is depression. Depression can manifest itself in many different forms but the main symptoms of depression include, "the loss of interest or pleasure in nearly all activities, accompanied by other symptoms such as insomnia and changes in appetite, energy and concentration" (Reardon & Factor, 2010). Another aspect of depression is maladjustment in which those affected by depression turn to substance abuse as a form of coping with their state of mind (Storch et al. 2005). Stress, and one's inability to cope with extreme stress, is one of the main factors that lead to a person developing depressive symptoms. College students as a general population are at a very high risk for developing these symptoms as they enter their new environment and figure out how to navigate it. College athletes, are a unique subgroup of the college student body that have different stressors added to the typical ones leading them at an increased risk for depression (Gavrilova & Donohue, 2018).

Regular physical activity and its correlation to mental health has been greatly studied over the recent decades as there has been a spike in adolescent depression (Kleppang, Hartz, Thruston, & Hagquist, 2018). Exercising and being active triggers a release of chemicals, such as: endorphins, dopamine, and serotonin - which boost one's mood and makes one happier. In the study performed by Kleppang et al, however, evidence suggests that the nature of physical activity is more indicative of how strong of an effect it will have on the mind. The study found that regular team activities resulted in a better mental state. However, individual physical activity (running, swimming, cycling) was correlated with higher rates of depressive symptoms

(Kleppang et al. 2018). Being a part of an athletic team (that participates in team sports rather than individual) is thought to have produced better mental health as the feeling of being a team and having a built-in support system raises self-esteem and overall mood.

This is an important development in the research surrounding mental illness because it puts a greater emphasis on the benefits of social interactions that happen due to exercise, rather than claiming that the mere act of exercising has the desired result. Recognizing the importance the social aspect of sports has on an athlete also helps to better our understanding of why athlete mental illness rates have increased in recent years. When an athlete feels isolated from their team, it can lead to a feeling of loneliness and cause a loss of that critical social interaction. There are many instances when an athlete can feel isolated or isolate themselves from their team. These instances often will stem from a player's performance and their perceived level of play in comparison to their teammates.

Elite athletes base much of their self-worth on how good they are as a player and are constantly striving to prove themselves to their teammates, coaches, and themselves. This desire usually takes up the majority of an athlete's thoughts and they often forget the fact that they were good enough to make it to the collegiate level in the first place. It is common for athletes to forget that they are within the top tier of athletes in the country by being a part of division one programs, and that they should be proud for reaching their goal. A recent study done to complete a master's requirement by Alyson Jones for the San Jose State University, conducted anecdotal interviews with current and former division one athletes. One participant in this study, Katy, was an example of how a physical plateau or shortcoming related to her sport of water polo quickly became a personal failure. Katy's identity was so closely tied to her status as an athlete and as a part of a team, that when she was unsuccessful in the pool, it ended up with her being

unhappy with her overall life (Jones, 2014, 54). Many division one athletes experience this problem of not being able to separate the "athlete" from the rest of their personality. Sports become so heavily integrated in persona that each day's mood can be dictated by what happened on the court/field/pool. At top levels this is problematic because division one athletes face more challenges than they did while participating in high school or club sports. This can be a big shock to players used to being the best on their teams in high school; now they are all equals fighting for the top spot which can be a big adjustment.

Learning how to deal with the new competition as well as the new schedule can lead to performance problems when first entering a collegiate program. The pace of the practices, the intensity of the workouts, and the start of heavy lifting, put a strain on incoming athletes (as well as athletes coming off of injury or who did not work out during the off season). These factors greatly impact level of play for an athlete and can have them feeling unconfident and uncomfortable on the field/court with their team. From the interviews previously mentioned, Jones deduced that sports acted as a double edged sword when it came to the individual athlete's mental state. Those interviewed stated that their sport helped them out of depressive states as it gave them something to look forward to and to put their focus into. However, it was also found that,

... When faced with unexpected plateaus or periods of poor performance, the participants suddenly felt self-doubt creeping in. Questions regarding their athletic abilities were exacerbated by perfectionism and harsh criticism of their performance, spiraling until their sport foundation had been truly shaken (Jones, 2014, p 55).

This dichotomy of either being the source or the solution to a person's depressive episode is concerning. It showcases the major issues athletes have when there is little else in their life other than their sport.

These areas of plateaus and poor performance in conjunction with being consumed by the athlete persona lead to depressive episodes that are harder for athletes to bring themselves out of. If an athlete is injured, it often times correlates with them having depressive symptoms. However, the symptoms fade in intensity as the athlete gets closer to being cleared and returning to their sport. Plateaus however, make it harder for an athlete to see an end to the source of their problem. These periods of stagnant performance are harder to come out of and can often feel permanent. Plateaus are the most dangerous because players begin, "Feeling as 'mentally weak' [or] a similar feeling of depletion: 'It's just so draining. Like this constant feeling of not being good enough, it's so draining'" (Jones, 2014, p 52). This description of what a plateau can do to an athlete's mental state is concerning as it is reminiscent of the definition of depression as it depicts a loss of energy as well as interest for previously enjoyable activities.

Athletes will try to cope with this loss of "star-status" in many different ways, the most common of which being to train even harder. Athletes are naturally competitive individuals which leads to them wanting to be in control of each aspect of their life. When they lose their status on a team, they can look to exercising harder than their teammates as a way to take back control over the athletic prowess. These extra workouts also help with the chemical release of serotonin which has them feeling better and more confident for a time. However, athletes already train for more than eight hours a week for the entire school year, sometimes reaching as high as 20 hours in a single week. Training on top of an already grueling schedule can lead to overtraining, "and depression is one of the cardinal signs of overtraining in athletes.

Psychological, physiological, and physical symptoms of overtraining correlate directly to, and are sources of, depression" (Armstrong, Burcin, Bjerke, & Early, 2015, p 185). Consistent overtraining can lead to the body and mind becoming dependent on excessive exercise and can actually lead to addiction-like symptoms. Once this happens, an "exercise-addicted individual may feel lack of control over physical exercise and that they suffer from withdrawal symptoms" (Levit, Weinstein, Weinstein, Tzur-Bitan, & Weinstein, 2018). Withdrawal symptoms can include trouble sleeping, restlessness, and most often mood worsening. For these individuals, it is very common that their bodies become used to their excessive workouts causing them to lose the "euphoria" associated with physical activity. Over time, the body builds up a tolerance to the drug – in this case the serotonin and endorphins released when exercising – and it makes it harder to feel those same good feelings associated with a good workout (Levit et al., 2018). With the loss of the positive feelings following a workout, an athlete might try to increase the intensity of their workouts or the frequency which is potentially dangerous to their performance on the court/field.

Overtraining causes an athlete's body to be in a constant state of fatigue or fatigue easily due to not being able to properly recover. This is common in athletes while in season but especially normalized at the Division 1 level. Rather than seeing a person training harder as potentially dangerous, it is typically viewed as having more dedication to the sport than their teammates. This can become physically dangerous for an athlete as they become fatigued and their body does not have proper time to heal and recover. Studies have shown that athletes suffering from mental illness have an increased risk of injury which is most often linked to their inability to recover from daily workouts (Gavrilova & Donohue, 2018). Athletes who suffer from overtraining for extended periods of time have the potential to become burnt-out and lose

their love the game. An athlete that over trains often is also at risk of isolating themselves from the rest of their team which can cause an exacerbation of already present depressive symptoms.

The "Burn-out Effect" happens when athletes' entire lives become too heavily centered on their sport, having all their time being spent in relation to their sport or team (Gerber, Best, Meerstetter, Walter, Ludyga, Brand, & Gustafsson, 2018). This ends up destroying their passion for the game and often leads to athletes needing to take time off or quitting the sport altogether. This is increasingly common for younger athletes (middle school/high school age) who specialize too early on in their sport, known as "sport professionalism". This is categorized by having younger athletes (younger than high school) training the way college and professional athletes do; whether it is with strength training, practicing for longer and more frequently, or hiring private specialized coaches (Flanagan, 2019). By not being able to play other sports or explore their other interests, they forget what made them love their primary sport in the first place. College athletes are subject to the same effect because of how intense and demanding their schedules can be. Having practice five times a week for sometimes up to three hours a day on top of any team bonding, traveling, volunteering, or physical therapy treatments can overload even the most dedicated athletes. When this happens, athletes often start trying to find something new to spark their interest which commonly leads to more dangerous habits such as alcohol or recreational drug use.

Abusive behaviors like this are also used as a coping mechanism for performance problems – when athletes struggle to be the best on the team or get the most playing time they can turn to these activities. Alcohol and recreational drug use on college campuses is not abnormal, it is increasingly common for regular students to use these substances frequently. However, it has been found that college athletes typically abuse these substances more than the

average student with male and female athletes' alcohol consumption being 16% and 19% higher respectively (Armstrong et al. 2015). This causes concerns for mental health professionals as there is evidence of a "positive linear relationship found between alcohol misuse and psychiatric symptoms [that] may indicate attempts to self-medicate mental illness" (Jones, 2014, p 14) With college already providing a significant risk to students because of the normalization of these concerning behaviors, it is easy to understand why college students are particularly at risk for suffering from depression and depressive symptoms. Adding in the draining and busy life of an athlete, and it is not hard to believe that they would turn to the same self-medicating behaviors that their non-athlete peers use for enjoyment.

In addition to these stressors that are unique to the athlete population, universities and their academic calendars as well as plethora of social situations pose triggers for their entirety of their student body. The most prevalent factor that leads to students being at a high risk for depressive symptoms is being overwhelmed by all that college has to offer. College is an extremely difficult time period to handle at the start: students have more freedom than ever before but this freedom comes with having to be responsible; rather than having parents to make sure homework is getting done, tests are being studied for, and that just overall health is being maintained, students have to do all of this on their own. They also have to manage their time because instead of being in class all day for five days a week the way high school schedules were laid out, classes typically take up about four hours a day. This free time is brand new and when someone's time management skills are not the best, it is tempting to use it to sleep, watch Netflix, or hangout with friends rather than tackle homework. This course of action can leave students unprepared when exams start and can increase the amount of stress experienced. When

stress is increased in athletes, or any student for that matter, their academic performance worsens and causes a spike in any mental illness symptoms (Gavrilova & Donohue, 2018).

The frequency with which these stressors trigger symptoms dictates whether the symptoms can be considering severe/chronic or simply mild. While having mild symptoms usually does not worry mental health officials or students themselves, they can often times be just as dangerous as full-fledged depression. Depressive symptoms while usually manageable for college students, can lead to episodes of severe depression which should be a cause of concern for mental health officials on college campuses (Goldring, 2012). Experiencing chronic depressive symptoms is dangerous when it comes to college students because the high number of possible stressors available leave the students vulnerable to severe episodes very frequently. These episodes can be caused by exam related stress that works on a cycle of either two or three times throughout the semester, constant stress to uphold a social life, and maintaining friendships and other relationships, it is possible that severe episodes could be happening at least once a month for some students.

Stigmas

Despite the more recent research showing that depression and depressive symptoms in college athletes is more of an issue than ever before, it is still not being discussed as frequently as it should. This research is only appearing within the last decade and it is very small in comparison to the plethora of research that states physical activity is beneficial for mental illness. The majority of research still holds on to the idea that any form of exercise is beneficial for a person's mental state due to the release of hormones and endorphins. This continues to be the common belief despite the newer research because no one (coaches, fans, parents, universities, etc.) want to accept the epidemic that is mental illness among college athletes. With the denial

comes the reinforcement of stigmas against mental illness discouraging those athletes that are suffering from feeling free to speak up (Reardon & Factor, 2010). Mental illness has long been

Considered a "weakness" by the athletic subculture. Athletes are trained to be both physically and mentally tough; therefore, feelings of hopelessness, loneliness, and lack of self-worth are viewed as personal flaws...In fact, according to the NCAA, suicide was the third-leading cause of death of student athletes [from 2004-08]" (Armstrong et al, 2015, 178).

This stigma is engrained in athletes from the time they enter sports with coaches saying colloquialisms such as, "rub some dirt on it", "walk it off", or "there's no crying in [whichever sport]". These sayings train athletes to ignore their physical pain from a very young age; it teaches them that pain is temporary and getting back into the game is more important than long term damage. While this can work with physical pain, mental injuries are not the same. Athletes put pressure on themselves to live up to the personas and the stereotypes that people have of them; those stereotypes do not include not being able to get out of bed some days or having panic attacks during a practice or game.

Competitors try very hard to suppress these symptoms and try even harder to make sure they are kept as secret as possible – often times teammates are unaware that the people they see every day are suffering; this usually happens because either the one suffering is covering it up so well or because teammates do not notice the signs of mental illness because they do not realize it is a likely problem. It is typical that there is a tendency on everyone's part to

Idealize athletes [which] leads health care providers to deny the existence or significance of psychiatric symptoms. Athletes themselves have a tendency to minimize apparent signs of weakness. Moreover, athletic behaviors sometimes resemble symptoms

of mental disorders (e.g. meticulous attention to diet, relative hyperactivity), thereby confounding recognition of illness (Reardon & Factor, 2010).

Ignoring pain can work for a physical injury, but with mental illness getting back into the game without proper treatment and help can further injure the player. When the source of an athlete's mental illness is the sport itself, proper treatment is needed in order to stop their damaging actions. The athlete needs a way to recognize their depressive symptoms and thoughts and then process them in a constructive way that enhances their mental state rather than further deteriorates it.

As a whole mental health has a negative connotation associated with it which has caused the topic to become a taboo in most public settings. Despite popular associations, mental health is not synonymous with mental illness; it is possible for someone to have good mental health and it should be something that people want to talk about. Having good mental health is crucial for anyone during their everyday lives as without a good state of mind, any trivial problem can seem like the end of the world. The first most important part of ending the stigmas against mental illness is ending the taboo around mental health as a whole. Mental illness will be easier to treat and new treatments will begin developing, once people stop being afraid to bring it up. With the surfacing of new research and the alarming rates at which collegiate athletes are struggling with mental illness, many universities have begun taking action to remove the negative connotation associated with mental health. The NCAA as a whole has taken steps by encouraging schools to add sports psychologists as well as implementing new screening policies across the association (Flanagan, 2019). Sacred Heart University has even launched the new campaign of Heart to Heart which is targeted at ending the stigma that athletes should be too tough to deal with mental illness. The main goal of the movement is to allow the athletes who have gotten treatment and

are doing better to speak out and share their story. By doing this, they are able to encourage others to do the same; the more people willing to actually address the issue, the less uncomfortable it is to discuss and once it is being discussed, changes and advancements can be made.

Mental Health Training

The first steps that need to be made in order for athletes to come forward about their mental health, is for the professionals (coaching staff, athletic training staff) working with them on a daily basis to change their style of treatment to fit the athlete subculture better. The main reason that athletes do not actively seek treatment when they experience depressive symptoms is the "failure of providers to implement interventions that are supported by evidence and systematically adapted within the context of sport" (Gavrilova & Donohue, 2018); basically athletes need treatments that are tailored to their competitive and active personalities or the treatments will never be effective. Treatment options need to work with an athlete and utilize their key personality traits that create the symptoms in the first place and redirect them towards positive actions. Of the depressed athletes that were surveyed in Gavrilova and Donohue's study, many "mentioned they did not pursue mental health treatments because they believed the providers of these services were not familiar with their culture, and that the interventions would be ineffective and not worth their time" (Gavrilova & Donohue, 2018). Clearly, there is an issue with the way that mental illness has been treated in the past in relation to competitive and elite athletes. Treatment for mental health has existed for decades now and it needs to be adapted to those being treated as well as the culture of modern society.

Many athletic programs are making strides and are recognizing the growing epidemic that is mental health within intercollegiate sports. University of Tennessee has created an entire

mental health facility specifically for their athletes where every athlete is encouraged to go on a regular basis for check-ins with mental health professionals. This program was implemented in 2005 and at the start had almost 30% of athletes attending session multiple times a week and was able to prevent three suicide attempts in the first three years of operations (Gill, 2008). While University of Tennessee took these measures in 2005, almost 10 years later, the rest of the National Collegiate Athletic Association followed with the chief medical officer's realization that mental illness truly was becoming an epidemic for student athletes (Flanagan, 2019). Following this discovery, therapists were added to athletic departments, new screenings were created for depression and anxiety, and coaching staff was alerted to the severity of the problem in order to make them more perceptive of their athletes' mental state.

These screenings typically look at personal and family history as a way of determining who might be at a higher risk of depressive symptoms. The problem with only looking at history for screening is that it still has stigmas bias; athletes who have not been professionally diagnosed with depression, are not going to call what they are feeling depression regardless if it is or not. This goes back to the fact that collegiate athletes do not want anyone to view them as weak — they do not want their coaches to look at them differently because of a family or personal past. One possible screening however that should be used to augment the personal screenings currently going on is a blood test that screens for polymorphisms in serotonin transmitters.

In one study performed by Petito et al, research showed that there was a link between polymorphisms in the serotonin transmitter 5HTT and depression and anxiety in elite athletes. The study showed that when there is a certain variation on the serotonin transmitter, it is harder for serotonin to be produced and spread throughout the body. Serotonin is one of the main hormones released through the body when working out or when having a positive mood in

general. With one's ability to circulate serotonin significantly impeded, it is easier for them to fall into depressive states. College athletes at all levels are required to do several blood tests before being allowed to participate in their sport for different genetic traits such as the sickle cell trait. While this trait drastically changes the way an athlete can physically perform, the polymorphism on 5HTT is a trait that is significantly linked to sport-related stress and depression. The NCAA can mandate that all athletes receive a screening for this gene variation which will give them a better insight into which athletes are very at risk for depressive symptoms.

Another significant aspect of college sports that needs to be changed is coaching behavior. A study by Wolanin et al looked at depressive symptoms across genders and sports and found that the results varied across all factors (women were not always above average, certain sports did not dictate more symptoms, etc.). However, it brings up the argument that individual team aspects have a larger impact than which sport or gender is involved. These factors include university level aspects such as funding or team probations as well as team interactions such as coaching behavior, team comradery, or team performance. A coach's interaction is arguably one of the more important factors as the way a coach talks and acts to players affects the way the players look at themselves. Non-supportive behaviors towards certain players or to the whole team induces negative self-talk as well as has the ability to turn players on one another further ruining the team culture (Gavrilova & Donohue, 2018). Coaching conduct with a team has the potential to act as either a protective or risk factor, determining whether rates of depressive symptoms decrease or increase (Wolanin, Hong, Marks, Panchoo, & Gross, 2016). Coaches that create more personal bonds with their players or overall have a more mellow coaching style are more likely to ease their teams' stress thereby lowering the extent to

which sports are triggering depressive symptoms. On the contrary, coaches who do not seem to care about their athletes outside of practice and game time and that are particularly abrasive in coaching style greatly increase the amount that sports relate to stress and depressive symptoms. While coaches might think that being tough on their players will ultimately make them better and the verbal abuse will be justified when the team succeeds, this is a fallacy. When sports-related stress is increased, players will perform worse overall than if they were in a positive environment (Gavrilova & Donohue, 2018). Too much stress causes a team to develop performance anxiety and, when stress is prolonged and extreme, depressive symptoms associated with their sport and their coach. Players who suffer from depressive symptoms as well as performance anxiety are too worried about their stress to perform at their peak and it will ultimately cause a team to lose which will only increase the stressors on athletes. With the overall rise in depressive symptoms seen throughout the last decade, it is important to remember the physical danger posed to a depressed athlete. The likelihood of injury is substantially increased when an athlete is struggling mentally as they become mentally and physically fatigued attempting to manage their depressive symptoms on top of their hefty workouts. Coaches play a substantial role in the lives of their athletes and have the power to help or hurt them further. Coaches not only should be trained to acknowledge the signs and symptoms, but also forced to acknowledge how big their role is in regards to mental illness on their teams.

Conclusion

Throughout the research, there is a significant correlation between college athletes and depressive symptoms, however correlation does not signify causation in this case. Being part of a college athletics team does not automatically dictate a person's mental health, and the purpose of this paper was to look into what causes the correlation. The one factor that was found to be

the most indicative of mental health can be summarized as an athlete's relationships. This covers relationships with teammates, coaches, schoolwork, roommates, parents, etc. When an athlete's life is too consumed by one relationship or when one of these relationships causes an undo amount of stress, is when an athlete is most susceptible to depressive symptoms becoming a lasting depressive state. The overall takeaway for athletes is to find a good balance in their life that allows them time to train for their sport, study for the academics, and relax for the everyday life.

Throughout the research conducted for this thesis, there was a common trend seen in regards to gender and the prevalence of depressive symptoms. Several studies found that female athletes were more likely to develop signs and symptoms of poor mental health or mental illness (Storch et al, 2005; Armstrong et al, 2015; Reardon & Factor, 2010). There are several different proposed reasons for this trend, however, nothing has been concretely proven or recreated to become a significant finding. In Reardon and Factor's study, one particular reason for female athletes being more affected is the prevalence of "leanness sports" which are heavily based on the appearance of an athlete; sports that fall into this category would include gymnastics, cheerleading, and figure skating. However, female athletes that do not participate in these specific sports are not immune to the "lean sport" effect as females in general face more scrutiny than males on what their bodies look like (Reardon & Factor, 2010). As this is a societal problem, its effect is seen across the general population not just in athletes. Further research needs to be conducted to determine if a sports' demands have any significant impact on female athletes or whether their depressive symptoms are on par with what is experienced by the general population.