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RESEARCH ARTICLE

IMPACT OF COVID-19 PANDEMIC ON MENTAL AND PHYSICAL HEALTH OF FEMALE BASKETBALL PLAYERS (11 TO 19 YEARS)

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Abstract

The unprecedented COVID-19 pandemic has affected every facet of normal life. The required social and physical distancing measures to prevent the spread of COVID-19 have brought the sports sector to a complete standstill. The cancellation of competitions, the lockdown of institutions, and the absence of organized training and communication amongst athletes have had a detrimental effect on the mental and physical health of athletes. In this paper, I have studied the impact of the COVID-19 pandemic on the mental and physical health of female basketball players in the age groups of 11 to 19 years, keeping in mind the unique socio-economic situations of this section of athletes. I found trends indicating an increasingly sedentary lifestyle and high levels of psychological distress by surveying 64 athletes from various states of India. These are worrying findings as these athletes are the future of the sport and need to be engaged and supported through these uncertain times. I believe this research will help sports authorities and educational institutions to take the necessary steps and make more informed decisions on engaging athletes during the pandemic and restarting sports activities in the future.

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Introduction:-

The onset of the COVID-19 pandemic at the beginning of 2020 resulted in a global quarantine affecting the realm of sports activities in complex and life-changing ways. All major sports events from the regional to international levels were cancelled or postponed to safeguard the physical health of the athletes and support staff. The stoppage has resulted in significant economic ramifications and risks not just for the athletes but also for professionals associated with sports in retail, marketing, sports services, and broadcasting fields. This uncertainty has profound implications on the next generation of athletes who are facing a difficult and uncertain future.

Young athletes are often drawn to sports for the close-knit community of peers and coaches that help one grow every step of the way. Sports is a way for these young athletes to build bridges between people from different communities and ages, to gain valuable exposure and life experience. But the cancellation of sporting events has undermined many of these social motivations and benefits of sports. The further closure of gyms, sports and fitness clubs has prevented these athletes from engaging in constant physical activity as well. With coaching staff struggling to foster the same community through online interactions, this novel environment these young athletes have found themselves in has been detrimental to both their mental and physical health. The challenge of no longer having a

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structured routine, lack of training resources and support of peers have resulted in a decrease in physical activity, irregular sleeping and eating patterns, weight gain, and the general loss of physical fitness.

The common perception states that athletes possess high levels of mental resilience and therefore would not be deeply affected by the current feelings of uncertainty; however, this is not the case for the majority of athletes. The unexpected suspension of sports activities in an athlete's life can lead them to be withdrawn or depressed. This originates from the feeling of having a lack of purpose, which has resulted in high levels of anxiety or stress amongst athletes. Depression amongst athletes due to injuries has been well documented, and the current situation of having no short term goals has the potential of resulting in similar or worse situations.

While similar research has been conducted in the professional sports sector to plan for the recommencement of activities, very few studies have been conducted focusing on the female basketball players in India. This paper focuses on the physical and mental state of basketball female athletes in India to help sports authorities to make informed decisions on sports and physical activity during and after the pandemic.

Methodology:-

64 female basketball athletes from all over India (Himachal Pradesh, Delhi NCR, Madhya Pradesh, Rajasthan) aged 11 to 19 years were surveyed on the effect of the pandemic on their physical and mental health. Due to current constraints, an online survey was used to collect quantitative data to gather information regarding the health of athletes.

The survey contained 28 multiple choice questions focusing on three broad categories. The first few questions obtained information regarding the background and experience of the respondents to ensure a variety of players. The second group of questions focused on the effects of quarantine on the player's physical strength and skills. Finally, the last segment of the questionnaire focused on the player's mental health, motivation and thoughts on their future in the sport. The survey was approximately 15 minutes long.

Blank copy of questionnaire has been attached as follows:

Sports Research Questionnaire:

***Required**

1. Name *

2. Age group *

Mark only one oval.

11 - 13 years

14 - 16 years

17 - 19 years

3. How long have you been playing basketball? *

Mark only one oval.

- 1 - 2 years
- 3 - 4 years
- 5 - 6 years
- More than 6 years

4. What is the highest level at which you have competed? *

Mark only one oval.

- Inter-school
- State
- National
- International

5. Which position do you play at? *

Mark only one oval.

- Point guard
- Shooting guard
- ~~Center~~
- Point forward
- Forward ~~Center~~

6. During the lockdown, how many hours a week do you devote to physical fitness? *

Mark only one oval.

- 1 - 2 hours
 3 - 4 hours
 5 - 6 hours
 7 hours or more

7. Which of the following best describe the way you carry out your fitness regime at home? *

*

Tick all that apply.

- Walking/jogging
 Yoga/Pilates
 Home based weight training
 Zumba
 Online fitness classes

8. My general physical health has deteriorated due to suspension of sporting activities.
How do you feel about this statement? *

Mark only one oval.

- Strongly disagree
 Disagree
 Neither agree nor disagree
 Agree
 Strongly agree

9. Which of the following aspects of physical fitness has been the most adversely affected, according to you? * *Mark only one oval.*

- Strength
 Flexibility
 Endurance
 Resilience

10. Has there been a loss of appetite or overeating due to absence of regular physical activity? *

Mark only one oval.

- Not at all
 Some days
 More than half the days
 Nearly every day

11. Have you been experiencing irregular sleep patterns due to lack of regular physical activity?*

Mark only one oval.

- Not at all
 Some days
 More than half the days
 Nearly every day

12. Have you experienced fluctuations in your weight due to lack of regular physical activity? *

Mark only one oval.

- Yes
 No

13. Due to zero or little physical activity, do you feel tired or lethargic? *

Mark only one oval.

- Not at all
 Quite Often
 Frequently
 Every day

14. Has this deterioration of physical health had any impact on mental health? *

Mark only one oval.

- Yes
 No
 Maybe

15. Has the current absence of Basketball from your life interfered with your ability to socialize? *

Mark only one oval.

- Not at all
 Some days
 More than half the days
 Nearly every day

16. Without regular practice sessions, have you found yourself feeling fidgety or restless? *

Mark only one oval.

- Never
 Sometimes
 Often

17. Due to the prolonged break from sports activities, are you having trouble concentrating on routine work? * *Mark only one oval.*

- Never
 Sometimes
 Often

18. Has there been any adverse impact on your academic performance due to lack of involvement in sports? * *Mark only one oval.*

- Occasionally
 Sometimes
 Often
 Frequently

19. What would you say you miss the most about your sports life? *

Mark only one oval.

- Spending time with your team and coach
 Attending practice sessions
 Winning accolades at tournaments
 Travelling for away-games
 Other:

20. How has your coach helped you cope during this lockdown? *

Tick all that apply.

- One-on-one ~~counseling~~ sessions
- Online team meetings
- Virtual training sessions
- Other:

21. With the cancellation of basketball tournaments, have you had the feeling of being lost or aimless without these goals in the future? * *Mark only one oval.*

- Not at all
- Several days
- Nearly every day

22. There is a lot of uncertainty regarding whether schools are even going to be having group sports ~~teams~~ events after the pandemic ends. How worried are you about your future in this sport? * *Mark only one oval.*

- Extremely worried
- Slightly worried
- Not worried at all
- A little worried

23. Group training and playing sports are going to look different after the pandemic ends from what we have been used to. Are you concerned to hear that we won't be returning to 'normal' and that there will probably be some fundamental changes in the way we play the game? * *Mark only one oval.*

- Extremely concerned
- Slightly concerned
- Not concerned at all

24. Covid-19 has led to the closure of all sporting activities. How do you react to the prospect of not playing basketball for the rest of the year? * *Mark only one oval.*

- Dislike very much
- Dislike
- Neither like nor dislike
- Like
- Like very much

25. Have you thought of dropping the sport altogether? *

Mark only one oval.

- Occasionally
 Sometimes
 Often
 Frequently

26. Post pandemic, would you be willing to adapt to the new safety measures which would probably be part of the basketball game? (Special protective clothing, head gear etc.) *

Mark only one oval.

- Yes
 No
 Maybe

27. After the pandemic ends, the spectatorship would be considerably less than what it was before. Would this have any effect on your game? * *Mark only one oval.*

- A lot
 Very little
 Not at all

28. Which of the following most closely resembles the way you have taken advantage of the current pandemic situation? * *Mark only one oval.*

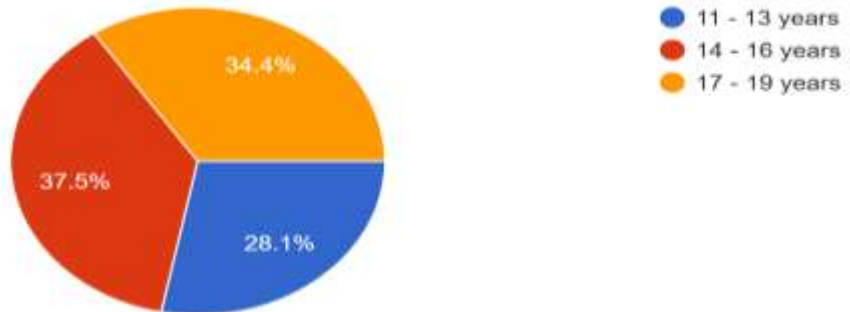
- Took an online course
 Developed new hobby
 Learnt a new skill
 Spent quality time with family
 Other:

Result:-

Responses gathered from the participants of the survey are stated as below:

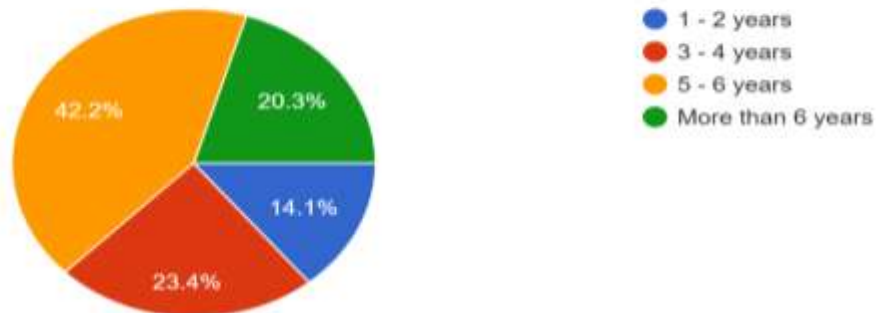
Age group

64 responses



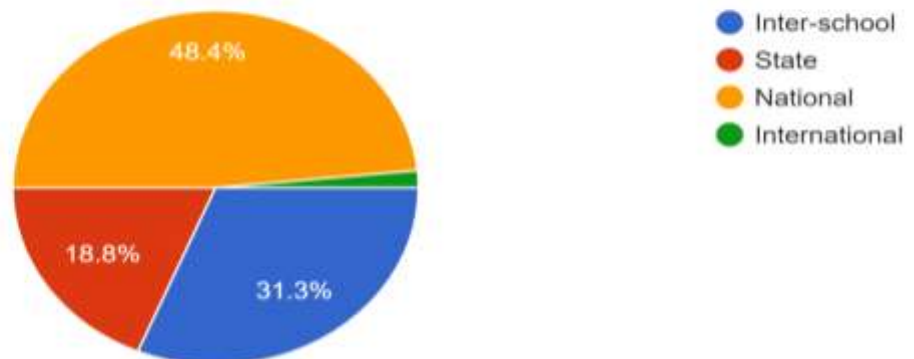
How long have you been playing basketball?

64 responses



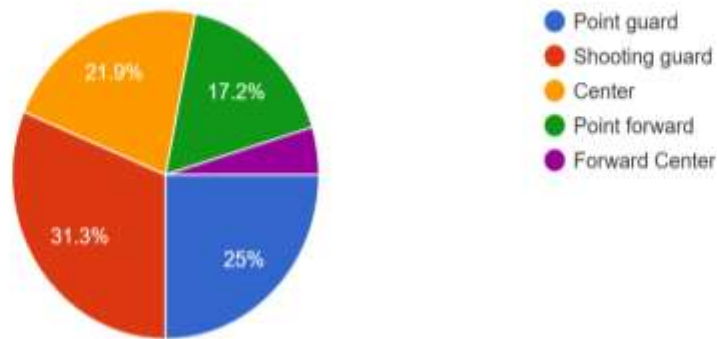
What is the highest level at which you have competed?

64 responses



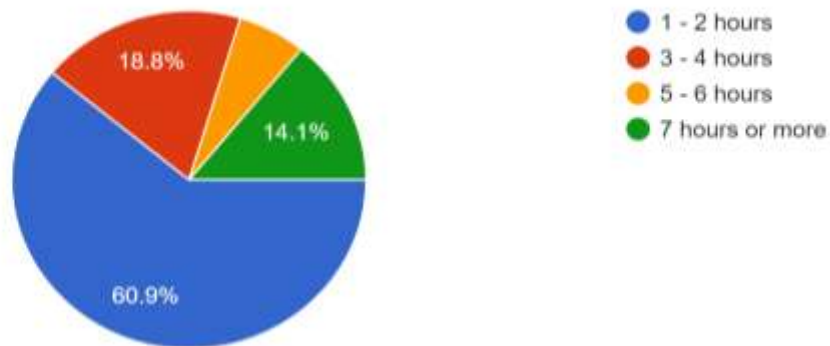
Which position do you play at?

64 responses



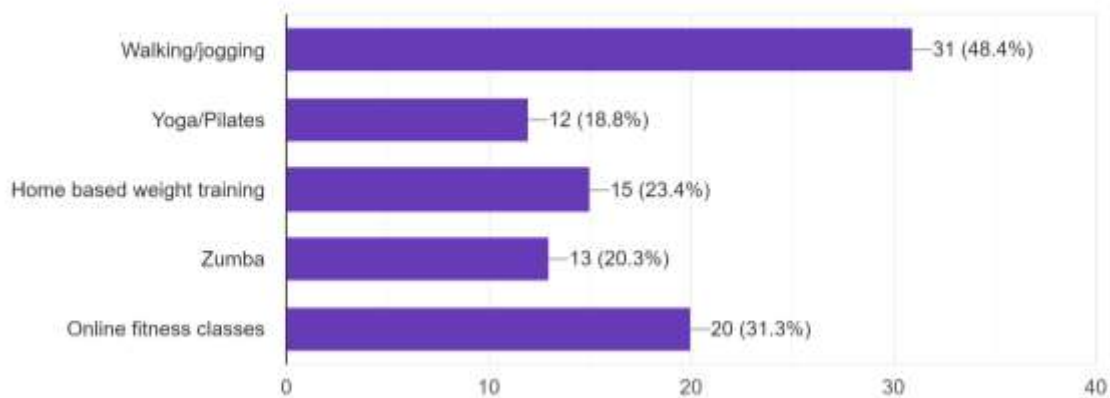
During the lockdown, how many hours a week do you devote to physical fitness?

64 responses



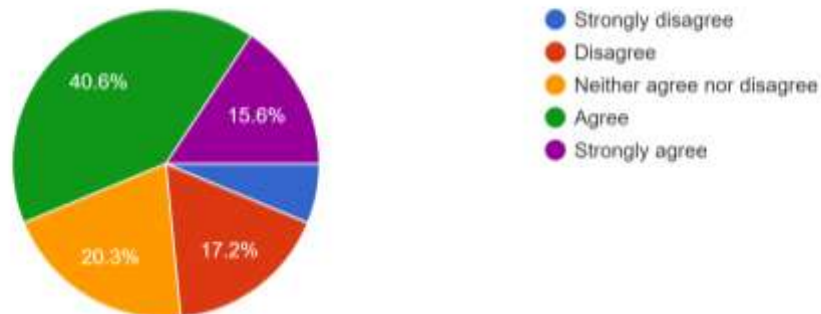
Which of the following best describe the way you carry out your fitness regime at home?

64 responses



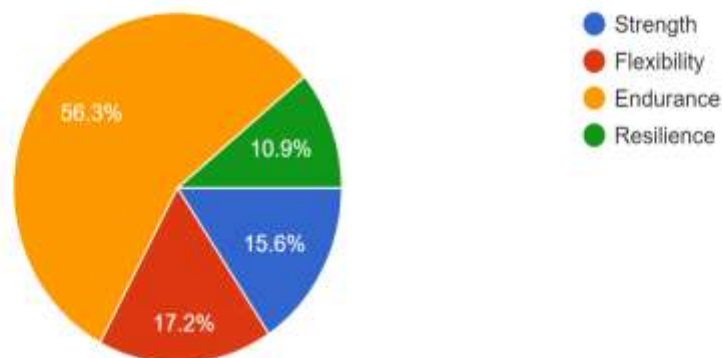
'My general physical health has deteriorated due to suspension of sporting activities .' How do you feel about this statement?

64 responses



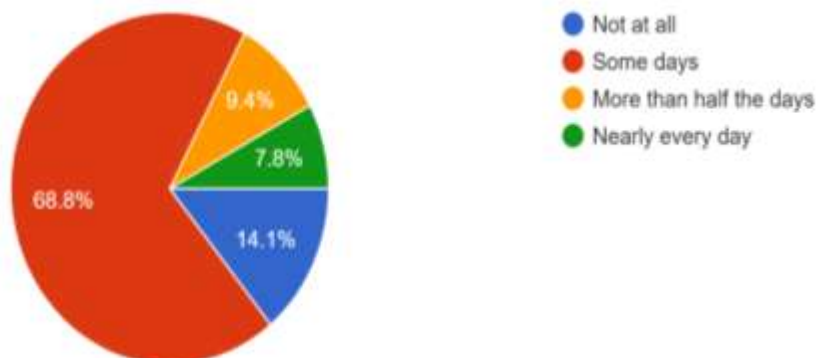
Which of the following aspects of physical fitness has been the most adversely affected, according to you?

64 responses

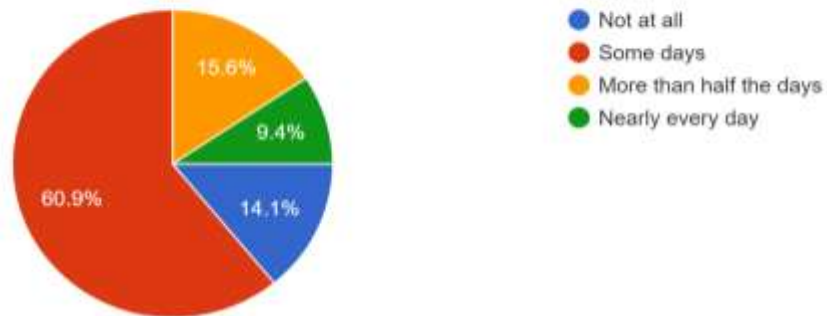


Has there been a loss of appetite or overeating due to absence of regular physical activity?

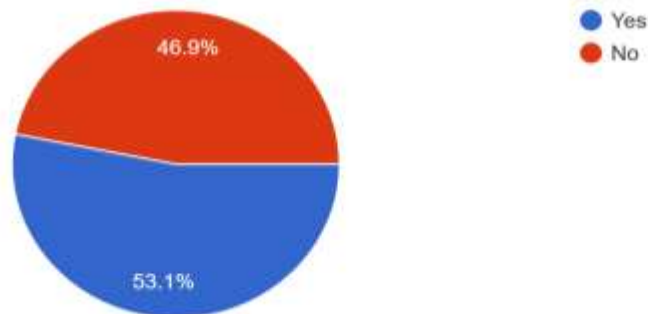
64 responses



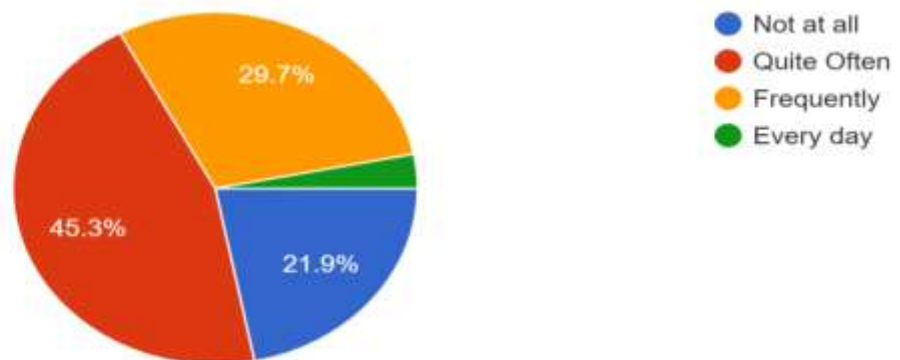
Have you been experiencing irregular sleep patterns due to lack of regular physical activity?
64 responses



Have you experienced fluctuations in your weight due to lack of regular physical activity?
64 responses

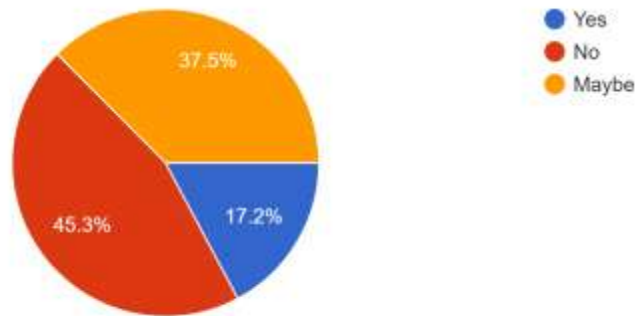


Due to zero or little physical activity, do you feel tired or lethargic?
64 responses



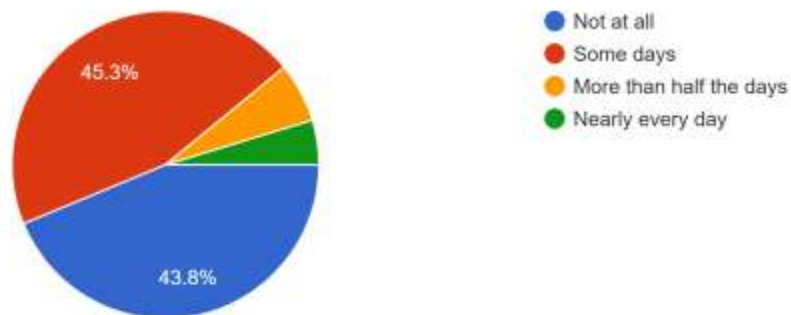
Has this deterioration of physical health had any impact on mental health?

64 responses



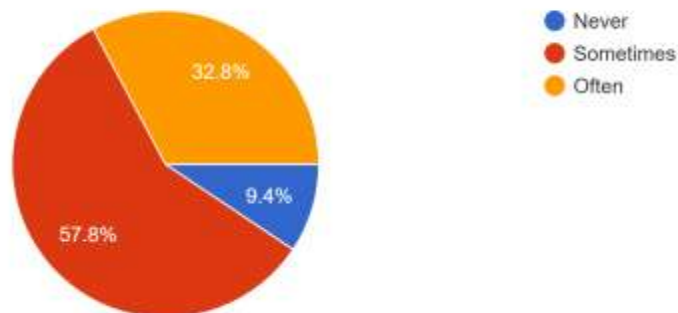
Has the current absence of Basketball from your life interfered with your ability to socialize?

64 responses



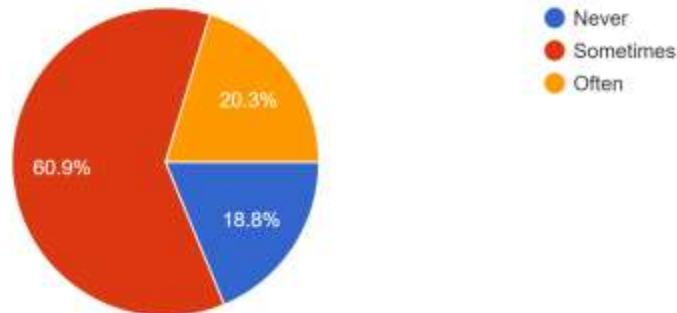
Without regular practice sessions, have you found yourself feeling fidgety or restless?

64 responses



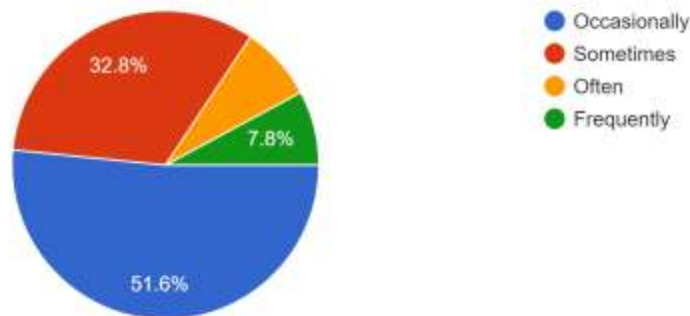
Due to the prolonged break from sports activities, are you having trouble concentrating on routine work?

64 responses



Has there been any adverse impact on your academic performance due to lack of involvement in sports?

64 responses



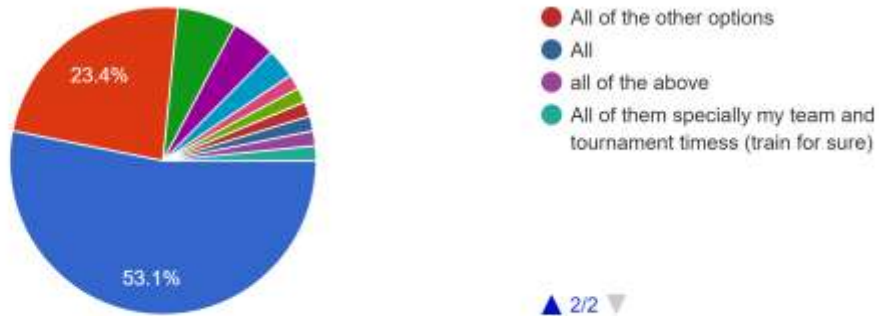
What would you say you miss the most about your sports life?

64 responses



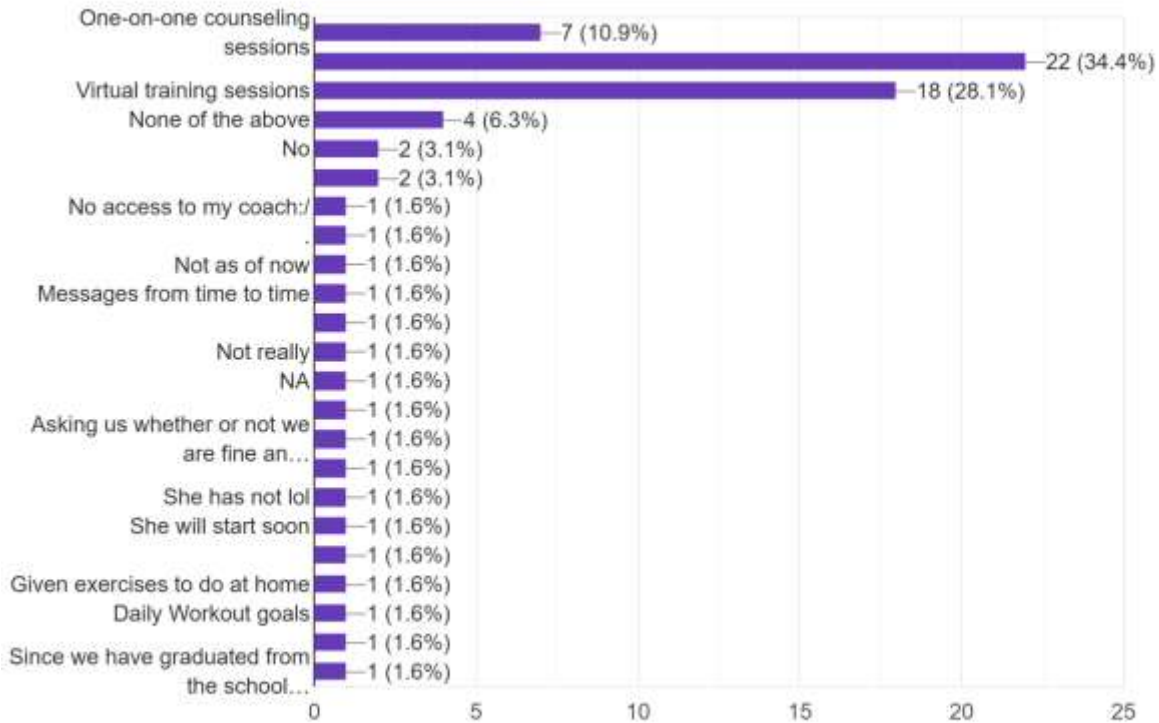
What would you say you miss the most about your sports life?

64 responses



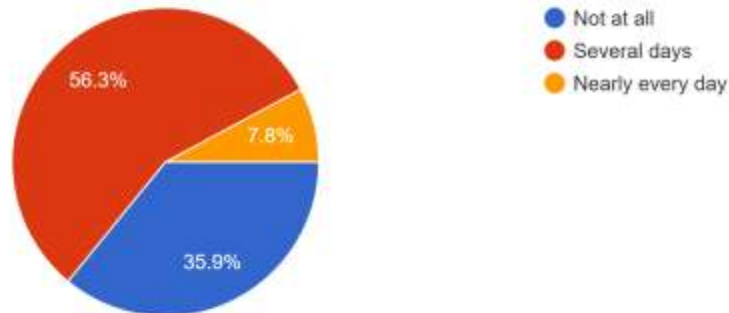
How has your coach helped you cope during this lockdown?

64 responses



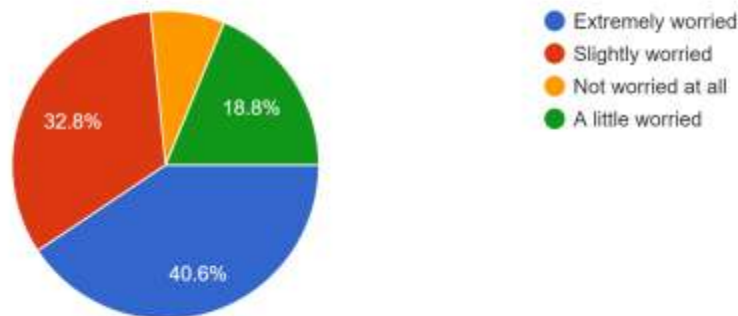
With the cancellation of basketball tournaments, have you had the feeling of being lost or aimless without these goals in the future?

64 responses



There is a lot of uncertainty regarding whether schools are even going to be having group sports teams events after the pandemic ends. How worried are you about your future in this sport?

64 responses



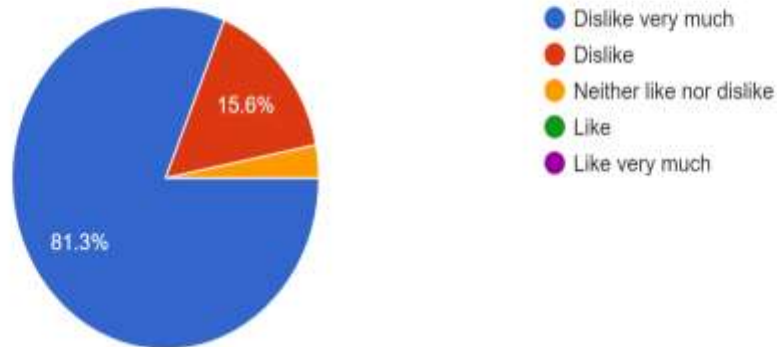
Group training and playing sports are going to look different after the pandemic ends from what we have been used to. Are you concerned to hear...ndamental changes in the way we play the game?

64 responses



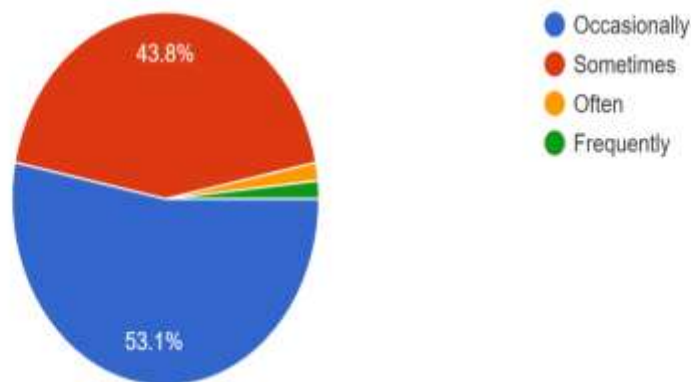
Covid-19 has led to the closure of all sporting activities. How do you react to the prospect of not playing basketball for the rest of the year?

64 responses



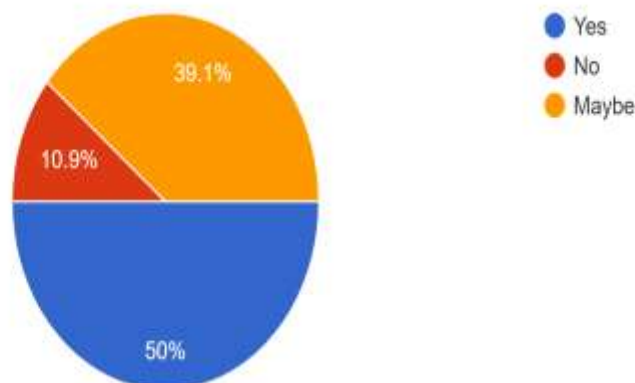
Have you thought of dropping the sport altogether?

64 responses



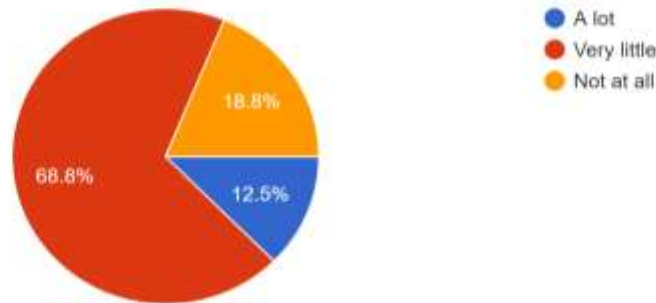
Post pandemic, would you be willing to adapt to the new safety measures which would probably be part of the basketball game? (Special protective clothing, head gear etc.)

64 responses



After the pandemic ends, the spectatorship would be considerably less than what it was before. Would this have any effect on your game?

64 responses



Which of the following most closely resembles the way you have taken advantage of the current pandemic situation?

64 responses



Discussion:-

The survey results have confirmed the hypothesis that the quarantine is having a detrimental effect on the mental and physical health of the athletes. Overall, 61% of the athletes devote 1-2 hours a week to physical training as opposed to the usual 12-14 hours of physical activity they participate in during training, playing, and fitness camps. Only 14% of the athletes responded to work out 7+ hours but still not as much as their regular schedule would require.

Long term detraining is usually induced by the cessation of regular physical activity for an extended period of time (more than four weeks). With the lockdown in effect for 4 months and counting, detraining has affected both physiological and physical features of the bodies of the athletes. Physiological effects are changes that are seen in the heart-vascular and respiration system. Physical effects are changes that occur in muscle strength and power, muscular endurance, speed, flexibility, and agility. 56% of the respondents agreed to have faced deterioration in physical health during the lockdown. Components of physical health that suffered the most declination are endurance (56% of athletes) and flexibility (17% of athletes).

Decreased endurance may predispose athletes to early fatigue, which has been agreed by 78% of the respondents. Various studies done in the past, show that, due to detraining, athletes also slowly lose their body's ability to use carbohydrates more efficiently, and metabolism may also begin to slow as muscle mass decreases and the body is no longer supporting a more active lifestyle. Under such conditions, around 85% of the respondents have reported having worse/irregular diets resulting in weight gain for nearly 53% of the respondents. 86% of the athletes have reported having irregular sleep patterns as well.

Besides these physical concerns, the mentality of the athletes has also been negatively affected. The self-identity of an athlete is largely tied to her ability to perform as a sportsperson. It has been hypothesized that a prolonged

interruption in playing at tournaments may subsequently affect the athlete's overall perception of herself. 64% admitted to feeling lost or aimless without any near-future goals (championships, nationals etc.) during the pandemic. For many athletes, physical activity serves as the ultimate coping method for dealing with psychological issues. In these athletes, a pandemic may result in even greater emotional upheaval. This has a direct correlation to disengagement from social life. 56% of the respondents said that not playing has affected their ability to socialize.

A necessary quality of an athlete is the ability to look at future goals and work towards them. Right now these future goals are unclear, and athletes are having trouble in their daily lives due to this uncertainty. 91% of the respondents feel quite restless and fidgety. 81% of respondents reported that they are having trouble concentrating on routine work, and nearly 48% reported that lack of involvement in sports has had an adverse impact on their academic performance, whereas 52% reported that it affects their academic performance on an occasional basis.

Athletes experience an identity and group affirmation from their team and the bonding they have with the teammates is the most important factor being missed by the players (almost 53%) during this time and are looking forward to their coaches for motivation and guidance. 34% have regular team meetings with their teammates over online platforms to keep in touch. Many athletes have redirected their attention to other forms of entertainment and education to keep busy: of all the respondents, 14% took an online course, 19% learned a new skill, and 41% spent quality time with family.

With no immediate end to the pandemic insight and great uncertainty regarding the status and safety of the sport when it does start, there are understandable uncertainties and anxieties amongst the athletes. 81% strongly dislike and 16% dislike the idea of no basketball for the rest of the year and 98% of the athletes are very concerned about the changes that will be made to the sport upon restart. While 50% of the athletes said they would comply with new safety measures required to play, the excitement and optimism amongst them are low. The extremely worrying finding is that the idea of quitting the sport due to this anxiety and uncertainty occurs to 53% of the athletes occasionally and 44% of the athletes sometimes.

Conclusion:-

The COVID-19 pandemic has had and will continue to have very significant effects on the sporting world and by extension, the physical and mental well-being of athletes around the world. The results of the survey reveal that most of the basketball athletes are at substantially lower levels of fitness compared to previous levels. With just one to two hours of physical activity per week, the ramifications on physical and mental health of the basketball players are far from straightforward. Several issues, ranging from irregular diets and sleeping patterns to lethargy and fatigue, have affected the athletes at varying intensity. Other problems such as lack of concentration on academic responsibilities and feelings of anxiousness due to their uncertain future in basketball.

There are many unanswered questions and many more will arise as we understand our circumstances better. For example, whether players affected by COVID-19 will experience any long-term effects on their health or game performance is unknown, or if new rules and guidelines will be enforced to comply with new preventive measures in the game. The need of the hour is to conduct more research to have effective plans ready for the restart. The sports management faculty needs to help athletes adapt to this new situation and focus on personal development. The athletes should keep themselves updated on the pandemic, as well as develop a routine to have proper sleep, limit screen timings, exercise regularly and consume a healthy diet, allocate time for academics and recreational activities, take up a new hobby etc. Additionally, innovative plans need to be formulated to administer the safe re-opening of sporting events and tournaments following the pandemic.

But we must stay positive and (virtually) together during these difficult times. We understand now more than ever that sports keep our body and mind healthy and bring us together. On a concluding note, we hope for the day when athletes will return to their playing fields and sports once again will become the symbol of exuberance, inspiration, and camaraderie.

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