

Influence Of Mindfulness On Perceived Stress And Mental Well-Being Among Student Athletes During Lockdown

G Chitrarasu* V.M.Abirami**& S Karunanidhi***

Abstract

The Covid-19 pandemic Lock-down had imposed many restrictions. Although the lockdown was intended to protect the people, it has its own downsides causing lot of stress especially among athletes. The aim of this study is to find the relationship between Trait Mindfulness, Perceived stress and Mental Well-being among student athletes. In addition, the study also explores the stress experienced by these student athletes during the lockdown period, factors that contributed to their stress and the coping strategies they used. Mixed method (QUAN-Qual model) was used to conduct the study. Student athletes of both U.G and P.G level participating in various sports from various Colleges/Universities in the Chennai city were surveyed. Mindful Attention Awareness Scale (MAAS), Perceived Stress Scale (PSS), Warwick Edinburgh Mental Well-being Scale (WEMWBS) and a few open-ended questions prepared by the researcher were used to collect the data. The findings of the study reveal that mindfulness is a significant predictor of wellbeing among students' athletes. Moreover, the major themes emerged in the qualitative analysis of factors responsible for stress were practice disruption, restricted movement, interpersonal problems, financial problems and emotional problems. Thus, the study highlights the importance of mindfulness training to enhance the level of Mental Well-being and better coping among student athletes.

Keywords: Mindfulness, Perceived stress, Well-being, Pandemic, Student-Athletes.

Introduction

The COVID-19 pandemic lockdown¹n was something new which has imposed a lot of restrictions in our daily activities. This could be a source of stress and requires adjustments in lifestyle to maintain the well-being of an individual. The imposed restrictions were stressful especially for people who are involved in sports. Engaging in any kind of sport requires certain infrastructure which can give optimal atmosphere for training and practice. Due to the lockdown restrictions, student athletes were confined within the four walls of their home. Usually, these people are more active physically which was disrupted due to restricted movement that could in turn impact their maintenance of their physique and stamina required for the sport they are engaged. Also, in city and suburbs the physical space has shrunk due to the density of population which is not conducive for training and practice.

*Ph.D Research Scholar, Department of Psychology, University of Madras, Chennai-05.

**Ph.D Research Scholar, Department of Psychology, University of Madras, Chennai-05.

***Emeritus Professor, Department of Psychology, University of Madras, Chennai-05.

Most of the student athletes come from a middle class or from low economic background. For such athletes it is highly impossible to afford personal equipment required for practice. Even for those who could afford, missing the usual way of practicing and adapting to the “new normal” would take time and effort. Another important aspect is the lack of training that these athletes get from their coaches. They need regular monitoring and inputs from their coach in order to improve or maintain a certain standard of performance. Also, many student athletes have planned their career based on the sport they are involved in. These restrictions made the situation very uncertain for this group of people and could cause lot of anxiety as they don’t know how long it will take for them to resume their activities.

In addition, many student athletes also faced lots of financial constraints to begin with. In this situation, their family also could not support them financially. All these factors can lead to poor mental wellbeing and increase the level of stress experienced among student athletes. And also, research studies to promote athlete health and performance is conventionally focused on the physical aspects of injury, practice and training, performance enhancement, the shift to the mental aspects of athlete health, is emerging rapidly in recent times [1–7]. In this scenario, this study is an attempt to explore whether being mindful can act as a buffer in maintaining better psychological functioning of the athletes.

Mindfulness is defined as the “kind of nonelaborative, nonjudgmental, present-centered awareness in which each thought, feeling, or sensation that arises in the attentional field is acknowledged and accepted as it is[8]. Studies have demonstrated that practicing mindfulness can have a positive impact on the mental wellbeing and can be helpful in dealing with stressful situations[9,10]. Though mindfulness meditation has significant benefits for positive mental health outcomes in various clinical population, adolescent population, working population, the research has also explained how mindfulness may boost athletic performance, improve mental health, and possibly even ease recovery from injuries [15]. Further, interventions based on mindfulness have been found to have a positive effect for minimizing negative thoughts and decrease the levels of perceived stress[12-15]. Moreover, regular practice of mindfulness has been found to reduce pandemic-related stress, depression and anxiety. Also, mindfulness intervention helps to alleviate the psychological distress caused by lockdown and restrictions [16]. Furthermore, a study conducted by Conversano et al., (2020) found that high dispositional mindfulness improves well- being and effectively deal with stressful situations such as the COVID-19 crisis. All these studies clearly indicate the effect of mindfulness on reducing stress and enhancing wellbeing. Thus, mindfulness can be a protective factor that can help student athletes to better cope and maintain mental well-being during stressful conditions. Gustafsson et al.,(2015) in his study also found that practicing mindfulness reduces burnout and enhances positive affect among athletes.

Aim

- 1) To find the relationship among Dispositional mindfulness, Perceived stress and Well-being among student athletes.
- 2) To find the influence of Dispositional mindfulness on Mental well-being and Perceived stress among student athletes.
- 3) To explore the level of stress experienced, factors that contributed to stress and coping strategies adopted by student athletes.

- 4) To explore the association between Dispositional mindfulness and Stress experienced during lockdown.

Materials and Method

Study design

Mixed method research design was used.

Participants and Procedure

Student Athletes involved in various sports studying Undergraduate (UG)& Post graduate (PG) in various colleges in Chennai city between the age group of 17 to 25 years. A total of 100 student athletes participated in the study. Purposive sampling method was used. The colleges in Chennai city were approached for permission to collect data. After getting approval, students involved in sports were surveyed using the questionnaires.

Measures

Mindfulness was measured using Mindful Attention Awareness Scale (MAAS), trait version. The scale consists of 15 items with the Cronbach alpha value of .90. Perceived Stress Scale (PSS) was used to measure the stress perceived by the student athletes. The PSS consist of 10-item scale which measures perceived stress in the past month with the Cronbach alpha value of .78. Mental wellbeing was measured using Warwick Edinburgh Mental Well-being Scale (WEMWBS). The scale has 14 items with the Cronbach alpha value of .87. The qualitative data was collected using open ended questions related to lockdown. The participants were asked to rate the level of stress they experienced during lockdown and the major factors that made them feel stressful and factors that helped them cope with the situation.

Statistical Analysis

The data were analyzed using Pearson product moment correlation, Linear Regression, chi-square and Content analysis. As there was lack of equal representation of male and female participants, gender differences were not taken into consideration.

Results and Discussion

Characteristics of the participants

The participants of the study were from the age group of 17 to 25 years including both male and female. The number of male participants is greater than the female participants (Male=77, Female=23). Majority of the participants were pursuing their undergraduate degree (UG=72; PG=28). Both individual and team sports players participated in the study. The various types of sports played are Athletics, Cricket, Football, Table tennis, Tennis, throwball, Kho-Kho, basketball, Kabaddi and Volleyball. Many of the players participated at state and national level competition.

Table 1 Correlation among Mindfulness, Perceived stress & Mental Well-being

	Mindfulness	Perceived Stress	Mental Well-being
Mindfulness	1	-.164	.330**

Perceived Stress		1	-.125
Mental Well-being			1

** significant at 0.01level

The correlation among the variables reveals that there is a significant relationship between dispositional mindfulness and mental well-being of the student athletes. This indicate that being mindful can have an positive impact on maintaining well-being especially during stressful situations (19,20). Although, there is no significant relationship between dispositional mindfulness and perceived stress in this study, the analysis shows a negative relationship between them. It can be interpreted that being mindful can lower the stress level.

Table 2 Linear Regression Coefficient, Beta Value and ‘t’ value

Variables	N	R	R ²	F	Standardized beta Coefficients	‘t’ Value
Mindfulness	100	.330	.109	11.85**	.330	11.336**
Well-Being						

**significant at 0.01 level

A linear regression was computed to predict the mental wellbeing based on the dispositional mindfulness. The regression equation ($F(1,98) = 11.85, p = 0.01$) was found to be significant which indicates that dispositional mindfulness plays an important role in maintaining mental wellbeing among the student athletes. Moreover, the results also indicate a direct positive effect of dispositional mindfulness on mental wellbeing. Further, the $R^2 = .109$ value depicts that the model explains 10.9% of the variance in Mental well-being among student athletes.

Table 3 The association between Trait Mindfulness and Stress experienced during Lockdown

Mindfulness	Stress experienced during lockdown				X ²	df	p
	Low	Moderate	High	Total			
Low	4	5	9	18	10.381	4	0.034*
Moderate	5	16	12	33			
High	17	23	8	48			
Total	26	44	29	99			

The Chi-squared analysis was carried out to find out the association between level of mindfulness and stress experienced during lockdown among student athletes. The results indicate a significant association between dispositional mindfulness and stress experienced during lockdown. Dispositional mindfulness has moderate effect on stress experienced during

lockdown. This highlights the importance of mindfulness in reducing the stress and maintenance of mental wellbeing.

Content Analysis

Qualitative analysis was carried out to explore the factors contributing to stress among student athletes during lockdown and the coping strategies that helped them to cope with those stressors. Majority of the students reported that missing out their regular practice was very stressful. For a sports person adopting to a sedentary lifestyle and unable to follow a routine is not an easy situation to adapt.

Table 4 Factors contributed to stress during lockdown among student athletes

Major categories	Description	Significant Statement Example
Practice disruption	Missing out the regular sessions.	Lack of cricket practice and matches (HR, Male, 19 years). Can't to do practice and regular activities at the time (SS, Male, 20 years).
Restricted movement	Confined inside the home due to lockdown.	I was not able to see other people often and was not able to roam freely (RM, Male, 22 years). Being locked in home without doing any work made me stress (MK, Male, 21 years).
Interpersonal Problems	Not able to meet and interact with other people due to lockdown.	Missed many of my friends and worried (DD, Female, 19 years) Not able to go out, meet friends, felt caged (CA, Male, 20 years)
Financial problems	Inability to meet financial requirements.	First thing financial problem in home can't able to practice football in Academy (J.K, Male, 19years). Was Not able to do training, as well as economic situation of the family and ours future. (RM, Male 23years).
Emotional Problems	Feeling of loneliness and uncertainty.	Psychological problems like feeling lonely sometimes (KP, Male, 20 years). Not being able to meet my parents, the list of deaths that kept increasing, the unawareness of when all of this would end (RP, Female, 20 years).

And also, restriction of movement can interfere in maintaining their physique, stamina and endurance required for their sport. As many of the participants are not financially independent and they do not have access to equipment needed for their practice. Moreover, most of the participants reported that their interpersonal relationship was seriously affected due to the restrictions imposed. This also led to feeling of loneliness and created lot of stress among student athletes.

Data analysis indicated social support as one of the major coping strategies that helped to cope up with stress experienced during lockdown. Participants perceived that they had quality time to spend with their family and relatives. They also reported having meaningful and

longer conversations with their family. Another, major coping strategy used by the participants were learning new skills and engaging in hobbies which helped them for self-improvement. By establishing a routine some participants were able to manage their time productively, which made them feel better about themselves. Some of the participants also adapted their home environment to continue their regular work-out & training and keeping up their physique and stamina required for their sport. A study carried out by Pété et al., (2021) found that athletes with different coping mechanisms (self-reliant, engaged, avoidant, active and social) varied on level of anxiety, stress appraisals, perceived social support, and interpersonal coping. The present study also confirms that participants engaged in active coping mechanisms experienced better well-being.

Table 5 Coping strategies used by the student athletes.

Major categories	Description	Significant Statement Example
Social support	Perceived support from family and friends.	“Spending time with parents and cousins (MM, Male, 22 years) Had time to figure out what to do next and had time to spend with the family for a good understanding and happiness (JBD, Male, 21 years).
Exercise	Work-out to maintain good health.	Build up my body and physique (J, Male,22years) “Home workout !! Some games !! Spending time with family (BN,Male, 18 years)
Learning new skills	Acquiring new skills to gain more knowledge and self-growth.	I started to learn about new things,Focused on my interests, had more time for self improvement(SMG, Female, 22 years) “I have learned somethings new during lock down which are useful for me” RR, male, 20 years I actually spent a lot of time studying new stuff which actually felt happy about (JD, Male 18 years).
Time management	Establishing a routine to use the time effectively.	I set my self a routine and a check list to be followed everyday and I made sure at least 70 percent of the work is done. This reduced procrastination and helped me focus with whatever I'm doing (PS, Male 20 years) Made few goals every week and achieve the target helped me feel good (RA, Male, 19 years)
Hobbies	Engaging in new activities for fun and entertainment.	Doing craft works, drawing, attending online webinars to learnnew things (HN, Female 20 years) Gardening, movies, books (SD, Female 22 Years).

Limitations

Sample size is limited which reduce the possibility of generalization. Equal representation of male and female could have helped understanding the gender differences.

Conclusion

In conclusion, the study points out that mindfulness can have a positive influence on Mental well-being of student athletes. And mindfulness is associated with stress experienced during lockdown by student athletes. Though, many of the participants experienced stress during lockdown they were able to use different coping strategies to maintain their well-being. Those who were high on dispositional mindfulness were able to cope better.

Implications

Mindfulness training can be given to enhance the level of Mental Well-being of student athletes. Coaches can give equal importance to the mental well-being of the players through incorporating mindfulness techniques.

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