

Investigating The Influence Of Covid-19 Pandemic Lockdown On Perceived Stress, And Coping Strategies Used By Intervarsity Level Athletes In Pakistan

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Abstract

Since World War II, the COVID-19 pandemic has caused the most massive disruption to the global sporting calendar. All over the world, recreational and professional sporting events on campus have been suspended or delayed. Athletes have been deprived of training in an appropriate atmosphere resulting of the emergency alert, while major events in their sporting careers have also been cancelled. This scenario might contribute to high levels of stress and other emotional issues. The current COVID-19 pandemic situation is a yet another worldwide threat. To minimize the exposure, numerous governments have implemented lockdown and physical distancing measures, which might have adverse impact on people's mental health. The objective of this research was to investigate the link between perceived stress and stress coping strategies in COVID-19 lockdown in a student athletes population (aged 18–28 years) via an online survey (N = 300). The results showed that athletes have face moderate to high level stress and significant negative relationship between athletes' usage of coping techniques $p < 0.001$. The findings will strengthen the literature and help to shape future research into the importance of stress management in stressful situations.

Keywords: Stress, coping strategies, pandemic, University level, athletes

INTRODUCTION

The first occurrences of corona virus (2019-n CoV, also known as COVID-19)-related lung disease were reported in Wuhan, China, December 2019 (Yang et al., 2020) Since then, the illness has spread to other areas around the globe outside China's borders. In March 2020, COVID-19 was officially listed a global pandemic, confirming the disease's threat to human health and well-being. The COVID-19 outbreak is a momentous situation in practically

everybody's life has had a significant influence on the public perceived stress level. Many researches on the relationship between coping and epidemic response in current and prior outbreaks revealed that a greater stress level among people. COVID-19 has attacked over 4 million people in over 200 nations and regions; over 278 thousand people have died as a result of the outbreak (WHO, 2020).The COVID-19 epidemic has harmed the psychological and physical well-being of people all around the

world (Tanne et al., 2020; Rosenbaum et al., 2020; Akour, 2020). People may experience more stress when important life incidents happen. When people see a situation as stressful and are unable to cope with the stimuli, stress can have a detrimental impact on their well-being or ability to perform (Roddenberry, 2010). USA, UK and European countries most hit by the corona virus's long-term and broad spread. Among middle-income countries, Pakistan, Thailand, the Philippines, and Malaysia had the highest rates of depression, anxiety, and stress (Wang C, 2021). As a consequence for the Pakistan government and citizens this crisis has been a huge challenge. Specifically to the athletic world, as well as athletes' lives, plans, and habits, have been influenced by the crisis. Social isolation, employment disruption, restricted, and restriction to training session, venues, and teammates have all been highlighted as obstacles and issues by athletes (Schinke et al., 2020). In accordance with the literature on the consequences of prior epidemics on mental wellbeing (Mak et al., 2009), the worldwide evidence to date linked to the COVID-19 pandemic indicated that the epidemic and associated methods to manage it may be contributors of psychological trauma (Rossi et al., 2020; Torales et al., 2020). Moreover, multiple studies have found that all of the characteristics linked to COVID-19 are associated with greater levels of anxiousness, which are directly related to a sense of isolation, fear, and uncertainty, as well as misunderstanding or overexposure to death accounts (Qiu et al., 2020; Ren et al., 2020; Rosen et al., 2020). As a consequence of the potential clinical application (Muller et al., 2020), a substantial research line has concentrated on the hazard factors for mental wellbeing during the epidemic, for instance attachment types or degrees of alexithymia have previously been identified as important determinants for mental health Caretti et al., 2018; Craparo et al., 2018; Pellerone et al., 2017). Everyone experiences anxiety on

occasionally during challenging situations; nevertheless, it is difficult and clinically significant to endure high levels of panic over long periods of time (Tanner, 2012). Numerous research have found that protracted stress promotes the negative health impact (de Kloet & Joëls, 2020; Glodosky & Cuttler, 2020)

In the sports settings, earlier researches have revealed that the presence of coaches, coaching staff members, friends, fellow players, and parent might impact coping resources and psychological adjustment (staff et al., 2020). The COVID-19 widespread has the potential to trigger considerable or as unexplained career devastation, subjecting athletes to tense situations and adversely affecting their health and wellness. A better knowledge of how student athletes perceived & handled COVID-19 outbreak situation is therefore crucial, most importantly the uncommon nature and possible psychological consequences. In the context of pandemics, some defense mechanisms (self-care, daily routines) seemed to shield the general public from mental distress more than others (Dawson & Golijani, 2020; Chew et al., 2020; Fullana et al., 2020). However, very little recognized the coping mechanisms utilized primarily by sportspersons to deal with the effects of the COVID-19 outbreaks, in addition to their efficiency in lessening its possible psychological consequences (Makarowski, R, 2020; Leguizamo, F, 2021; Pete, E. et al., 2021; Szczypińska, M., 2021). In compliance with the previous researches, the current study is conducted in the light of the literature that is concerning the impact of pandemic-related preventative measures on psychological outcomes, enhancing the existing perspective on coping skills for psychological health. More notably, the current study sought to examine perceived stress and coping methods employed by Pakistani intervarsity athletes with a special

emphasis on during the phase of Covid-19 pandemic lockdown.

METHODOLOGY

Research Design

In this study, a cross-sectional method was used with online questionnaires designed and developed in Google Forms®. Data was collected between 5th May to 30th May, 2020 during one of the most stressful early stages of the COVID-19 epidemic situation in Pakistan, when the lockdown was imposed, all universities academics, co-curricular activities were closed. The physical teaching was transferred to internet remote teaching.

Participants

Student athletes who were consented to take part in the study have voluntarily filled the questionnaire during the course of the study total 300 University student athletes' participated in this research. The descriptive statistics and the correlation analysis were applied to investigate the PSS and Brief COPE scores across the participants.

Sampling

The present study carried out the snowball sampling technique.

Data Collection tool

To measure stress level the perceived stress scale (PSS) developed by Cohen et al. (1983) were adopted and to investigate coping strategies used by intervarsity athletes Brief COPE questionnaire (Carver, 1997) has been used for present study. PSS was established in 1983, the tool continues to be a popular choice for assisting in better understanding how different events influence our thoughts and stress levels. The PSS has satisfactory psychometric properties with Cronbach's alpha value of 0.78. The responses to the statements were assessed on a 5-point Likert scale (from 0 to 4). The Brief COPE is a shortened questionnaire that comprised of 28 statements that assess coping and cognition regulatory processes in response to stressful scenarios on a scale of 1 to 4, with 1 indicating "I haven't done this at all" and 4 indicating "I have done this a lot."

Procedure:

The Respondents filled out an online questionnaire by using the Google Form tool. It took around 20 and 25 minutes to complete the forms. Before commencing the questionnaire, all participants were made aware of its objectives and their consent was obtained.

Results

Table 1: Socio demographic characteristics of the study participants

Variable		Frequencies
Sex	Male	180 (60.51)
	Female	120 (40.45)
Age (Mean, SD) years	Male	20.55±1.60
	female	

Total 300 male and female athletes have participated in this study. The mean and standard deviation of the participants' age were 20.55 (± 1.60) years and the frequencies of male and female were 180 and 120 respectively.

Table 2: PSS mean and SD score

PSS items	Average score (mean $\pm$ SD)
In the last month how often have you been upset because of something that happened unexpectedly?	2.39 $\pm$ 0.52
In the last month how often have you felt that you were unable to control the important things in your life?	2.79 $\pm$ 0.40
In the last month how often have you felt nervous and stressed?	2.23 $\pm$ 0.43
In the last month how often you felt confident about your ability to handle your problems?	2.60 $\pm$ 0.48
In the last month how often have you felt that things were going your way?	2.41 $\pm$ 0.50
In the last month how often have you found that you could not cope with all the things that you had to do?	1.58 $\pm$ 0.49
In the last month how often have you been able to control the irritations in your life?	3.58 $\pm$ 0.48
In the last month how often have you felt that you were on the top of the things?	3.58 $\pm$ 0.39
In the last month how often have you been angered because of things that were outside of your control?	1.84 $\pm$ 0.49
In the last month how often have you felt difficulties were piling up so high that you could not overcome them?	3.66 $\pm$ 0.39

The above table showed that statement, 'In the last month how often have you felt difficulties were piling up so high that you could not overcome them?' has attained the highest score with mean (3.66) and SD value (± 0.39) and the second highest statement, 'In the last month how often have you been able to control the irritations in your life?' score are mean (3.58) and SD value (± 0.39)

Table No:3 COPE mean $\pm$ SD score

Cope subscales	COPE Items	Average score (mean $\pm$ SD)
Problem focused coping	I've been concentrating my efforts on doing something about the situation I'm in	3.18 $\pm$ 0.50
	I've been taking action to try to make the situation better	1.90 $\pm$ 0.53
	I've been getting help and advice from other people	2.23 $\pm$ 0.83
	I've been trying to see it in a different light, to make it seem more positive	1.74 $\pm$ 0.43
	I've been trying to come up with a strategy about what to do.	2.30 $\pm$ 0.79
	I've been looking for something good in what is happening	1.69 $\pm$ 0.49
	I've been trying to get advice or help from other people about what	2.20 $\pm$ 0.69
	I've been thinking hard about what steps to take.	1.59 $\pm$ 0.49
Emotion-Focused Coping	I've been getting emotional support from others.	1.93 $\pm$ 0.39
	I've been saying things to let my unpleasant feelings escape.	3.08 $\pm$ 0.99
	I've been criticizing myself	2.04 $\pm$ 0.53
	I've been getting comfort and understanding from someone	1.81 $\pm$ 0.56
	I've been making jokes about it.	1.95 $\pm$ 0.59
	I've been accepting the reality of the fact that it has happened.	1.69 $\pm$ 0.46
	I've been expressing my negative feelings.	1.86 $\pm$ 0.77
	I've been trying to find comfort in my religion or spiritual beliefs.	2.14 $\pm$ 0.93
	I've been learning to live with it.	1.66 $\pm$ 0.47
	I've been blaming myself for things that happened	1.53 $\pm$ 0.49
	I've been praying or meditating	3.59 $\pm$ 0.49
	I've been making fun of the situation	2.04 $\pm$ 1.00

Avoidant Coping	I've been turning to work or other activities to take my mind off things.	2.11±0.93
	I've been saying to myself "this isn't real".	2.05±0.10
	I've been using alcohol or other drugs to make myself feel better	2.01±0.30
	I've been giving up trying to deal with it	2.04±0.45
	I've been refusing to believe that it has happened.	2.40±0.49
	I've been using alcohol or other drugs to help me get through it.	2.58±0.49
	I've been giving up the attempt to cope.	1.76±0.53
	I've been doing something to think about it less, such as going to movies, watching TV, reading, daydreaming, sleeping, or shopping	3.58±0.49

The above table showed that athletes used different kind of coping strategies during COVID-19 lockdown related stress situation. Emotional coping strategy “I've been praying or meditating “ has been used mostly among athletes with high mean (3.59±0.49), avoidant coping

strategy attained second highest mean score (3.58±0.49) “I've been doing something to think about it less, such as going to movies, watching TV, reading, daydreaming, sleeping, or shopping”.

Table 4: The frequencies and percentages distribution of the sample group based on perceived stress

Perceived stress	Frequencies	Percentages
Low stress	0	0
Moderate stress	233	77.67
High stress	67	22.33

According to the above table, 77.67% of the study sample reported moderate stress, while 22.33% of the students experienced high stress.

Table 5: The frequencies and percentages of the sample group distribution based on coping strategies

Coping strategies	Frequencies	Percentages
Poor use of coping strategies	0	0
Average use of Coping strategies	40	13.33
Good use of coping strategies	260	86.67

The above table showed that 86.67% athletes are having good coping strategies whereas 13.33% students are having average coping strategies.

Table 05: Perceived stress and Coping strategies determined by the correlation 'r' value.

		Problem focused	Emotion focused	Avoidant coping strategy	
stress	Pearson Correlation	-.210**	-.294**	-.269**	
	Sig. (2-tailed)	.000	.000		.000
	N	300	300	300	

P<0.001

The above table showed that based on 300 observations correlation coefficient for stress with coping strategies (Problem focused, Emotion focused, and Avoidant coping strategy) -.210, -.294, and -.269 is significantly negative ($p < .001$ for a two-tailed test).

DISCUSSION

The onset of the COVID-19 pandemic transformed the operations and structure of the world and impacted over almost every component of human functionality. A pandemic condition is a potent environmental source of stress that has an impact on community and can be viewed as an extraordinary circumstance that causes trouble for every person who is subjected to it (Heszen, 2014). Psychologists are interested in stress management since the efficiency of this approach benefit greatly the healthcare spending of a stress interaction (Antonovsky, 1979). During COVID-19 the common worries about one's own health and the health of their family have been worsened by decreased finances. Also, personal networks, job, transportation, leisure activities, and regular exercise have all seen substantial changes. Limiting training chances and postponing or cancelling sporting events constituted a big difficulty for professional athletes. The epidemic has highlighted the crucial human concerns of survival and well-being. The weight change, exercising at home, monthly income thoughts, and impaired performance were

some of the main causes of stress for athletes (Yamen, 2021). During the COVID-19 epidemic, university and college students typically regarded as a vulnerable population and have become more likely to be subjected to a wide range of stresses Schinke et al., 2020; Taku & Arai, 2020 that can lead to uncertainty and lacking in career direction (Samuel et al., 2020). Therefore, the purpose of the study was to investigate the perceived stress level and coping strategies used by university athletes during COVID-19 lockdown. This study has substantial limitations that should be considered when evaluating the findings. Firstly, the study has used snowball sampling technique because due to lockdown physical visits were not possible. Secondly, data has not been gathered in different phases of COVID-19 waves. Furthermore, this study did not consider at gender and socioeconomic variables. Nevertheless such limitations, this research has certain benefits and contributes significantly to a better understanding of stress level and use of coping strategies during the COVID-19 lockdown in intervarsity level athletes. The finding revealed that the COVID-19 crisis is seen as a stressful situation among university athletes and results are consistent with the Pargament (2010) that in adverse situations, people typically rely more firmly on religious resources and people who felt more uncertain about the epidemic were more tend to use avoidant coping strategies (Wang et al., 2020; Zacher & Rudolph, 2020). The COVID-19

outbreak has been recognized as dramatically depressor of neuron endocrine-immune mechanism (Cao, 2020), which can trigger stress and stress sensitivity. Inactivity, isolation from sports playmates, detachment from the athletic environment, no interactions with athletic trainers, and a lack of support from others have all been associated with emotional discomfort and psychiatric illnesses in student athletes. To recapitulate, in severe situations or unexpected situations, health experts and sport organizations must identify their objectives and establish measures to ensure university athletes health and their sports participation.

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CONFLICT OF INTERESTS

The researchers have asserted that there are no conflicting interests.

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