

Role of Exercise in Regulating Emotions and Social Well-Being: A Qualitative Study among the Athletes of Mizoram

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ABSTRACT

Background: This research is introspective in nature focusing on the effect and extent to which exercise has on the emotional and social wellbeing of athletes in Mizoram. Raising questions on just to what extent exercise help in regulating the various stressors focusing on the emotional and social aspect.

Methodology: Qualitative Interview was done on 12 participants, all residing in Mizoram and are in the field of professional football.

Results: The participants are players of the men's second tier of the Indian Football league system. Further, it shows that exercise plays an immense role in the regulation of the different aspects of life in these athletes.

Conclusion: Further studies with larger participant sizes in this area are warranted.

Keywords: Athletes, exercise, mental health, physical, effects, well-being.

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INTRODUCTION

Physical Activity

What does it mean by being physically fit, and taking exercise seriously? According to the definition given by the World Health Organization, "Physical activity is any bodily movement produced by skeletal muscles that requires energy expenditure. Including all during leisure time, for transport to get to and from places, or as part of a person's work. Both moderate- and vigorous-intensity physical activity improve health." These include the activities that require any kind of activation of muscles, that uses energy and burns it. These activities include activities of different kinds of sports, football, basketball, track and field, etc. And not only that, it is as mentioned any bodily movement, which also includes dancing, workouts in the gym even if they are not professional athletes. At one point of time in our life we all have had an encounter with exercise, be it just singing and dancing out with friends, as we sweat while having fun, we use our energy to do the activity, which in turn becomes physical activity that gives a benefit, which is, improving health. There have been many studies that demonstrate that there is a relationship between physical activity and effects that are seen on the brain. In a study done by Christie and colleagues in 2008 [1], it is stated that physical activity or exercise directly affect the synaptic structure and the potentiating synaptic strength thereby increasing the synaptic plasticity, theses functional and structural change has been best studied in the hippocampus. Therefore, it was stated that through the regulation of growth factors, exercise ensures better brain function.

Effect on the Cardiovascular System

The cardiovascular system is made up of the heart, blood and the blood vessels which are the arteries and veins. Providing adequate amount of blood circulation through the body is the main purpose of the system. Having two main loops called the systemic circulation – pumps to provide the oxygenated blood to and the pulmonary circulation, allowing for the oxygenation of the blood. By responding to various stimuli, can control the velocity and amount of the blood carried through the veins [2]. With an increase in the amount

of activity there is a decrease in the risk of contracting cardiovascular diseases, such as stroke, coronary heart diseases, etc, which decreases the functionality of an individual.

Emotion

Next, what are emotions? According to the definition given by the American Psychological Association [3], "Emotions are conscious mental reactions (such as anger or fear) subjectively experienced as strong feelings usually directed toward a specific object and typically accompanied by physiological and behavioural changes in the body". According to Don Hockenbury and Sandra E.Hockenbury, it is "The complex psychological states that involve three distinct components; a subjective experience, a physiological response, and a behavioural or expressive response." [4] As humans we feel different emotions because of our experiences with the situation we are in.

Social

Being social is interacting with other people and being in a relationship that benefits both people together. As humans, we live in a society that needs to be social to form relationships, it is even more important to be healthy in the way of interacting together.

Well-Being

According to the definition given by the World Health Organization, it is the "State of well-being in which the individual realises his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community" [5]. Social well-being is an end state in which basic human needs are met, and people can coexist peacefully in communities with opportunities for advancement.

The big portion of having good mental health is the process of coping with those stressors. In what ways are we regulating the emotions, moods and our reaction to triggers and situations, hence, we will be taking about one of the things that people do to cope with changing moods or frame of mind. Talking about the benefits of exercise, there is no doubt that physical activities do help in regulating emotions.

In a meta-analysis done by Emily E. Bernstein & Richard J. McNally, it was stated that, 'more active individuals reported greater coping self-efficacy or perceived ability to cope with stressors or negative mood, than did fewer active peers [6]. Participants were made to answer self-report questionnaires and were randomly assigned to perform 30 mins of cycling, after which they underwent a stressful task followed by a recovery period where they were assessed, of deep thought and reporting of difficulties of emotion regulation. It was also found that people who engaged more in aerobic exercise are associated with fewer or less severe symptoms of depression, anxiety and general stress.

METHODOLOGY

Statement of Problem

To find out the extent to which exercise helps in regulating emotions and mental issues.

Objective: The research aims to understand just what position exercise has on the lives of athletes and to find out why such individuals use exercise to help themselves in regulating their emotions. Research Design

Qualitative research design was used. This research design helps to find out the why and how by using open ended questions which helps the subject to express themselves clearly and broadly. This is a design that helps in understanding subjects' behaviour.

Open-ended questions were set with the focus to give the subjects space to elaborate on the different experiences they have and situations they have gone through. The questions were validated by experts and was given the green light to start collecting the data. The researcher travelled to Mizoram from Bangalore to collect the data.

Data Collection and Sampling Technique

Data was collected using purposive sampling techniques, with the inclusion criteria of the participant being an athlete, playing sports at a professional level, having an age range of 20 - 40 years old. In the month of December, the researcher had gone to the practice field of the football players and interviews were conducted there. Here, the practice was observed by the researcher and spent a few hours with the team. As it was the last practice session of the season, practice hours were not long so a mere 7 participants were interviewed. Consent was taken from each participant for permission to record the whole of the interview. Continuing

from December, since the research had gone back to Bangalore another set of data was collected in January via phone call, where consent was also taken to record the full conversation. A total of 12 subject's data was collected. The data was then analysed using the thematic analysis method. Analysis

Braun and Clarke's thematic analysis process was followed to analyse the data. Following the phases given by them, the first phase primarily consists of familiarising myself with the collected data. Although the data was collected by me, resulting in being familiar with the data, it is still not efficient to conclude, so, the data was listened to again and again. This results in a clearer picture of the data that was collected. Themes were refined, defining what they mean and putting together what the subjects are talking about. Elaborating on the themes and taking up articles that support such claims.

Lastly, when all is done, the report and the analysis of the research was written. The data tells the introspective ways in which the subjects feel what exercise has done to their body as well as to the mental health, with managing their emotions as well as in sustaining and managing their social circle.

RESULTS

Effect Of Exercise

The effect of exercise could be seen in both mental and physical aspects. The interviewee answered that when they have thoughts and other things that bother the mind, it seems like exercise is a form of escapism and thus results in the mind getting refreshed. Since their history with exercise goes a long way back, the athletes mentioned that they have a fun time indulging in exercising and getting to get their heart pumping.

Physical

There are many aspects of physical health that comes with regularly exercising. Since the sport football require the athletes to be able to run for miles during a match, it is essential for the athletes to have good endurance during a match. The athletes interviewed majorly put emphasis on training on cardio rather than working on weights. This is since, football requires athletes to be running the whole field effectively in their respective positions. Based on a study done by Goodacre [7], on average the football player runs up to 10 km during a single match of 90 minutes. Although the distances will differ based on the position of the player as well as the performance of the player. To be physically fit, based on the records of the interviewees, other exercise rather than cardio is not given that much of a priority. Another response mentioned that, if the players were to put on weight or muscles through strength training, their performance in the field would be affected.

Since, football is a sport that requires the players to be light on their feet, one cannot risk on being slow in the field. When asked what the difference is on regularly exercising and not exercising, the athletes responded that, it seemed as though their body was deteriorating, and their fitness levels were rapidly going down. On the physical aspects, that was the concern that the athletes had, as well as on sustaining injuries in the play. Interviewee no 8 said, "when I don't exercise it seems as if there is something missing in my life" ("exercise ka lak loh chuan keimahah hian kim lo tlat hi a awm"), which could show us the extent to just how much exercise is important for the athletes in the professional field.

Mentally

Playing sports on a professional level take a different type of people, people who are mentally strong and are much more resilient than the average people. Which shows how much more taking care of the mind is important. Interviewee no 3 said, "when I am having problems in my life, it would follow me to the field and effect my performance" ("Nun a harsatna ka neih in, field ah min zui a ka performance a ti hniam thin"). The interviewee went on to say that the particular match was one of his most terrible matches and his team did not make it through. From then on, he made it a point to not take his issues with him in the field when he is playing, trying to remain in his best shape mentally.

Another effect exercise had on the athletes quoted by interviewee 5, "exercise is an activity that not only require the body but also the mind, so it makes it easier to focus and not think about any other problems that might be bothering us" ("Exercise lak chuan, taksa chauh niloin rilru pawh hman tel a ngai thin a, chuang chuan kan harsatna dang neih te ngaihtuah loin focus a awl thin"). He emphasised the importance of the team players to be able to control and regulate their emotions and reactions to things happening in and outside of the field. Interviewee no 1 said that, when I am in a low mood, I would use exercise to freshen up and in turn it gives me better mental health ("mood fuh lo chang deuh te hi a awm thei a, exercise tho hian rilru ka ti thawveng thin a, rilru hrise min pe let"). He went on to say that he uses exercise as the main thing to help solve many problems ("exercise hi chu eng pawh solve nan hian ka hmang ber").

Managing Emotions

In managing their emotions, interviewee 10 who is a long-time football player signifies the importance of playing in the field as it help him to manage his STUFFINESS as they have fun in the field when they are playing (“Football kan han practise a nuam ti taka kan han inkhelh te hian thawipikna awm thin te a reh ve phah thin ka tia, tun hma atangin...”).

In an article by Bruce [8] the author emphasised on the role of physical activity in managing moderate levels of stress. The author said that during physical activity, the body releases endorphins and reduces the level of cortisol and adrenaline. This finding is also supported by a review research on Sports people which suggests that team sport has more favourable mental health outcomes [9].

Interviewee no 8 said, “when we have issues bothering my mind, playing football relieves it” (“rilru hahna neih chang chuan football kan khel hian min chhawk zawk thin”). Interviewee 5 said, “Running is best for me when I experience low mood. I feel like it is the best exercise that helps me. Also played online games with friends”, (“Running hian ka mood a that loh chang chuan min pui ber. Thiante nen online games te pawh kan khel thin.”)

Interviewee no 1 said, “Other than exercise I put more focus on reading the bible and praying”. (“Exer ka lak tih lohah chuan tawngtai leh Bible chhiar hi ka bei ngawrh”). Further explaining that, although he is religious and is praying and reading the Bible on a regular basis, when he experiences such low moods, he would focus more on the fruit of the spirit, where he would give more importance on reading the holy scripture as well as praying to God. In research done by Koenig [10], studies of spirituality serving as a psychological and social resource for coping with stress was found. In her research she had found that spirituality is an important and powerful source of hope, comfort and help in coping with mental stress.

Social Interactions

Building team spirit is an essential part of different sports, especially of football which was concentrated in this research. In a review that was done by Monteiro and Andrade [11], due to the mutual support of the individuals that are in a team play an important role in the effectiveness of the athletes mental health.

When there is a decrease in mood, other hobbies also come in play to help an individual relax. Playing games with friends and interacting with other people, even for a few minutes a day helps in relieving stress.

DISCUSSION

This research aimed to find out just how much and to what extent exercise has an effect among the athlete population in Mizoram. From the interview that was conducted it shows a clear indication that exercise has a direct impact on the emotional and social wellbeing of athletes in professional career. Although it could get to the point of it getting negative, where the athletes overtrain, and this could escalate into the athletes having injuries which then hinders the athletes to have a pause on their careers. Sometimes, not getting to play a number of matches, in working around their concerns that effects their mental health, physical activity, exercise remains an important regime. Exercise also helps in moral support of the athletes which is brought upon by the love of the sport and activity. This is due to reactions in the physical state of our body due to the physical activities which affect the synaptic structure thereby increasing the synaptic plasticity. [1]. Though exercise may act as a stressor, it has been demonstrated to reduce harmful effects of other stressors [12]. The findings of the research also correspond with the findings. Positive effects on mental health are also highly dependent on regular exercise, this also supports the fact that the research sample was of people in the professional career, who would practise in the fields regularly [13]. Exercise may have a brief effect on the body, but regular exercise is the main point where the effects on mental health becomes evident and becomes positive. In the different areas of their personal and professional life, exercise is given an importance in managing with the different emotions and in regulating their reactions to different situations.

REFERENCES

1. Christie BR, Eadie BD, Kannangara TS, Robillard JM, Shin J, Titterness AK. Exercising our brains: how physical activity impacts synaptic plasticity in the dentate gyrus. *Neuromol Med* 2008;10(2):47–58.
2. Chaudhry R. *Physiology Cardiovascular*. StatPearls; 2022.
3. Emotions. From <https://www.apa.org>. <https://www.apa.org/topics/emotions>
4. Hockenbury D, Hockenbury SE. *Discovery of Psychology*, 5th edition. Worth Publishers; 1984.
5. World Health Organization: WHO. Physical activity. <https://www.who.int/news-room/fact-sheets/detail/physical-activity>; 2022.

6. Bernstein EE, McNally RJ. Exercise as a buffer against difficulties with emotion regulation: A pathway to emotional wellbeing. *Behav Res Ther* 2018;109:29–36.
7. Goodacre C. How far do footballers run? | The Elastico. The Elastico. <https://the-elastico.com/how-far-do-footballers-run/>; 2023.
8. Bruce DF. Exercise and depression. WebMD. [https://www.webmd.com/depression/exercise-depression/](https://www.webmd.com/depression/exercise-depression;); 2022.
9. Eather N, Wade L, Pankowiak A. The impact of sports participation on mental health and social outcomes in adults: a systematic review and the 'Mental Health through Sport' conceptual model. *Syst Rev* 2023;12:102.
10. Koenig HG. Spirituality and mental health. *Int J Appl Psychoanal Stud* 2010;7(2):116–22.
11. Morgan WP. Affective beneficence of vigorous physical activity. *Med Sci Sports Exerc* 1985;17:94-100.
12. Deslandes A, Moraes H, Ferreira C, Veiga H, Silveira H, Mouta R, Pompeu FA, Coutinho ES, Laks J. Exercise and mental health: many reasons to move. *Neuropsychobiology* 2019;59(4):191–8.
13. Portugal EMM, Cevada T, Monteiro-Júnior RS, Guimarães TT, Da Cruz Rubini E, Lattari E, Blois C, Deslandes AC. Neuroscience of exercise: From neurobiology mechanisms to Mental health. *Neuropsychobiology* 2013;68(1):1–14.

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