Physical Education, Health and Social Sciences

https://journal-of-social-education.org

E-ISSN: 2958-5996

P-ISSN: 2958-5988

Sports Engagement, Personal Growth and Mental Well-being among University Students in Pakistan

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DOI: https://doi.org/10.63163/jpehss.v4i1.1018

Abstract

This research examines the correlation of sports activity engagement with personal growth and mental well-being among university students in Pakistan. Sports is often associated with improved physical health but its association with maintaining mental well-being is often overlooked. Students in Pakistan are often discouraged from participating in sports as it is considered disadvantageous for the students' academic career. This study aims to change this perception by assuming a positive correlation between sports, personal growth and mental health of students. By using the cross-sectional method of research, data was collected from 150 students enrolled at different universities in Islamabad and Rawalpindi. The Physical Activity Rating Scale-3 Questionnaire, Personal Growth Initiative Scale Questionnaire, and Mental Well-Being Scale Questionnaire were used. The finding of the study showed that a significant positive correlation exists between sports participation and personal growth (r = .184*) as well as between sports participation and mental well-being (r = .242**) of university students. The finding of the study has shown that university students who join sports have the ability to gain discipline, control of emotion, as well as attain well-being.

Introduction

Sports is principally considered a physical activity since it requires physical movement, energy consumption, and exercising. Sports participation is motivated by need to achieve physical well-being and maintain a healthy body. However, with ever increasing interest in mental health, it has come to attention that people that are physically active and participate in sports have an astronomically greater percentage factor of having a positive parallel connection to mental wellbeing. (Eather et al., 2023).

Sports participation is prominent in youth with college and university students spending at least some part of their day engaged in sports activities. However, as they are in their growing age and still mainly dependent on their families, they are generally told to focus on their studies more with sports participation being viewed as a distraction. Due to this they are not given as much freedom to involve and build a sports mindset that can help groom their mental wellbeing.

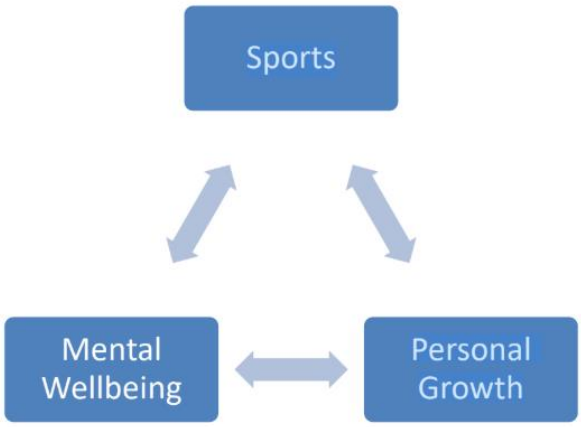
Academic insights regarding importance of sports participation suggest a negative consequence on mental health with non-promotion of sports engagement. The tremendous level of academia creates anxiety, depression, and psychological disturbances within university-going students (Biddle et al., 2019). Engaging in sports becomes a very useful tool to cope with emotional disturbances as it reduces psychological issues, boosts moods, and even helps with emotional regulation (Rowińska et al., 2025).

Various studies also indicate that engagement in sports can serve as a protective factor to prevent students from being overwhelmed by academic stress, which is always inevitable (Hernández et al., 2023). Development of high self-esteem and self-confidence-variables important for mental well-being-have been attributed to sports.

The most important opportunities provided by sports are for personality development and growth, rather than mere playful activities. Sports participation also lead towards teamwork, discipline, building resilience, as well as character enhancement. (Wang et al., 2024). Playing sports is a great stimulator for overall mental health. It is a great way to unwind one's mind and get relief from racing thoughts. Exercise not only boosts levels of confidence but also inculcates a sense of self-worth. It is necessary for emotional toughness. Sports also influence overall happiness.

Despite the plethora of benefits offered by sports participation to improve mental well-being and growth, its importance is rarely understood in Pakistani culture where academic accomplishment is prioritized over extracurricular activities. Hence, understanding the relation of sports participation with mental being and personal growth is necessary to shape the public perception of sports especially among young students who can reap the most benefit out of sports participation.

Conceptual Framework



This theoretical framework depicts how sports participation, mental health, and personal growth are interconnected. Sports participation is posited as the main variable, as sports participation is assumed to correlate positively with both mental health and personal growth. On the other hand, mental health is seen to be interconnected with personal growth, suggesting that enhancement in psychological health can trigger a process of personal development, which, in turn, can further expand psychological health.

Objectives

- To explore the relation between sports and personal growth.
- To evaluate the nature of relation between sports and mental wellbeing.
- To assess the interconnectedness between personal growth and mental wellbeing.

Hypotheses of the Study

- The personal growth will be significantly positively correlated with sports engagement.
- Sports engagement will have a significantly positive correlation with mental wellbeing.
- Personal growth and mental wellbeing will have a significantly positive correlation with each other.

Operational Definitions of the Variables

- **Sports Engagement (Physical Activity Rate)** is a way to express a person's daily physical activity as a number and is used to estimate their total energy expenditure.
- **Personal Growth** is a continuous process of improving oneself in various aspects, including skills, behaviors, attitudes, and habits, to enhance one's life in meaningful ways.
- **Mental Well-Being** is a unified state of mental, physical and social well-being, where a person can achieve their potential, is able to effectively contribute to the community.

Research Design

For this study, a quantitative research methodology is employed with a correlational and cross-section design. The cross-section design is considered effective to research the relationships among the research variables at a specific point in time as opposed to multiple points. In this study, the correlational methodology enables the researcher to determine the magnitude and direction of the relationships among the variables mentioned above without manipulating any variable. On the other hand, the cross-section aspect of this study enables the research to study the variables by obtaining data from a large population at a specific instance.

Sample

Purposive sampling method was used to collect a total data of 150 undergraduate students. The data was collected from various universities across Islamabad including COMSATS, Air University, Bahria University, SZABIST, Foundation University and Riphah University. The number of males was 74 and the number of females was 76. Sample age range was 18 to 26 years. Students enrolled in both undergraduate and post-graduate programs were approached.

Instruments

Physical Activity Rating Scale-3 (PARS-3): Sports engagement was measured using the (PARS-3), Hiroo Hashimoto (Kimio,1990). It is a 3-item self-reported scale comprising intensity, duration and frequency of physical activity. Each item is evaluated from 1 to 5, and the total score of physical activity (i.e., exercise volume) is computed by the equation below: intensity x (duration-1) x frequencies, of which the range is from 0 to 100. A total score that is equal to 19 or below will be defined as light physical activity, while the score from 20 to 42 is defined as medium, and one that is equal to 43 or above is defined as the high exercise. The scale has been shown to have good test-retest reliability (e.g., 0.838-0.942) and internal consistency (e.g., Cronbach's $\alpha = 0.85$). Additionally, confirmatory factor analysis results suggest it has good measurement validity.

Personal Growth Initiative Scale (PGIS): Personal growth was measured using Robitschek, C. (1998) the PGIS was initially used to assess the impact of a wilderness program on self-improvement. Over time, it transitioned into a robust measure of an individual‘s proactive engagement in change and development. The PGIS demonstrates high internal consistency, meaning the items within the scale are highly correlated and measure the same underlying construct. This is supported by Cronbach‘s alpha values typically exceeding 0.80, indicating good to excellent internal consistency. The items in the PGIS directly address different aspects of personal growth initiative, making it intuitively clear what is being measured. The PGIS includes nine items that participants rate on a Likert scale ranging from 1 = Strongly Disagree to 6 = Strongly Agree. The scores for each item are summed to calculate a total PGI score. Completing the PGIS takes approximately 5 minutes.

Warwick-Edinburgh Mental Wellbeing Scale: Mental well-being was measured using Warwick-Edinburgh Mental Wellbeing Scale (Tennant et al., 2007). The scale shows high levels of internal consistency and reliability against accepted criteria. Short, acceptable and meaningful to general population groups, and relatively unsusceptible to bias, it is capable of distinguishing between different population groups in a way that is consistent with other population surveys. Test-retest reliability at one week in the student sample was 0.83 ($p < 0.01$), indicating a high reliability for the scale. The new 14-item scale appears to have good face validity, as it covers the majority of the range of concepts associated with positive mental health, including both hedonic and eudaimonic aspects, positive affect, satisfying interpersonal relationships and positive functioning.

Results

The major objective of this study was aimed to explore the relation of sports with personal growth and mental wellbeing among university students. To achieve the study objectives primary data was collected from 150 undergraduate students through well-structured questionnaires. The

collected data were analyzed with the help of statistical software SPSS (IBM SPSS-20). These results have been discussed below:

Table 1

Demographics of Sample (N=150)

Demographics		F	Percentage%
Age	18-20	51	34.0%
	21-23	70	46.7%
	24-26	28	18.7%
	4.00	1	0.7%
Gender	Male	74	49.3%
	Female	76	50.7%
Education	BS	137	91.3%
	MS/ PHD	12	8%
	4.00	1	0.7%
Height	<4'10	2	1.3%
	4'10-5'3	42	28.0%
	5'4-5'9	64	42.7%
	5'10-6'3	42	28.0%
	6'4>	0	0.0%
Weight	<30kg	3	2.0%
	30-55kg	65	43.3%
	56-80kg	68	45.3%
	81-105kg	14	9.3%

Table 1 shows the demographic results of respondents in the form of frequency and percentage. According to the results in the table among 150 respondents in the data set, around 49.3% of the individuals are male (74 out of 150), and 50.7% are female (76 out of 150). Age is divided into 3 groups in which 18-20 are 34%, 21-23 are 46.7% and 24-26 are 18.7%. Education has 3 groups calculating BS being 91.3%, MS and PHD being 8%. Both height and weights have been divided into 5 groups.

Table 2

Descriptive Statistics of Scales

	Min.	Max.	M	SD	Skewness	SE	Kurtosis	SE
PARST	1.00	100.00	32.5333	32.72002	.971	.198	-.330	.394
PGST	9.00	54.00	36.9467	9.79028	-.704	.198	.361	.394
MWBST	14.00	116.00	47.5533	13.21304	.547	.198	4.258	.394

This is a descriptive statistics table that gives information on values of PARST, PGST, and MWBST. An average value of 32.53 (SD = 32.72) for PARST showed that there was a medium level of activity. PARST scores were positively skewed (0.97), indicating that most individuals had low levels of activity. This parameter, however, had a kurtosis of -0.33, indicating normalcy. PGST scores had values of 9-54 and had a medium value of 36.95 (SD = 9.79). Its corresponding value for skewness is -0.70, which is a negative index that portrays most individuals as having high scores of personal growth. This parameter had a value of 0.36, indicating that there is normal data distribution. MWBST values were recorded to range from 14 to 116 and had a medium value of 47.55 (SD = 13.21). This parameter had a moderately positive value for its skewness of 0.55 and relatively high kurtosis of 4.26.

Table 3

Pearson Correlation between Sports, Personal Growth and Mental Wellbeing (N=150)

	1	2	3
	1	.184*	.242**
PARST		.025	.003
		150	150
		1	.589**
PGST			.000
			150
MWBST			1

**. p<0.01, *.P<0.05

Correlation of variables studied is revealed in Table 3. There is a positive correlation of "Sports", "Personal Growth" and "Mental Wellbeing" with a p-value of less than 0.01 (Highly significant) and 0.05 (Statistically significant) respectively. The Correlation Coefficient is 0.184*, 0.242** and 0.589** respectively. Correlation coefficient measures of "PARS" and "PGS" is also positive with a value of 0.184*, indicating statistical significance with p-value less than 0.05. A correlation coefficient of 0.242** also reveals very significant positive relation with a p-value of less than 0.01. The last relation is also very significant with positive relation with correlation coefficient of 0.589** and also having a p-value of less than 0.01.

Figure 1
Histogram for Sports Participation

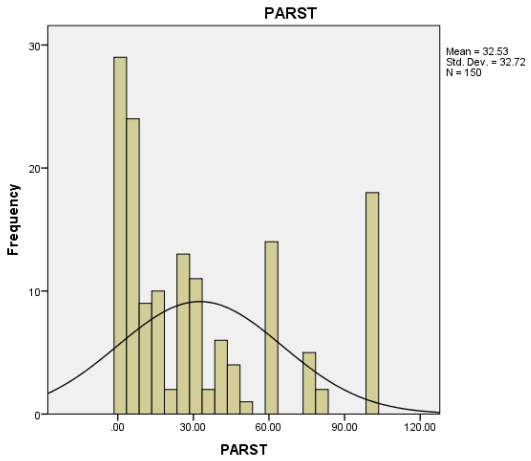


Figure 2
Histogram for Personal Growth

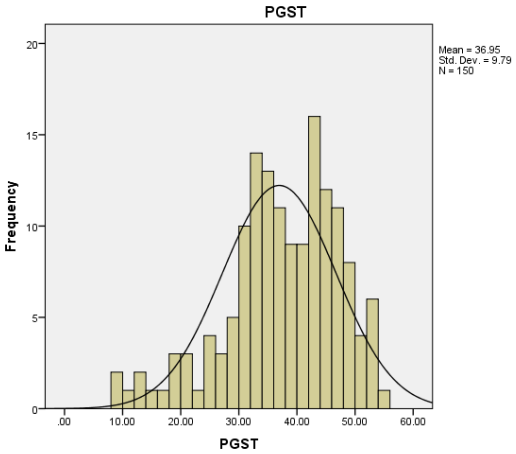
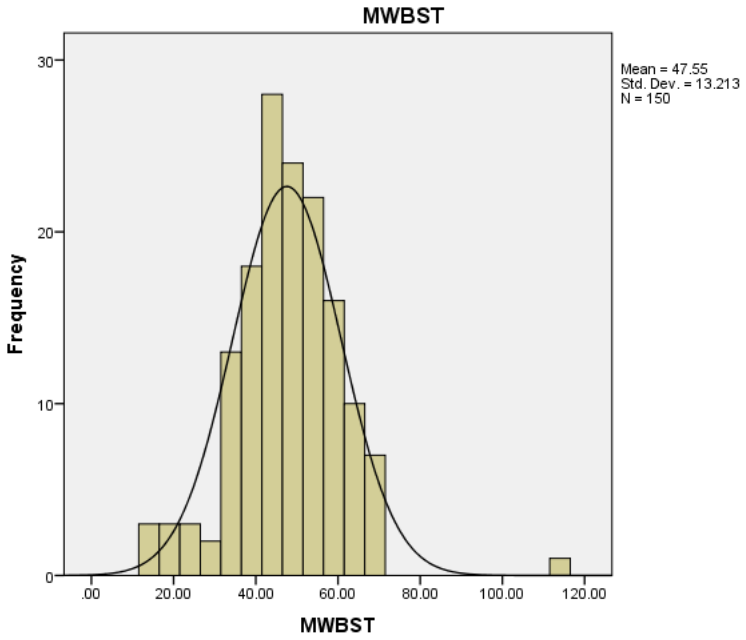


Figure 3
Histogram for Mental Wellbeing



Discussion

The current study explored the relationship between sports engagement, personal growth and mental well-being among university students in Pakistan. A data of 150 students was collected from multiple universities across Islamabad and Rawalpindi. The results reveal significant positive correlation between sports engagement and personal growth (r=.184*) and sports engagement and mental well-being (r=.242**). A significant positive correlation was also found between personal growth and mental well-being (r=0.589**).

The results are in line with recent studies that highlight the importance of physical activity in nurturing healthy bodies, minds, and psychosocial elements. There has been empirical validation for preserving sound mental health, emotional control, adaptability, cognitive functioning, and intellectual achievement through frequent participation in physical activity (Rodríguez-Ayllón et al., 2019). The validation acquired via cross-sectional and longitudinal research has ratified that those actively taking part in physical activity experience optimized mental and psychological outcomes throughout different stages of human developmental phases

(Chekroud et al., 2018; White et al., 2019). The university students who showed beneficial levels of physical activities supported positive outcomes on mental health compared to students who were least active or did not engage in physical activities at all, which is consistent with supporting evidence by recent explorations (Wang & Li, 2022; Zhang, 2025).

The results also indicate that increased level of physical activities exhibit positive personal growth. Personal growth has been associated with resilience, optimism and self-efficacy (Wardani & Tjandraningtyas, 2023). These factors contribute to development of a strong personality as well as a healthy mind. Sports participation encourages self-confidence, leadership and motivation which empowers students to cope with stressors associated with academic activities (Wang & Qian, 2024). Sports are also considered to be a great platform for social development. Group sports facilitate teamwork, leadership skills, and development of social networks. This enables students to establish good social connections and external support systems, which are considered to be significant measures of positive growth in young adulthood (Bailey et al., 2016).

Personal growth was also found to play a significantly important role for mental well-being in the current study. This finding is consistent with a number of existing literature that proposed the pursuit for personal growth is a significant factor in having a healthy well-functioning mind (Asif et al., 2024). Seeking personal growth enables people to develop significant resources in terms of optimism, resilience, and self-efficacy, which are all important for having a healthy mind. Moreover, personal growth enables a person to develop effective ways of coping in order to overcome stressful events in life, something that students often have to encounter in their academic pursuit (Jiao et al., 2024).

The study emphasizes the need to promote regular and meaningful physical activity in order to enhance personal development and mental health among university students. As such, targeted mental health interventions, stress-management programs, and enabling institutional policies-when developed and executed across universities, especially for student-athletes-will go a long way in minimizing long-term psychological risks and enhancing the wellbeing of the population in question.

Conclusion

The findings and conclusions drawn from this research study reaffirm that involvement in sports helps remarkably with personal development and improves mental health conditions among university students. This is proven through findings that show university students who participate in moderate levels of physical exercise, such as activities that include increased heart rate and games such as soccer, basketball, and swimming, are likely to gain increased feelings of camaraderie and decreased levels of tension and anxiety. This can be achieved through creating a personal routine for university students that seeks to engage both personal and group sport activities. This indicates that university life must therefore include physical exercise for improved personal development and mental health conditions.

With the benefits that sports participation offers, it is obvious that the opposite can have detrimental influence on the mental health and wellbeing. Lack of sports engagement can decrease personal growth, self-esteem and self-confidence. Since sports is commonly used as stress coping strategy by the students, those who don't participate can have poor stress management skills. Therefore, creating an environment which encourages regular physical activity will be very important in way of promoting holistic health for all students.

Limitation

While the study offers an important insight into the relation of sports participation of well-being of students, it is important to consider the limitations as well. The drawback for this study arises from the fact that it is based on collecting samples from university-going students. Such students tend to have varied levels of physical activities. These include people who tend to have sedentary lifestyles due to academic or social commitments as well as students who are committed

to athletic activities on professional level. This leads to having outliers in the study. The sample size is relatively small and consists only of two cities in this study: Islamabad and Rawalpindi. This might affect how well the results can be generalized on university students all over Pakistan.

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