



# International Journal of Physical Education, Sports and Health

P-ISSN: 2394-1685  
E-ISSN: 2394-1693  
Impact Factor (ISRA): 5.38  
IJPESH 2018; 5(2): 22-25  
© 2018 IJPESH  
www.kheljournal.com  
Received: 11-01-2018  
Accepted: 12-02-2018

**Jotika Judge**  
Research Fellow, Department of  
Psychology, Panjab University,  
Chandigarh, Punjab, India

## Stress, happiness and psychological well-being among college students: Role of sports in mental health

**Jotika Judge**

### Abstract

The importance of sports in a student's life is invaluable and goes much further than the basic physical benefits. The current study aims to investigate the impact of sports on mental health by exploring stress, happiness and psychological well-being among college students. The sample for current investigation consists of 100 (50 who indulge in sports regularly, 50 who are not into any sports activity) students from the colleges of Mohali and Chandigarh. Perceived stress scale (Cohen, 1983), Psychological well-being Scale (Ryff, 1995), and General happiness Scale (Lyubomirsky & Lepper, 1999) were administered to the sample. t-test was applied to compare sports playing and non-sports playing individuals. Results indicate significant differences between sports playing and non-sports playing students on levels of stress, happiness and psychological wellbeing.

**Keywords:** happiness, sports, stress, mental health, college students

### Introduction

College life is marked with number of changes that if not managed well can bring turmoil in life. The transition from childhood to young adulthood marked by beginning of college is particularly a stressful time (McNamara, 2000) [31]. Stress levels among college students are higher than any other age group (David, 2009) [10] and this high level of stress negatively affects the health of students (Elizabeth, 2003) [15]. The students tend to be high on stress levels as they have to manage their college life while preparing themselves for life beyond college. Stress is defined as a condition subjectively experienced by an individual who identified an imbalance between demands addresses to him/her and the resources available to counter these demands (Lazarus, 1990) [27]. Stress not only badly affects physical health of an individual but also has adverse effects on psychological and cognitive health (Shankar & Park, 2016) [42]. Stress in student life is related to poor academic performance, depression and serious health problems (Misra & McKean, 2000) [33]. Academic pressures combined with emotional factors result in higher levels of stress for students (Bamnuhair, 2015). Though stress during college life is a reality but stress should be prevented from becoming students' way of living in college because it has terrible effect and may result in failure in later life also. Students must learn to enhance to their stress management abilities so that they can live a healthy life after entering the society as adults (Kai-Wen, 2010) [22]. Playing sports is one such way that can lead towards lowered stress levels (Kerr & Vlaswinkel, 1995; Miller & Kerr, 2002; Martin, Vause & Schwartzman, 2005; Moksens *et al.*, 2010; Rumbold, 2012; Anderson, 2013) [24, 32, 29, 39, 1]. Present study looks into the role of sports on stress levels as well as happiness and psychological well-being among students.

Happiness is life experience marked by a preponderance of positive emotion. The word 'happiness' derives from the term for good fortune, or "good hap," and indeed the terms used to translate it in other languages have similar roots. In this sense of the term—call it the "well-being sense"—happiness refers to a life of well-being or flourishing. Martin Seligman (2002) [29] in his book *Authentic Happiness* gives the positive psychology definition of happiness as consisting of both positive emotions (like comfort) and positive activities (like absorption). Encouraging people to take up purposeful activities such as physical activity, being a form of exhilaration of external factors, can help people live healthy and balanced lives (Um Sh, 2004) [7]. Happiness can be bought among individuals by encouraging them to

**Correspondence**  
**Jotika Judge**  
Research Fellow, Department of  
Psychology, Panjab University,  
Chandigarh, Punjab, India

participate in physical activities as it helps them to lead a healthy and fulfilling life (Jouybari, 2011) [21]. Students constitute an important part of any nations' population and are among the vulnerable group, thus, providing them experience of happiness becomes a responsibility for the adult population (Mohammadi, Batvandi & Saberi, 2015) [34].

Psychological well-being is usually conceptualised as some combination of positive affective states such as happiness (the hedonic perspective) and functioning with optimal effectiveness in individual and social life (the eudaimonic perspective) (Deci & Ryan 2008) [40]. Psychological well-being refers to how people evaluate their lives. According to Diener *et al.* (1999) [13], these evaluations may be in the form of cognitions or in the form of affect. However, it is not a static concept; it gets enhanced with age, education and consciousness (Keyes *et al.*, 2002) [25]. Ryff's (1989) [41] extensive work in the field has led to development of a multidimensional model of psychological well-being. The model consists of six dimensions; autonomy, environmental mastery, personal growth, positive relations with others, purpose in life and self-acceptance. All these dimensions play an important role in maintaining the overall psychological health of an individual. Psychological well-being is important attribute to lead a healthy and happy adult life for every individual and foundations of adult life is laid in college, thus making it a crucial aspect of college years (Sujata & Jayakumar, 2017). Physical activity during college years is one such factor that may influence psychological well-being of students. Individuals who engage have higher levels of psychological well-being compared to the ones who live a sedentary life (Powell, 2014) [37].

There is lack of research on role of sports in maintaining psychological well-being and happiness among college students in Indian context. The primary aim of the current study was to investigate the role of sports in mental health of students and three variables i.e. stress, happiness and psychological well-being are studied in this regard.

Based on review of literature following hypothesis were framed

1. Sports playing students will have lower levels of Stress.
2. Sports playing students will have higher levels of Happiness and psychological well-being than their peers.

## Methodology

The sample for the current investigation consists of 100 male students of first year of college (Graduation), who were further divided on the basis of their participation in sports activity, that is, 50 who engage in sports on daily basis and 50 who are not into sports activities. Only those students were included who are not into competitive sports but play sport as a form of physical activity. The age group of the sample is 18-20 years. The sample was collected from the colleges of Chandigarh and Mohali. The students who belong to middle socio-economic families living in urban areas and have equal access to playgrounds and parks were included in final sample.

## Measures:

### Perceived stress scale (PSS)

The Perceived stress scale (Cohen, 1983) [8] is a 10-item instrument which asks participants to respond to a series of statements designed to evaluate the degree of stress experienced. It has strong psychometrics with coefficient alpha reliabilities ranging between .84 and .86.

### Psychological Well-Being Scale (PWBS)

Psychological well-being scale (Ryff *et al.*, 1995) [41] is an 18 item scale. All responses are made on 7-point scale ranging from 1 (strongly agree) to 7 (strongly disagree). This measure has adequate reliability of .70 (Ryff *et al.*, 2007) [25].

### General happiness Scale (GHS)

General happiness Scale is a 4 item scale designed to measure subjective happiness. Each of items is completed by choosing one of 7 options that finish a given sentence fragment.

## Results

Table showing descriptive statistics and group differences on stress, happiness and Psychological wellbeing

Variables	Group-I		Group-II		t value
	Mean	S.D.	Mean	S.D.	
Stress	20.2	4.18	29.1	4.25	10.4**
Happiness	17.2	4.08	11.7	4.29	6.48**
Psychological Well-Being	75.1	10.9	44.2	10.3	14.31**

\*\*p< .01 level \*p< .05 level

Group I= Students who engage in sports

Group II=Students who do not engage in sports

## Discussion

The primary objective of this study was to study the role of sports in maintaining mental health through the variables of stress, psychological well-being and happiness among college students. The findings of this study that playing sports is related with lower level of stress among students are in line with previous researches (Anshel, 1996; Biddle, Fox & Boucher, 2000; Nguyen-Michel *et al.*, 2006; DeCamps *et al.*, 2012) [2, 6, 35, 11]. Though the number of college students engaging in sports is less than average but physical activity is related to lower levels of stress among sports playing students (Lippke *et al.*, 2015) [28]. College time is a period of adjustment at inter as well as intrapersonal level and sports a mean of physical activity helps in reduction of reaction towards stress that comes up when life needs us to adjust and cope and respond to new experiences (Nguyen-Michel *et al.*, 2006) [35]. Physical activity acts as an important coping mechanism in anxious situations and enhances positive affect in such conditions (Thome & Espelage, 2004) [46]. Sports activities during college life help students to build up resistance to stressful conditions and making them less prone to negativities of stress (Holland, 1997). Considering the deleterious effects of stress and sedentary behavior on health, these results have implications for lifetime physical and mental health.

The results show that students who engage in sports on regular basis are high on happiness quotient. Findings are consistent with various previous researches (Argyle & Martin, 1991; Csik-szentmihalyi & Wong, 1991; McHale, 2009; Ghasempour *et al.*, 2013; Rasmussen & Laumann, 2013; Shirvani, Pourabbasi & Khashayar, 2013; Siadat & Keikha, 2013; Huang & Humphrey, 2011) [3, 9, 17, 38, 19]. Participation in sports makes people happier by reducing stress levels and improving mood which in turn tends to make people happier, and also creates positive after effects which helps in bringing long-term happiness (Sullivan, 2014) [45]. Ghasemi, Abedi & Bagheban (2009) found that better physical health resulting from sports activity not only increases happiness but also motivates individual to participate in sports more, thus creating a circular relationship between sports and happiness. Health is a strong factor that through which sports

participation leads to higher levels of happiness (Huang & Humphreys, 2011) <sup>[19]</sup>. Availability of public sports facilities in close proximity of individual's homes is another factor that positively influences happiness as participation in sports become more likely (Pawlowski, Breuer & Leyva, 2011) <sup>[36]</sup>.

Students who engage regularly in sports have higher levels of psychological well-being than those who do not engage in sports. These findings are consistent with few other previous researches (Bozoian, Rejeski, & McAuley, 1994; Bray & Kwan, 2006; Powell, 2014) <sup>[37, 7]</sup>. Edwards & Ben (2008) <sup>[14]</sup> found sports skills and psychological well-being to be interrelated concepts. As sports participation for college students act as opportunity to improve their personal well-being (Keating *et al.*, 2010) <sup>[23]</sup>. From a psychological perspective sports improves wellbeing by enhancing feelings of control, self-esteem and self-efficacy (Krawczynski & Olszewski, 2006) <sup>[26]</sup> and also leads to more positive social interactions. Moreover, individuals with high levels of self – efficacy are more likely to engage in physical activities and this circle keeps on adding in to psychological well-being (McAuley, Lox, & Duncan, 1993) <sup>[30]</sup>. In college students, exercise leads to better psychological health as it lowers down levels of depression and negative affect (Thome & Espelage, 2004) <sup>[46]</sup>. In addition to above cited benefits sports as a kind of physical activity also alleviates negative moods, reduces anger, and anxiety and also make students felt more socially integrated into their community as it gives opportunity to engage with members of community (Hassmen, Koivula, & Uutela, 2000) <sup>[18]</sup>.

One of the limitations of study is that it included only male students. For more inclusive results female students also need to be included in sample. But this limitation stems from another limitation prevalent in our society. That is, female students have much less access to open spaces for sports and recreation as compared to their male counterparts. Another limitation is that sample is based in urban areas only, for further better comparisons students from rural areas should also be included.

### Conclusion

The results of this study conclude that sports have a valuable influence on mental health of students. Sports participation not only reduces levels of stress among students but also improves happiness and psychological well-being. Considering the positive influence sports have on psychological health, health promotion programs for college students can benefit from incorporation of physical activity strategies to reduce stress and enhancing psychological well-being. It is important to encourage students to make sports a part of their lifestyle so that they can reap various physical, emotional and psychological benefit of this physical activity. Parents, teachers and administrators all should focus on making sports participation essential for the students.

### References

1. Anderson E, Shivkumar G. Effects of Exercise and Physical Activity on Anxiety. *Frontiers in psychiatry*. 2013; 4(27). doi: 10.3389/fpsy.2013.00027
2. Anshel MH. Effect of chronic aerobic exercise and progressive relaxation on motor performance and affect following acute stress. *Behavioral Medicine*. 1996; 21(4):186-196.
3. Argyle M, Martin M. The psychological causes of happiness. In Fritz Strack, Michael Argyle, N. S., editor, *Subjective Well-Being: An Interdisciplinary Perspective*

- chapter. 1991, 77-100.
4. Bray SR, Kwan MY. Physical activity is associated with better health and psychological well-being during transition to university life. *Journal of American College Health*. 2006; 55(2):77-82.
5. Bamuhair SS, Farhan AA, Alaa Althubaiti A, Agha A, Rahman S, Ibrahim NO. Sources of Stress and Coping Strategies among Undergraduate Medical Students Enrolled in a Problem-Based Learning Curriculum. *Journal of Biomedical Education*, 2015. doi:10.1155/2015/575139
6. Biddle SJH, Fox KR, Boutcher SH. *Physical activity and psychological well-being*. London: Routledge, 2000.
7. Bozoian S, Rejeski WJ, McAuley E. Self-efficacy influences feeling states associated with acute exercise. *Journal of Sport and Exercise Psychology*. 1994; 1.6:326-333.
8. Cohen S, Kamarck T, Mermelstein R. A global measure of perceived stress. *Journal of Health and Social Behavior*. 1983; 24:386-396.
9. Csikszentmihalyi M, Wong M. The situational and personal correlates of happiness: A cross-national comparison. In Fritz Strack, Michael Argyle, N. S., editor, *Subjective Well-Being: An Interdisciplinary Perspective*, chapter 10, pages 193- 212. Oxford, Pergamon Press, 1991.
10. David M. *Student life independent newspaper in Washington University in St Louis*, 2009.
11. DeCamps G, Emilie B, Brisset C. French College Students' Sports Practice and Its Relations with Stress, Coping Strategies and Academic Success. *Frontiers in Psychology*, 2012. doi: 10.3389/fpsyg.2012.00104.
12. Diener E, Emmons RA, Larsen RJ, Griffin S. *The Satisfaction with Life Scale*, 1985.
13. Diener E, Suh EM, Lucas RE, Smith HL. Subjective well-being :Three decades of progress. *Psychological Bulletin*. 1999; 125(2):276-302.
14. Edwards John D, Ben JM. *Sport psychological skills training and psychological well-being*. Institutional Repository of the University of Pretoria, 2008.
15. Elizabeth V. *The Hindu, Concern over high stress levels among students*, 2003.
16. Ghasemi Afshan, Abedi, Ahmad, Baghban, Iran. The Effectiveness of Group Training Based on the Snyder Hope Theory on Happiness of the Elderly. *Knowledge & Research in Applied Psychology*. 2009; 41:40-17.
17. Ghasempour A, Jodat H, Soleimani M, Zhalehshabanlo K. Happiness as a Predictor of Psychological Well-Being of Male Athlete Students. *Annals of Applied Sport Science*. 2013; 1(2):25-32
18. Hassmen P, Koivula N, Uutela A. Physical exercise and psychological well-being: a population study in Finland. *Preventive Medicine*. 2000; 30(1):17-25.
19. Huang H, Humphreys BR. Sport participation and happiness: evidence from US micro data. In: Rodriguez P, Kesenne S, Humphreys BR, eds. *The economics of sport, health and happiness: the promotion of well-being through sporting activities*. Glos, UK: Edward Elgar Publishing. 2011; 163-183.
20. Humphreys B, Ruseski J. *The economics of participation and time spent in physical activity*. Working Papers 2009-9, University of Alberta, Department of Economics, 2009.
21. Jouybari LM, Rezaiean M, Sanagoo A, Jafari SY, Hosseini S. Explaining the happiness experience of the

- students in Golestan University of Medical Sciences. *Journal of Gorgan University School of Nursing and Mid – wifer*. 2011; 8(1):1-10.
22. Kai-Wen C. A study of stress sources among college students in Taiwan. *Journal of academics and business ethics*, 2010.
  23. Keating X, Guan J, Castro J, Bridges D. A Meta-Analysis of College Students' Physical. Activity Behaviors. *Journal of American College Health*. 2008; 54(2).
  24. Kerr JH, Vlaswinkel EH. Sports participation at work: An aid to stress management. *International Journal of Stress Management*. 1995; 2(2):87-96
  25. Keyes CLM, Shmotkin D, Ryff CD. Optimizing well-being: The empirical encounter of two traditions. *Journal of Personality & Social Psychology*. 2002; 82(6):1007-1023.
  26. Krawczynski M, Olszewski H. Psychological well-being associated with a physical activity programme for persons over 60 years old. *Psychology of Sport and Exercise*. 2000; 1:57-63.
  27. Lazarus RS. Theory-based stress measurement. *Psychological Inquiry*. 1990; 1:3-13.
  28. Lippke C, Wienert J, Kuhlmann T, Fink S, Hambrecht R. Perceived Stress, Physical Activity and Motivation: Findings from an Internet Study. *Annals of Sports Medicine and Research*, 2015.
  29. Martin GL, Vause T, Schwartzman L. Experimental studies of psychological interventions with athletes in competitions: Why so few? *Behavior Modification*. 2005; 29:616-641.
  30. McAuley E, Lox C, Duncan TE. Long-term maintenance of exercise, self-efficacy, and physiological change in older adults. *Journal of Gerontology*. 1993; 48(4):18-24.
  31. McNamara S. *Stress in young people: What's new and what can we do?* London: Continuum, 2000.
  32. Miller PS, Kerr G. The athletic, academic and social experiences of intercollegiate student-athletes. *Journal of Sport Behavior*. 2002; 25:346-367.
  33. Misra R, McKean M. College Students' Academic Stress and Its Relation to Their Anxiety, Time Management, and Leisure Satisfaction. *American Journal of Health Studies*. 2000; 16:41-51.
  34. Mohammadi E, Batvandi Z, Saberi A. Relationship between happiness and different levels of physical activity. *Trends in sports sciences*. 2015; 1(22):47-52.
  35. Nguyen-Michel ST, Unger JB, Hamilton J, Spruijt-Metz D. Associations between physical activity and perceived stress/hassles in college students. *Stress and Health*. Wiley InterScience, 2006. DOI:10.1002/smi.1094.
  36. Pawlowski T, Breuer C, Leyva J. *Sport opportunities and local well-being : is sport a local amenity. The economics of sport, health and happiness*: Edward Alger Publishing, 2011.
  37. Powell M. *How Sports and Exercise Influence Psychological Well-Being*. Zerofitness Magazine, 2014.
  38. Rasmussen M, Laumann K. The role of exercise during adolescence on adult happiness and mood. *Publishing models and article dates explained*. 2013; 33(4):341-356.
  39. Rumbold J, Flechter D, Daneils K. A systematic review of stress management interventions with sport performers. *Sport, Exercise, and Performance Psychology*. 2012; 1(3):173-193.
  40. Ryan R, Deci EL. Facilitating Optimal Motivation and Psychological Well-Being across Life's Domain. *Canadian Psychology*. 2008; 49(1):14-23.
  41. Ryff CD, Keyes CLM. The structure of psychological well-being revisited. *Journal of personality and social psychology*. 1995; 69(4):719.
  42. Shankar NL, Park CL. Effects of stress on students' physical and mental health and academic success. *International Journal of School & Educational Psychology*. 2016; 4(1):5-9
  43. Shirvani ME, Pourabbasi A, Khashayar P. Physical activity in high-school students improves school performance and happiness levels: a pilot study. *Gazzetta Medica Italiana Archivio per Scienze Mediche*. 2013; 172(1-2):4-31.
  44. Siadat SA, Keikha A. A comparative study of happiness factors among women athletes of individual and team sports (a case study). *International Journal of Sport Studies*. 2013; 3(1):86-92.
  45. Sullivan GB. Collective pride, happiness and celebratory emotions: aggregate, network and cultural models. In C. von Scheve, & M. Salmela (Eds.), *Collective Emotions*. Oxford: Oxford University Press. 2014, 266-280.
  46. Thome J, Espelage DL. Relations Among Exercise, Coping, Disordered Eating, and Psychological Health among College Students. *Eating behaviors*. 2004; 5:337-351
  47. Um SH. The effect of regular exercise on mental health on aged people. *Science Technology*. 2004; 3:284-286.