



## HEALTH RELATED QUALITY OF LIFE: AN ANALYSIS OF COLLEGIATE SPORTSMEN AND NON-SPORTSMEN

Vivek Solanki<sup>1i</sup>,

Jyoti Solanki<sup>2</sup>

<sup>1</sup>Assistant Professor, Physical Education,  
Maharaja Surajmal Institute, GGSIPU,  
New Delhi, India

<sup>2</sup>Assistant Professor, Physical Education,  
Government of Haryana, India

### Abstract:

The present study was conducted to assess and compare the health related quality of life in collegiate sportsmen and non-sportsmen. For the purpose of the study a total of fifty (n=50) male subjects i.e., 25 male sportspersons from Delhi University and 25 male non-sportspersons from Indraprastha University as subjects were selected. These subjects were given a standardized questionnaire of health related quality of life (SF-36) developed by Stewart Hayes and Ware (1988). The data was obtained from these subjects and analyzed statistically on the sub scale of Physical Functioning scale (PF), Role-Physical scale (RP), Bodily Pain scale (BP), General Health scale (GH), Vitality scale (VT), Social Functioning scale (SF), Role-Emotional scale (RE), Mental Health scale (MH). The statistical technique employed for analyzing the data were mean, standard deviation and 't' test. The level of significance chosen was 0.05. The result of the study indicates that there were significant difference obtained among male sports person and non-sports person on the sub-scale of general health (GH). However there were no significant difference among male sports person and non-sports person on the sub-scales of Physical Functioning scale (PF), Role-Physical scale (RP), Bodily Pain scale (BP), Vitality scale (VT), Social Functioning scale (SF), Role-emotional scale (RE), Mental Health scale (MH).

**Keywords:** physical functioning scale, role-physical scale, bodily pain scale, general health scale, vitality scale, social functioning scale, role- emotional scale, mental health scale.

---

<sup>i</sup> Correspondence: email [drviveksolanki@gmail.com](mailto:drviveksolanki@gmail.com)

## 1. Introduction

With heightening expectations to foster life skills for health action, sport activities have brought attention, Especially in Western nations, as a promoting factor to advance life skills. Sport activities are easy to understand as challenge or management experience (Chalip, et al, 1984), and are considered to be desirable experience for fostering life skills. For example, through the process of experiencing sport activities, players are required to have various skills. These skills include such psychological skills as stress management, time perspective, communicative skills with others, and self-control. If these skills acquired through exercises and athletic situations can be transferred to daily life, good management in the present life or any future event in life is feasible (Danish, et al., 1992 ; Ueno and Nakagomi, 1998). Danish (1998), based on a hypothesis that psychological and social skills acquired in exercises and participation in sports are applicable to different situations, developed educational programs, including the GOAL (Going for the Goal) program, to foster life skills by participating in sport activities. GOAL is targeted for primary school students, and is implemented to prevent smoking, drinking and drug abuse by heightening self-efficacy experienced in acquiring life skills and their processes. Meanwhile, in Japan, research focusing on skills in the field of sport activities includes social skills (Sugiyama, 1999), coping skills (Aoki and Matsumoto, 1997; Sasaki, 1999), psychological competitive ability (Tokunaga and Hashimoto, 1988), and competitive situation skills and life skills (Ueno and Nakagomi, 1998). There are, however, only a few studies on how skills acquired through sport experiences are applied in daily life. One such study was made by Ueno and Nakagomi (1998), who, by creating a scale of life skills, found that students who participate in sport club activities acquire higher interpersonal and personal skills in daily life than general students. The scale prepared in their study, however, had such problems that it did not aim at a diagnosis of personal skills but was developed based on students' in-school experiences, and its sub-scale was only categorized to personal skills and interpersonal relationship skills. Therefore, they have tried to create a new scale to understand health-enhancing skills in daily life in a versatile and comprehensive manner.

## 2. Methodology

The data was collected from 25 sportsmen and 25 non-sportsmen of Delhi. The Health status questionnaire (SF-36) developed by Stewart Hayes and Ware (1988) was employed to collect the data from the subjects. All the necessary instructions were given to the subjects before the subjects were requested to respond to the statements in the questionnaire.

The SF-36 health survey is a generic outcome measure designed to examine a person's perceived health status. The SF-36 has 8 multi item scales namely: Physical Functioning scale (PF), Role-Physical scale (RP), Bodily Pain scale (BP), General Health scale (GH), Vitality scale (VT), Social Functioning scale (SF), Role- Emotional scale

(RE), Mental Health scale (MH). The SF-36 health survey items and scales were constructed using the Likert method of summated question that are scored. These scores are then summed to produce raw scale scores for each health concept which are then transformed to a 0-100 scale. Scale is set up so that a higher score indicates better health.

### 3. Analysis and Discussion

To find out the difference in the Health Related Quality of Life between sportsmen and non-sportsmen the mean, standard deviation and the 't' values were calculated which are presented in the table-1.

**Table 1:** Significance of Differences among Sportsmen and Non-Sportsmen on the Sub-Scale Of Sf-36

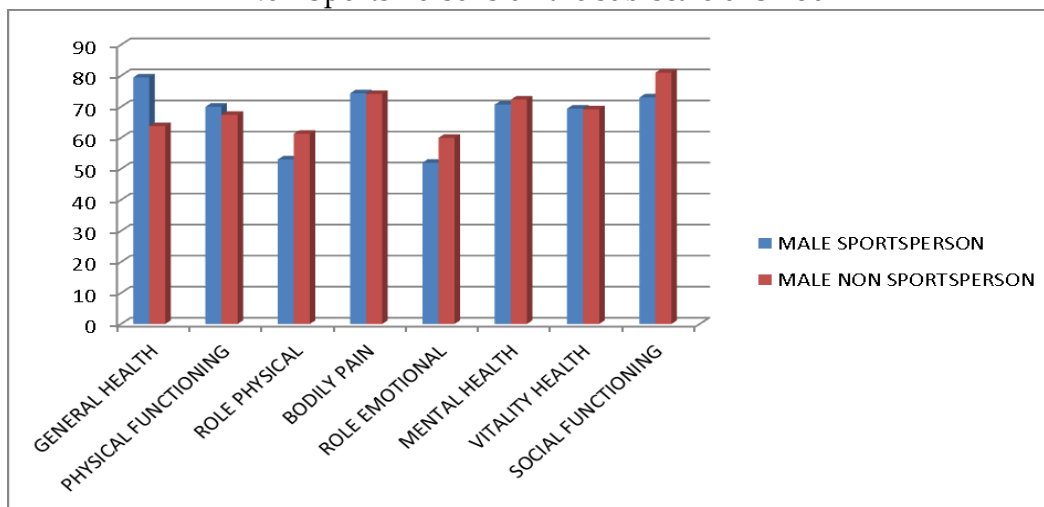
Sub-Scales	Groups	Mean	Sd	Df	'T'	Sig.
General Health Scale	Sportsmen	79.4400	13.51567	48	<b>2.553*</b>	.014
	Non Sportsmen	63.7760	27.54550			
Physical Functioning Scale	Sportsmen	70.0000	28.72281	48	.323	.748
	Non Sportsmen	67.4000	28.17801			
Role-Physical Scale	Sportsmen	53.0000	36.31460	48	.802	.427
	Non Sportsmen	61.3200	37.04470			
Bodily Pain Scale	Sportsmen	74.3200	19.57618	48	.035	.973
	Non Sportsmen	74.1200	21.31181			
Role- Emotional Scale	Sportsmen	51.9840	42.03253	48	.665	.509
	Non Sportsmen	59.9840	43.03273			
Mental Health Scale	Sportsmen	70.7200	15.60854	48	.302	.764
	Non Sportsmen	72.3200	21.41401			
Vitality Scale	Sportsmen	69.4000	3.40049	48	.039	.969
	Non Sportsmen	69.2000	3.82623			
Social Functioning Scale	Sportsmen	73.0000	19.98697	48	1.433	.158
	Non Sportsmen	81.0000	19.47220			

\*Significant at 0.05 level

t 0.05 (48)=2.00

It is evident from Table 1 that there were significant difference in the 't' values between the male sports person and non-sportsperson on sub- scale of General Health scale (GH) however, there were no significant differences in other subscale namely: Physical Functioning (PF), Role-Physical scale (RP), Bodily Pain scale (BP), Vitality scale (VT), Social Functioning scale (SF), Role-Emotional scale (RE), Mental Health scale (MH).

**Figure 1:** Mean score of Sports Persons and Non-Sports Persons on the sub-scale of SF-36



Mean score of male sportsperson and non-sportsperson on the variable of General Health scale (GH) Physical Functioning (PF), Role-Physical scale (RP), Bodily Pain scale (BP), Role- Emotional scale (RE), Mental Health scale (MH), Vitality scale (VT), Social Functioning scale (SF).

#### 4. Discussion and Findings

Analysis of the data revealed a significant difference in the 't' values between the sports person and non-sportsperson on general health scale. However there were no significant differences in other subscale namely: Physical Functioning scale (PF), Role-Physical scale (RP), Bodily Pain scale (BP), General Health scale (GH), Vitality scale (VT), Social Functioning scale (SF), Role- Emotional scale (RE), Mental Health scale (MH) between the sports person and non-sportsperson. The probable reason for the significant differences in the general health perception between the sports person and non-sportsperson owes to the active lifestyle inclusive of competitive sports participation that in itself bring about a wholesome development in the sportsperson. The probable reason for the insignificant differences in other subscales namely: Physical Functioning scale (PF), Role-Physical scale (RP), Bodily Pain scale (BP), General Health scale (GH), Vitality scale (VT), Social Functioning scale (SF), Role- Emotional scale (RE), Mental Health scale (MH) shows a normal based line values and the subjects selected (sports person and non-sportsperson) for the study were leading a healthy life style and with higher education values perceived better health, subjects belonged to good academic background, they were well psyched up and they had good knowledge and were well aware about their health.

#### 5. Conclusion

It is concluded that there were significant difference obtained among male sports person and non-sports person on the sub-scale of General Health (GH). However there were no significant difference among male sports person and non-sports person on the sub-scales of Physical Functioning scale (PF), Role-Physical scale (RP), Bodily Pain scale

(BP), Vitality scale (VT), Social Functioning scale (SF), Role- Emotional scale (RE), Mental Health scale (MH). Our findings support the notion that athletic involvement is a benefit to the overall general health status of adults and highlight the need to promote physical activities of maintaining or improving Health related quality of life.

## References

1. Akoi, T., Ohashi, T., Mastumoto, T., Sato, M. (1997). The pipette aspiration applied to the local stiffness measurement of soft tissues. *Annals of biomedical engineering*, vol 25, issue 3, pp581-587
2. Chalip, L., Csikszentmihalyi, M., Kleiber, D. and Larson, R., (1984). Variation of experience in formal and informal sport. *Research Quarterly for Exercise and Sport* 55 (2), 109-116.
3. Danish, S.J., Petipas, A.J. and Hale B.D. (1992) A developmental-educational intervention model of sport psychology. *The Sport Psychologist* 6:403-415.
4. Danish, S. J. (1998). Teaching life skills through sport: Community based programs for adolescents. In: Van Raalte, J.L. and Brewer B.W. (Eds.) *Exploring Sport and Exercise Psychology*. American Psychological Association: Washington D.C., pp.205-225. 7)
5. Tokunaga, M. and Hashimoto, K. (1988). A study on the training of psychological competitive ability for athletes (4): On making the diagnostic inventory. *Journal of Health Science*, 10: 73-84
6. Ueno, K., & Nakagomi, S. (1998). A Study on the Acquisition of Life Skills through the Participation in Athletic Club. *Japan Journal of Physical Education*, 43, 33-42.
7. <http://www.jstor.org/pss/3350401>
8. <http://fampra.oxfordjournals.org/content/6/2/153.extract>
9. <http://www.ncbi.nlm.nih.gov/pubmed/8201132>
10. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1060184/>
11. <http://www.nationalmssociety.org/for-professionals/researchers/clinical-study-measures/sf-36/index.aspx>
12. <http://walkcoc.nationalmssociety.org/docs/HOM/MSQLI Manual and Forms.pdf>

Creative Commons licensing terms

Authors will retain the copyright of their published articles agreeing that a Creative Commons Attribution 4.0 International License (CC BY 4.0) terms will be applied to their work. Under the terms of this license, no permission is required from the author(s) or publisher for members of the community to copy, distribute, transmit or adapt the article content, providing a proper, prominent and unambiguous attribution to the authors in a manner that makes clear that the materials are being reused under permission of a Creative Commons License. Views, opinions and conclusions expressed in this research article are views, opinions and conclusions of the author(s). Open Access Publishing Group and European Journal of Physical Education and Sport Science shall not be responsible or answerable for any loss, damage or liability caused in relation to/arising out of conflict of interests, copyright violations and inappropriate or inaccurate use of any kind content related or integrated on the research work. All the published works are meeting the Open Access Publishing requirements and can be freely accessed, shared, modified, distributed and used in educational, commercial and non-commercial purposes under a [Creative Commons attribution 4.0 International License \(CC BY 4.0\)](https://creativecommons.org/licenses/by/4.0/).