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**Off-Season break, quality of life & sport satisfaction
among elite Indian athletes**

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Abstract

Elite athletes experience a unique range of stressors that may potentially increase their vulnerability to mental ill-health. Studies have identified certain key factors such as the psychological impacts of injury, overtraining and burnout; intense public and media scrutiny; and managing ongoing competitive pressures to perform (Rice *et al.*, 2016) [29]. Previous research on Off-season breaks has primarily focused on their effect on athletes' performance, thus ignoring other salient aspects of athletes' experiences such as Sport Satisfaction and Quality of Life. Moreover, there is a dearth of research on related topics in the Indian context. This study aims to understand the impact of Off-season break on overall Quality of Life and Sport Satisfaction of Indian Elite Athletes. The study was conducted with a sample size of 103 individuals who were classified into three groups depending on their duration of Off-season break (less than 15 days; 15- 30 days; more than 30 days). The Quality of Life Inventory was administered and a semi-structured interview with a focus on aspects of Off-season break and Sport Satisfaction was conducted on three groups of athletes and the data was compared using Kruskal-Wallis-H Test. The findings indicate that there is no difference with respect to overall Quality of Life or Sport Satisfaction between the three groups but, with respect to sub-domains of Quality of Life, statistically significant differences were observed in the areas of Health ($p < 0.05$), Play ($p < 0.01$) and Community ($p < 0.05$); with the first group obtaining higher scores on all the three domains. The study, if extended, will help us understand the ideal Off-season break trends that lead to better Quality of Life and Sport Satisfaction in elite athletes.

Keywords: Quality of life, sport satisfaction, off-season break, elite athletes

Introduction

The World Health Organization (WHO) emphasizes that physical activity and sports are essential for our health and well-being. Along with a healthy diet, tobacco free life and avoidance of other substances harmful to health, appropriate physical activity and sports constitute one of the major components of a healthy lifestyle. Regular practice of appropriate physical activity and sports has a wide range of physical, social and mental health benefits (World Health Organization, 2003) [33].

India is home to a diverse population playing many different kinds of sports across the country and is emerging as a sporting nation with interest spread across a range of activities and competitions. A report on 'Sports India: Popularity and Participation of Sports in India', states that Cricket, Tennis and Football are the top three most followed and played sports in India (YouGov, 2012). Surveys have found that when gender of sport participation was compared in India, males (79%) were more than females (21%), reflecting traditional male participation in sports (Sen & Sensharma, 2004) [30].

Elite athletes spend an average of 48 out of the 52 weeks in a year preparing or playing their sport (Soller, 2016) [32].

There are various models that exist with regard to Phases of an Athlete's year. Among the popular models, the '3 Training Phases of an Athlete's Year' (3TP) model proposed by Force Fitness and Performance (2017) is the most comprehensive and widely followed model. According to the model, Phase 1 is the Off-Season, or the General Preparation Period which focuses on training general qualities that improve the performance of an athlete in a given sport. The model suggests that playing multiple sports and strength training in the off-season will help athletes be more successful and healthier. Phase 2–The Pre-Season, or the Specific Preparation period is explained as a phase where the specific traits, as opposed to specific abilities, that will make athletes successful in their sport are focused on and the abilities gained from the general phase are translated into more specific abilities. Phase 3–The Season, or the Competition period usually starts in the several weeks leading up to the competitive season, and lasts through the final games. It is the phase where athletes will work on the specific abilities associated with success in their sport.

Off-season breaks are said to foster positive feelings in athletes. According to International Youth Conditioning Association, Off-season break is "a period of time when an athlete is not participating competitively in their sport" (Slezak, 2014) [31]. Off-season breaks help elite athletes recover physically and psychologically, repair physical imbalances that are inherent in competitive sports and recharge the athletes to resume training (Fenner, 2016) [9], ensure work-life balance (Keim, 2016) [18], and regulate burnout (Heidloff, 2012) [15] which correlates with injuries. Despite the known beneficial and protective effect of exercise on mental illness, elite athletes experience a varied range of factors that may potentially increase their vulnerability to immunocompromise and mental illness (Paluska & Schwenk, 2000) [26] and reduced Quality of life.

Satisfaction has been used interchangeably in sport and exercise literature with various terms such as enjoyment, happiness, commitment, liking, and well-being. Sport satisfaction can be affected by many factors, both internal and external.

According to Papaioannou *et al.* (2008) [27], athletes' satisfaction determines achievement of goals and approval of social agents such as coach, parents and teammates. Studies have found that overtraining contributes to burnout among athletes (Lemyre, Roberts & Stray-Gundersen, 2007) [21] which is often linked with reduced Sport satisfaction, which can be buffered by Off-season breaks.

Review of Literature

Physical activity in general has been positively associated with Quality of life (Pucci *et al.*, 2011) and Sport participation has been linked to mental/psychological well-being such as the alleviation of depression and anxiety, promotion of self-esteem, positive affect, personal growth, social integration, social support, and community well-being (Galloway, 2006) [12].

Recent findings suggest that the ideal duration of Off-season break is 2-4 weeks (Fenner, 2016) [9]. Research on long-distance runners, found that a one-month Off-season break where athletes indulge in non-specific physical activities rather than inactivity, maintained all strength-related variables intact at the end of the season. It was also found that complete rest lowered fitness levels (Balsalobre-Fernández, Tejero-González & del Campo-Vecino, 2015) [3].

Research has demonstrated that physical injuries not only

compromise physiological parameters but also affect psychological variables such as Quality of Life and Burnout experienced by athletes (Filbay *et al.*, 2016; Houston *et al.*, 2016) [16]. Specific factors contributing to lowered quality of life include the psychological impacts of injury, overtraining and burnout; intense public and media scrutiny; and managing ongoing competitive pressures to perform (Rice *et al.*, 2016) [29].

According to Sheehan *et al.* (2018), 37% of athletes reported scores indicative of mild-to-moderate depression, 32% were poor sleepers, and 8% were highly anxious. Prolonged training mediated by overtraining injuries, lowered the vitality, general health and quality of life among athletes when compared to their controls (McAllister *et al.*, 2001) [24]. Sport satisfaction, or Athlete satisfaction, is an individual-level (intrapersonal) construct that is seen as an important outcome to a variety of psychological variables (Chelladurai & Riemer, 1997) [5]. Past research shows that factors such as athletes' satisfaction and motivation have significant influence on athletes' performance (Gillet, *et al.*, 2010; Lorimer, 2011) [14, 22]. There is a positive link between athlete satisfaction and individual/team performance (Papaioannou *et al.*, 2008) [27]. Reviewing recent literature available, it can be understood that there is a complete lack of empirical research done with respect to Off-season break and its impact on athlete's satisfaction with sport and Quality of Life. The rationale of the study is to compare the different durations of Off-season break and how it impacts Sport Satisfaction and Quality of Life among Elite Indian Athletes.

Method

Research Problem

- 1) Does the duration of Off-season break affect Quality of Life and Sport Satisfaction among Elite Indian Athletes?
- 2) Are there specific activities which elite athletes predominately engage in during Off-season breaks?

Objective

To assess whether differences in duration of Off-season breaks affect Quality of Life and Sport Satisfaction among Elite Indian athletes

To enumerate the specific activities taken up by elite athletes during such breaks

Specific objectives

To assess the Quality of Life and Sport Satisfaction of Indian elite athletes

To identify activities engaged in by elite athletes during Off-season break

Operational Definitions

Off-season break - "a period of time when an athlete is not participating competitively in their sport" (Slezak, 2014) [31].

Quality Of Life - "the individual's experience of his/her own life situation in the context of his/her culture and value system, and also with respect to his/her goals, expectations and standards" (World Health Organization 1996) [34].

Sport Satisfaction, or Athlete satisfaction, can be defined as a positive, affective state associated with the athletic experience (Chelladurai & Riemer, 1997) [15].

Hypotheses

H₁: The duration of Off-season break does not have an effect on Quality of Life of Elite Indian athletes

H2: The duration of Off-season break does not have an effect on Sport Satisfaction of Elite Indian athletes

Variables

Quasi-independent variable: Duration of break. The sample was divided into 3 groups depending on break duration:

Group 1: participants who took an Off-season break of less than 15 days (Short Break)

Group 2: participants who took an Off-season break of 15-30days (Average Break)

Group 3: participants who took an Off-season break of more than 30 days (Long Break)

Dependent variables. Quality of Life, Sport Satisfaction
Research Design

A Quasi Experimental research design was used to understand how different durations of Off-season breaks differ with respect to Quality of Life and Sport Satisfaction.

Sample

Through Purposive Sampling, 103 subjects were chosen for the present study. The following were the criteria chosen for the sample:

Inclusion criteria

- Athletes between the age 17 to 30 years
- Athletes who currently compete at the National and/ or International level
- Athletes who are of Indian nationality
- Athletes who have taken an Off-season break

Exclusion criteria

- Athletes below the age of 17 and above the age of 30 years
- Non-Indian athletes
- Athletes who are not currently competing at the National/ International level
- Athletes who have not taken an Off-season break

Tools

The following tools were used to collect data

The Quality of Life Inventory or QOLI is an evidence-based positive psychology test used in intervention planning using satisfaction scores in 16 key areas of life and an overall life satisfaction score. It was developed by Michael B. Frisch and published by NCS Pearson, Inc. in 1994. It can be administered on individuals who are 17 years and older and requires a Reading Level equivalent to 6th grade. Administration can be either Paper-and-pencil or computer administered. Approximately 5 minutes is required to complete it. It consists of 32 items with 3-point rating scale for importance, and 6-point rating scale for satisfaction. The QOLI can be used as a screening tool for mental health and physical problems. A low quality of life score is often a key symptom of psychological and physical disturbances and might also predict future health problems. With regard to psychometric properties, it has a Test-retest reliability of 0.80-0.91 and Internal consistency of 0.77-0.89 (Lehman, Lasalvia, 2010) [19]. Moreover, the QOLI was specifically chosen for this study from among the various measures of Quality of Life as it asks subjects how important an area is to their happiness and then how satisfied they are in that area,

thus providing less influence to areas that are less important to the individual to contribute to the individual’s overall quality of life. The Quality of Life Inventory was administered to the sample with the instruction to answer it with respect to the past year.

Semi- structured Interview consisted of questions related to the Off-season break taken during the past year regarding the duration of the break, nature of activities undertaken, satisfaction with the break etc.

Sport Satisfaction: As part of the Semi-structured interview, Sport Satisfaction was assessed with a single-item indicator used to represent the positive, affective state associated with the *athletic experience*. Participants responded to the item “On a scale of 1-10, how satisfied are you with your sport? (‘1’ being extremely dissatisfied and ‘10’ being extremely satisfied)” after being instructed to answer it keeping in mind the past year. Although the use of single-item indicators is controversial (Crocker & Algina, 1986) [6], an empirical study examining the utility of such indicators suggests that normally distributed scores from single-item indicators that adequately represent the focal construct of interest can be as useful as their multi-item counterparts (Gardner *et al.*, 1998) [13]. Also, there are inadequate tools currently available to measure Sport Satisfaction for individual sport athletes and those without a coach. The Athlete Satisfaction Questionnaire that measures Sport Satisfaction can be only administered on athletes who have a coach or play team sports, which is not the focus of the current study.

Ethics

Ethical clearance was obtained from the institution. It was ensured that informed consent was taken and rights of participants were given importance. No harm, physical or psychological, was inflicted during the process. Confidentiality and anonymity was ensured.

Analyses of Data

Analysis for Normality of sample distribution was carried out using Shapiro-Wilk test and since the data was not normally distributed, Kruskal-Wallis-H Test was carried out for 3 groups on Quality of Life and Sport Satisfaction. The responses from the semi-structured interview were interpreted qualitatively to understand the nature of Off-season break.

Results

The following Pie charts show pictorial representations of Gender, Level of Sport and the Sport that the Elite athletes play.

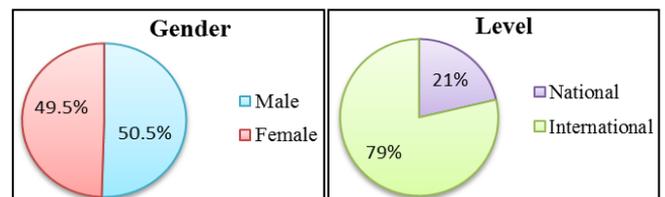


Fig 1.1 & 1.2: show the representation of Gender and Level of participation in the sample.

Figure 1.1. Shows a pictorial representation of percentage of Males and Females in the sample. The sample included 52 (50.5%) males and 51 (49.5%) females. The representation of males and females are nearly equal. Figure 1.2 shows a pictorial representation of percentage of National and International level Elite athletes in the sample. The sample

included 22 (21%) National level and 81(79%) International level athletes.

This section includes the comparison of socio-demographic data between Group 1, Group 2 and Group 3 using Kruskal-Wallis-H Test. It also includes assessment of normality of the distribution of data, followed by comparison of Duration of Off-season break, Quality of Life, and Sport Satisfaction among the 3 groups using Kruskal-Wallis-H Test.

Table 1.1: Shows the comparison of socio-demographic characteristics of the sample

Variables	Descriptives	Group 1	Group 2	Group 3
Age	Mean	19.48	21.31	21.73
	SD	2.38	3.29	4.28
Sex	Males (N)	32	12	8
	Females (N)	14	27	10

The above table shows the demographic variables of Age and Sex of the sample. The Mean and Standard Deviation of age of the 3 groups as well as the number of Males and Females in each group are displayed. With respect to age, Group1 has a Mean of 19.48 and a Standard Deviation of 2.38, Group 2 has a Mean of 21.31 and a Standard Deviation of 3.29 and Group 3 has a Mean of 21.73 and a Standard Deviation of 4.28. With regard to sex, Group 1 consists of 32 males and 14 females, Group 2 consists of 12 males and 27 females and Group 3 consists of 8 males and 10 females.

Table 1.2: Shows the Years of Sporting Experience of the sample

	Group (based on Break duration)	N	Mean Rank	χ^2	Sig
Years of Sporting Experience	1	52	49.31	1.961	.375
	2	32	58.09		
	3	19	49.11		

The above table shows the Years of Sporting Experience of Elite athletes in Group 1, Group 2, and Group 3, which has been analyzed by Kruskal-Wallis-H Test. The results indicate

that there is no significant difference between the 3 groups. Therefore the data was found to be comparable with respect to Years of Sporting Experience.

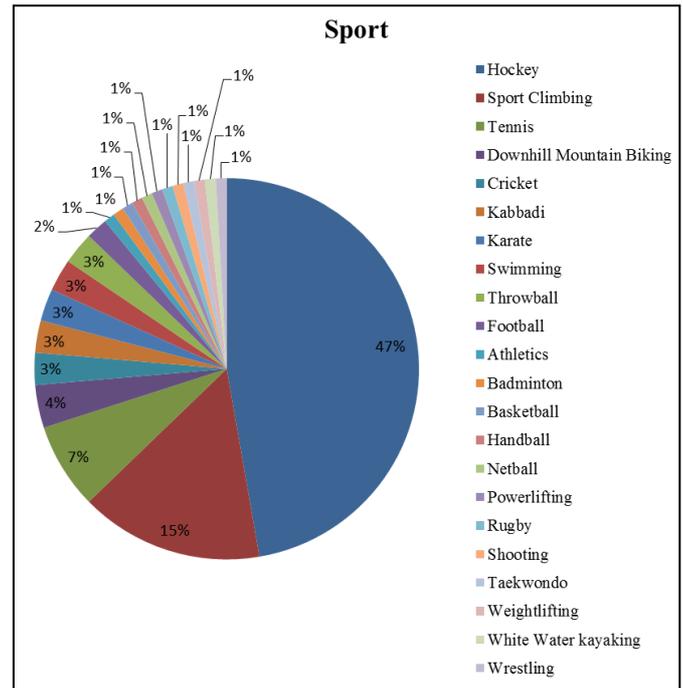


Fig 1.3: Shows the representation of Sport in the sample.

The above pie-chart in Figure 1.3 shows a pictorial representation of percentage of Elite athletes in 22 different sports. The sample included 57 Hockey players, 17 Sport Climbers and 8 Tennis Players. The rest of the sample included Elite athletes from Downhill Mountain Biking, Cricket, Kabbadi, Karate, Swimming, Throwball, Football, Athletics, Badminton, Basketball, Handball, Netball, Power lifting, Rugby, Shooting, Taekwondo, Weightlifting, White Water Kayaking and Wrestling as shown in the pie-chart.

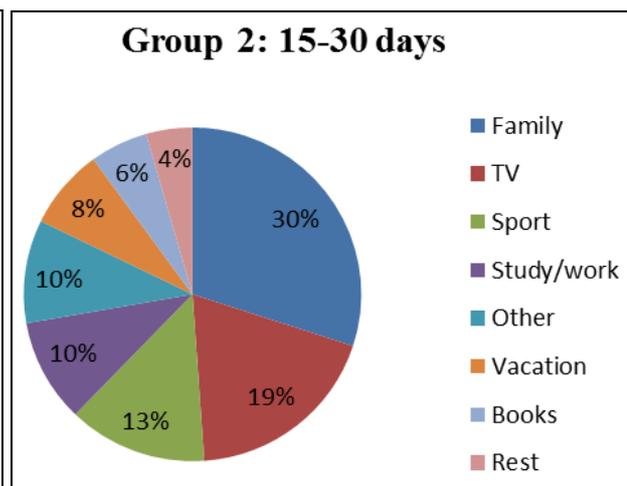
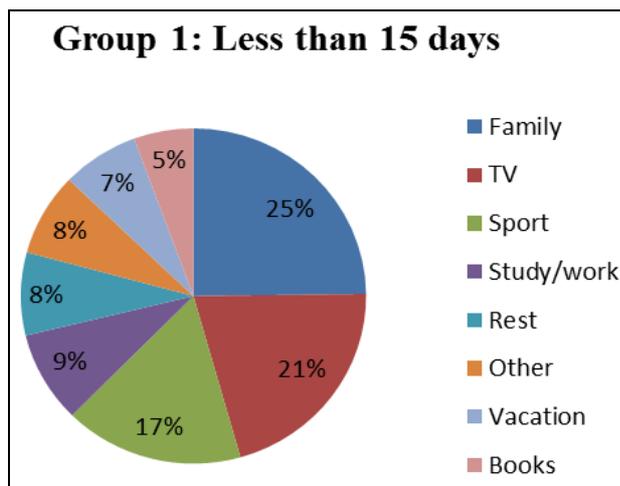


Fig 2.1 & 2.2: Showing the activities during Off-season break for Group 1 & Group 2

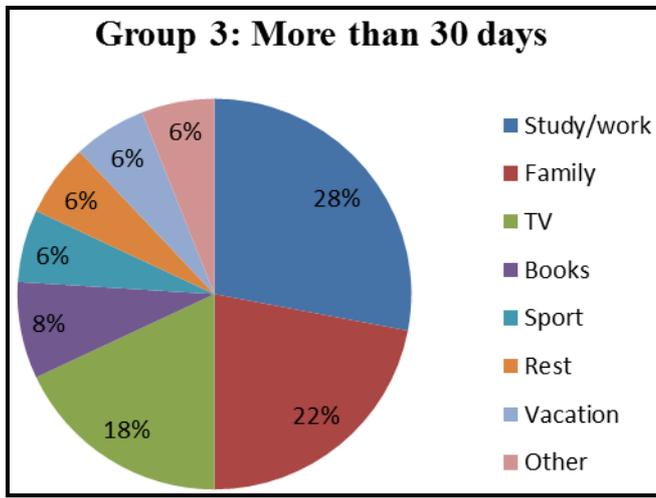


Fig 2.3: Showing the activities during break for Group 3

The Figure 2.1 shows a pictorial representation of the activities that Elite athletes of Group 1 (less than 15 days)

indulge in during their Off-season break. In this group, it is seen that 25% (31 participants) spend time with family and friends, 21% (26 participants) watch television/watch movies/play video games and 17% (21 participants) play a different sport. The Figure 2.2 shows a pictorial representation of the activities that Group 2 (15-30 days) indulge in. 30% (27 participants) spend time with family and friends, 19% (17 participants) watch television/watch movies/play video games and 13% (12 participants) play a different sport. The Figure 2.3 shows a pictorial representation of the activities that Group 3 (more than 30 days) indulges in during their Off-season break. 28% (14 participants) study or work, 22% (11 participants) spend time with family and friends and 18% (9 participants) watch television/watch movies/play video games. The other activities that the athletes reported doing were 'reading books', 'going on a vacation', 'working out at the gym', 'jogging and stretching', 'planning a schedule for the next season' and 'taking complete rest', i.e., no jogging, working out or any form of training.

Table 2: Shows the Assessment of Normal Distribution of Data

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
QOLI Score	.077	103	.141	.968	103	.014
Sport Satisfaction	.0222	103	.000	.812	103	.000

Shapiro-Wilk test is used to assess the normal distribution of data. The above table gives the normality testing for all 3 groups for Sport Satisfaction and Quality of Life Inventory

score. The results for all 3 groups are significant (0.014 for QOLI score and 0.000 for Sport Satisfaction) which means the data does not fall under normal distribution curve.

Table 3.1: Shows comparison of the 3 groups on QOLI scores using the Kruskal-Wallis-H Test

Area	Mean Ranks			χ^2 values	Sig
	Group 1	Group 2	Group 3		
Health	59.51	49.06	39.17	7.493	.024*
Self Esteem	58.80	45.74	48.17	4.726	.094
Goals & Values	46.51	58.54	51.86	3.686	.158
Money	46.87	54.76	59.14	2.843	.241
Work	49.84	54.71	51.67	.583	.747
Play	59.90	40.76	56.17	10.847	.004**
Learning	53.88	50.19	51.11	.371	.831
Creativity	53.85	51.56	48.22	.501	.779
Helping	56.66	47.01	50.89	2.384	.304
Love	53.27	45.49	62.86	4.472	.107
Friends	54.91	46.97	55.44	1.964	.375
Children	46.25	54.09	62.17	4.057	.132
Relatives	54.08	51.90	46.92	.777	.678
Home	53.08	53.69	45.58	1.341	.512
Neighbourhood	57.76	46.88	48.36	3.300	.192
Community	60.28	44.23	47.67	6.788	.034*
QOLI score	57.26	47.12	49.14	2.637	.268

In Table 3.1, we can see that in the Quality of Life Inventory, the areas of Health and Community are significant at the 0.01 level whereas Play is significant at the 0.05 level showing that there is a significant difference between the 3 groups in the

above areas. The table also shows the mean ranks of the 3 groups. Higher ranks indicate higher scores in the QOLI which is interpreted as higher satisfaction in that area.

Table 3.2: Comparison of the 3 groups on Sport Satisfaction using the Kruskal-Wallis-H Test

Variable	Mean Ranks			χ^2 values	Sig
	Group 1	Group 2	Group 3		
Sport Satisfaction	52.27	55.15	44.47	1.741	.419

The table 3.2 shows the mean ranks of the 3 groups on Sport Satisfaction. Higher ranks indicate higher scores which is interpreted as higher Sport Satisfaction. From the table, it can

be seen that there is no significant difference in Sport Satisfaction among the 3 groups.

Discussion

The Off-season is an important phase of an athlete's year. Not only will it help the athlete to recover physically and psychologically, it can be used to address some of the physical imbalances that are inherent in playing competitive sport (Anderson, 2019). An Off-season break helps to clear the mind, re-evaluate current objectives, set new goals, strategize, regain strength and take care of the body (DePaula, 2016) [7]. Not taking time away from a sport can lead to burnout and mental exhaustion. While burnout is more of a psychological issue, it can actually result in physical injury as athletes who aren't devoted to their sport mentally tend to have decreased awareness on the field or develop lazy mechanics, which can result in injury (Heidloff, 2012) [15].

While Off-season breaks and Quality of Life have been independently studied among Elite athletes, no studies were found to have linked the two concepts. Although there are a number of articles that talk about the mental and physical benefits of taking an Off-season break, there are no studies in particular on its effect on Quality of Life and Sport Satisfaction.

The current study hypothesized that the duration of Off-season break does not have an effect on Quality of Life and Sport Satisfaction of Elite Indian athletes. It also explores the activities engaged in by these athletes during their Off-season break. The age group of the sample was 17-30 years.

A semi-structured interview was used to obtain demographic details as well information on the athletes' Off-season break and measure Sport Satisfaction. The Quality of Life Inventory was used to assess Quality of Life of the sample. Based on the Off-season break duration, the sample was divided into 3 groups, Group 1 consisted of participants who took an Off-season break of less than 15 days (Short Break). Group 2 consisted of participants who took an Off-season break of 15-30 days (Average Break) and Group 3 consisted of participants who took an Off-season break of more than 30 days (Long Break).

The findings of the current study and its implications with reference to previous literature are discussed below.

Off-season break duration and Quality of Life

This study hypothesized that the duration of Off-season break does not have an effect on Quality of Life of Elite Indian athletes. The findings of this study failed to reject the null hypothesis. This means that there is no significant difference in the overall Quality of Life among the 3 groups. However, on closer examination of data, it is seen that there is a significant difference in 3 areas of the Quality of Life Inventory. This has been discussed in detail below.

Health and Off-season Break

The QOLI defines Health as "being physically fit, not sick, and without pain or disability". A low score in this area indicates that the individual may suffer from (a) poor fitness and health habits (e.g., overweight, out of shape, in need of exercise), (b) a chronic illness or disability, such as back pain or heart disease, (c) a recent illness, injury, or surgery, or (d) symptoms of psychological disturbance, such as depression, anxiety, or alcohol or drug abuse.

The results of the current study show that elite athletes who took a short break of less than 15 days (Group 1) have a significantly higher score in the area of Health in the Quality of Life Inventory, compared to the remaining groups (Group 2 & Group 3). Group 3 (Long break) has the lowest score in the area of Health. This finding is in accordance with previous

literature which states that an optimum Off-season break is important for staying healthy as training and competing all year round takes a toll on the bodies of elite athletes. While there may not be visible trauma or injury, internally there has been a tremendous amount of stress on the body and its various systems. Continuing this process without taking some time off is not healthy (Buchanan, 2018) [4].

On the other hand, when athletes whose life and normalcy revolve around exercising nearly every day, sometimes twice a day, are suddenly subjected to two or more weeks of absolutely no exercise, some ramifications are expected. While taking a break aids in physical and mental relaxation, a break that is too long can result in a counter reaction and mood changes. In a study entitled 'Committed Exercisers and Exercise Deprivation: The Relation of Biochemical Mark', habitual runners and triathletes, who were forced to take at least 2 weeks off, showed significant increases in feelings of tension, depression, anger, confusion and total mood disturbance. Additionally, there was a decrease in vigor. These psychological mood state changes were accompanied by neuro-chemical alterations, more specifically, in the levels of neurotransmitters Andamide and B-endorphin which play a large role in joy, bliss, "runner's high", and other happy emotions (Leite, 2014) [20].

Steve Magness, an expert performance coach, *attributes these findings* to the fact that exercise creates a routine and structure, plays a large role in stress relief and gives a neuro-chemical hit which is the reason a lot of Elite athletes continue to engage in physical activities like running, cycling and swimming during their break. He goes on to explain that prolonged deprivation of exercise leads to neuro-chemical alterations similar to a withdrawal effect which is the body craving the exercise it used to regularly receive (Magness, 2014) [23]. This view finds support in a study on student-athletes that suggests that stress of the Off-Season may be greater for the Student-Athlete than during Competition season. A possible explanation for this was that for student-athletes, the structure of competition season may balance the stress of competition and when the structure is removed or reduced, perceived stress increases (DiClementi, Reese, Borsa, 2017). Magness suggests that Cross-training and providing a substitution to the routine may help from a mental and physical standpoint to reduce the anxious counter reaction, mood changes and physical ramification of reduced fitness that result from prolonged inactivity during Off-season breaks. He states that an Off-season break is a balancing act between detraining and psychological refreshment (Magness, 2014) [23]. This is an area that requires further exploration.

Play and Off-season break

Under the area of Play, The QOLI measures how satisfied individuals are with what they do in their free time to relax, have fun or improve them. This could include watching movies, visiting friends, or pursuing a hobby like sports or gardening. It also measures how important the individual thinks these are to his or her happiness. A low score in this area indicates that the individual may not engage in his/her favourite hobbies or pastimes, as often as he/she would like to, because of a perceived lack of time. Elite athletes who took an Average break had significantly lower scores in the area of Play compared to those who took Short and Long breaks. The group that took Short breaks had the highest score in the area of Play. As shown in the results, athletes who take Short breaks indulge in activities such as spending time with family and friends, watching television, movies or playing

video games and trying a different sport. This implies that they are satisfied with the amount of time they spend engaged in their hobbies or pastimes.

Community and Off-season break

Under the area of Community, the QOLI measures an individual's satisfaction with the city, town, or rural area where they live, along with their neighbourhood. It includes how nice the area looks, the amount of crime and how well the individual likes the people along with places to go for fun like parks, concerts, sporting events and restaurants. The cost of necessary things, the availability of jobs, the government, school, taxes and pollution are also included in this area. A low score in this area indicates that the individual may perceive his/her community as unsafe, unattractive, unfriendly or lacking in recreational outlets, job opportunities, activities for singles or cultural amenities such as concerts, sporting events and restaurants.

Elite athletes who took a Short break (Group 1) had significantly higher scores in the area of Community compared to those who took Average (Group 2) and Long breaks (Group 3). Elite athletes who took Average breaks had the lowest score in the area of Community. As shown in the results, athletes who take Short breaks indulge more in community activities such as spending time with family and friends and trying a different sport. This implies that they perceive the community as safe, attractive, friendly or having adequate recreational outlets and job opportunities.

Offseason break duration and Sport Satisfaction

This study hypothesized that the duration of Off-season break does not have an effect on Sport Satisfaction of Elite Indian athletes. The findings failed to reject the hypothesis of the current study. This means that there is no significant difference in Sport Satisfaction among the three groups. All the groups reported extremely high Sport Satisfaction, although it is interesting to note that the mean score for males was slightly higher than females. This indicates that break duration does not really impact the subjective feeling of satisfaction as it is regarded as an extrinsic aspect of sport.

Though the recommended average duration of Off-season breaks for Elite athletes is 2-4 weeks, (Overton, 2016; Fenner, 2016) [9], in reference to the current study, it can be observed that among Elite Indian athletes, a break of less than 15 days seems to have noticeable benefits in few domains of Quality of Life. An experimental investigation can ensure accuracy of the ideal duration of Off-season break.

1. In summary, it can be understood that there is no significant difference in overall Quality of Life among the 3 groups, however, significant differences were found in 3 Areas of Life in the Quality of Life Inventory:
 - Elite athletes who took a shorter break than average (less than 15 days) had significantly higher scores in the area of Health compared to those who took Average (15-30 days) and Long (more than 30 days) breaks. Elite athletes who took Long breaks had the lowest score in the area of Health.
 - Elite athletes who took an Average break had significantly lower scores in the area of Play compared to those who took Short and Long breaks. The group that took Short breaks had the highest score in the area of Play.
 - Elite athletes who took a Short break had significantly higher scores in the area of Community compared to those who took Average and Long breaks. Those who

took Average breaks had the lowest score in the area of Community.

2. There is no significant difference in Sport Satisfaction among the 3 groups.

Conclusions

The current study compared Quality of Life and Sport Satisfaction among three groups of Elite athletes based on their Off-season break duration. The study further looked at the activities engaged in by these athletes during their Off-season break. The higher scores of Group 1 on Health, Play and Community can be attributed to the fact that adverse effects of lack of routine and physical activity have been found to occur only after two weeks (Leite, 2014) [20] while Group 1 took an Off-season break of less than 15 days. Moreover, as more participants of Group 1 tried out different sports than the other groups during the break, they ensured that higher satisfaction with Play and Community was maintained compared to the remaining groups.

Limitations

- QOLI English version was used where basic knowledge of English was required.
- Socio-economic status was not controlled.
- A single-item measure was used to assess Sport Satisfaction.

Implications

The current study has some important implications. Although it failed to reject the null hypotheses that Off-season break has an effect on Quality of Life and Sport Satisfaction, it was found that Elite athletes who took a shorter Off-season break were more satisfied with their Health, Play and Community than those who took a longer break. Taking an Off-season break of less than 15 days showed significantly higher Quality of Life scores in these areas. This implies that taking an Off-season break of optimum duration and engaging in activities such as trying a different sport, spending time with family and friends and indulging in entertainment media like television, movies, video games and reading books, could help better some aspects of athletes' functioning as well as their Quality of Life.

This study concludes that an Off-season break of Short duration (less than 15 days) is desirable for achievement of better satisfaction in the areas of Health, Play and Community.

Future Directions

- In the present study, a single-item measure was used to assess Sport Satisfaction as the tools currently available to measure Sport Satisfaction can only be administered on athletes who have a coach and those who play Team sports. Development of a Sport Satisfaction scale for Individual Sport players and those without a coach can be undertaken.
- Quality of Life of Elite athletes Pre and Post Off-season break has not been studied. This could be a possible area for further investigation.
- Due to time constraints only cross sectional assessment was done. Longitudinal replication would give a better outcome.

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