

Chapter I

INTRODUCTION

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“Work Hard + Good Recovery = Best Performance”

Sports is one of the areas where India lags behind in comparison to some of the poorer nations, this is not because of lack of talent. At the junior level, Indian athletes are competing with the best in the world but, when it comes to senior level, they seem to fall behind which could be due to many reasons of which one could be improper training. Repetition of the same movements with the same intensities may not improve performance all the time, it could plateau the performance due to the adaptation of the central nervous system which results in lack of stimulation. On the other hand overtraining or excessive training stress occurs when athletes are forced to train with too high intensity and high volume than what is required. Added to this is an improper recovery program caused by high pressure on the athlete to win or could be due to high expectations. Inadequate recovery will cause the athlete to not being able to train at the required intensity. The intense and prolonged physical exercise can lead to fatigue and high level of fatigue could also lead to injury. In order not to continue participating in sports, nowadays some of the athletes have started using painkilling drugs to mask their injury and they feel that nothing is wrong in using it on the day of competition (Tricker, 2000). Hence, we can assume the amount of pressure on an athlete to perform consistently at their best is an issue that could force the athlete to train harder and harder without considering their health, which might result in pushing many an athlete towards burnout. This could be a serious lapse on the part of that athlete, because training too hard, too fast without proper recovery can cause serious damage to their health and career.

In athletics, specialized training and proper recovery plays a major role for achieving top performance (Kellmann, 2002). Gould and Dieffenbach (2003) found that a state of overtraining and under recovery leading to burnout is produced when there is a failure to recover properly from stress of training. Overtraining is happening because of

repeated stress without proper recovery, it is a physical, behavioral, and emotional state that is created when the intensity and volume of an athlete's exercise exceeds their recovery capacity. In general, overtraining is described as an improper balance between training and recovery (Kuipers & Keizer, 1988). Raglin (1993) viewed overtraining as part of periodisation in which athlete's training program is raised above its normal levels followed by a period of tapering for improving performance. But performance is not always improved due to this increase of training; maladaptation can also occur. Maladaptive response to overtraining is staleness. Its symptoms include decrease in muscular strength, change in athletes perception of physical effort and premature fatigue during training (Raglin & Wilson, 2000). Excessive fatigue can result as maladaptive fatigue syndrome (Henschen, 2000). It is a psycho biosocial state which could result in physical, psychological and emotional withdrawal from an enjoyable and motivating activity (Gould, 1996). The common symptoms of overtraining are fatigue, getting easily irritated, depressed, moody, losing competitive desire, sleep disorders and some people will have decreased appetite, weight loss and increased number of injuries.

More than 60% of the distance runners experience the consequences of overtraining at least once during their career (Morgan et al., 1987), 21% of athletes of Australian swimming team during half year season (Hooper et al., 1993), by 33% players of Indian basketball team during 6 week training period (Verma et al., 1978) and by more than 50% of the soccer players after a four month competition season (Lehmann et al., 1992). A mild form of overtraining can also occur on a short time basis that can easily be recovered over several days. This situation can be called as "overreaching" (Kuipers & Keizer, 1988). 'Under recovery' leads to Physiological and Psychological consequences which themselves are believed to ends in poor performance (Budgett, 1998). Therefore a chronic problem in high performance remains the continual risk of an imbalance in the training, competition, recovery cycle as the cause for developing the overtraining syndrome called 'burnout' or 'staleness' (Budgett, 1990).

Stress is an important content of the burnout process because stress is often an unavoidable aspect of everyday life. It is a state of mental or emotional strain or tension

resulting from adverse or demanding circumstances. Research has repeatedly verified the effects of stress on health and well-being (Lazarus, 1999). Aldwin (1994) formulated one definition after incorporating most of the elements of various stress definitions that she believed researchers used to identify with the purpose to study stress and its effects. She defined stress as a psychological and physiological distress resulting due to “quality of experience, manufactured by a person-environment interaction caused by either over arousal or under arousal”. Pearlin and Schooler (1978) referred stressors to an external event, but referred to strain or stress as an internal event.

In today’s world, exposure to stress is a certainty; there are lots of research on tools to evaluate the amount of stress to which a person is exposed, how well a person is able to cope with stress, and whether or not a person is displaying physical or mental signs of stress (Nordhaus-Bike, 1995). Stress refers to a physical, chemical or emotional state that leads to negative feelings, tension in the body or mind, in response to an event (Abouserie, 1994). McGrath (1970) defined stress as “a marked imbalance between the capability to respond to a demand, under situations where failure to cope up with a demand has important consequences”. Similarly, Lazarus and Folkman (1984) considered stress to be a function of situation that is highly demanding, combined with the person’s limited emotional capacity to cope with these situations. Stress is primarily caused by situational or personal sources or a combination of the two. Situational sources include areas such as the importance placed on the event and the uncertainty surrounding the outcome of the event (Martens, 1987). Personal sources of stress include trait anxiety and self esteem. Trait anxiety is a dispositional characteristic predisposing an individual to view generally nonthreatening situations as more or less threatening. As such, a higher trait anxious person is likely to perceive competition and other evaluations as more threatening and stressful than an individual with lower trait anxiety. Self esteem affects an individual’s state anxiety level or how anxious they feel in any particular situation. Self- esteem refers to how we feel about ourselves and our abilities in any given situation. Low self esteem athletes have lower levels of confidence in respect of a given situation and thus they experience more state anxiety than athletes with higher self esteem.

Increasing self confidence through means such as teaching and facilitating success is one way to reduce the amount of state anxiety of an athlete.

In life, every one experiences stress but for athletes it is considerably higher because they have worries about lifestyle, social and emotional stress in addition to their everyday training and competition. Many studies have been conducted in occupational stress and burnout but very fewer studies have been conducted on athletes stress and its relationship with burnout. Athletes are prone to burnout because they are highly dedicated, achievement oriented and are very stressed (Feigley, 1984). Regular, systematic and scientific training is most important for an athlete to improve his/ her performance but if the training load is in excess of what the athlete can sustain, it could end up as overtraining and negatively affect his/her performance. A serious consequence of such training can lead to burnout or complete withdrawal from the field or sometimes even the society.

Certain amount of the training stress is actually beneficial to an athlete as it helps to focus better and to perform with additional energy, but our body may not be able to differentiate which is life style stress and which is the training stress. Too high stress could actually be undesirable for the body as it has direct effect on the hormonal balance, entire metabolism and immune system. Athletes are more likely to experience burnout if they are involved in sports mainly because they have no other choice or related reasons (Raedeke, 1997). Reaction to chronic stress can also lead to burnout. Burnout is a process of gradual exhaustion of one's energy. These are characterized by mental, physical and emotional exhaustion. In the year 1980 people started describing the cause of burnout as extreme emotional pressure but burnout among young athletes continues to be viewed as an individual problem.

Maslach and Jackson (1981) identified burnout conditions characterized by depersonalization, emotional exhaustion and less sense of personal accomplishment. Most accepted definition in sports is proposed by Smith (1986); it's a multidimensional experience which is associated with psychological, physical and emotional withdrawal of

a person from formally enjoyable activity due to excessive and constant stress. Freudenberger (1980) defines it as a state of fatigue or irritation by commitment to a cause, way of life, or relationship that failed to produce expected return. In simple terms, burnout is “a condition when individuals become bored with anything they are doing, and throw it like a towel” (Harris, 1984). Coakley (1992) believed that it’s more of social foundation rather than stress. Feigley (1984) defines burnout as a growing phenomenon. In its starting state they may experience fatigue, irritability, loss of enthusiasm, frustration and anger. Physically minor body pains and changes in eating patterns were noticed. In the middle stage they may show withdrawing or silent response to questions regarding their sports. Excessive disordered eating and severe fatigue can be noticed as physical symptoms. In the final stage they will show escapist behavior toward their sports. Fender (1989) described the symptoms of burnout; physical symptoms include fatigue, sleeplessness, headaches, shortness of breath and weight fluctuation, behavioral symptoms are getting easily angered, frustrated, inconsistent performance and emotionally they feel helpless, depressed, irritable and experience negativity towards their sports and other areas of life; possibly completely dropping out or withdrawing from the sports altogether.

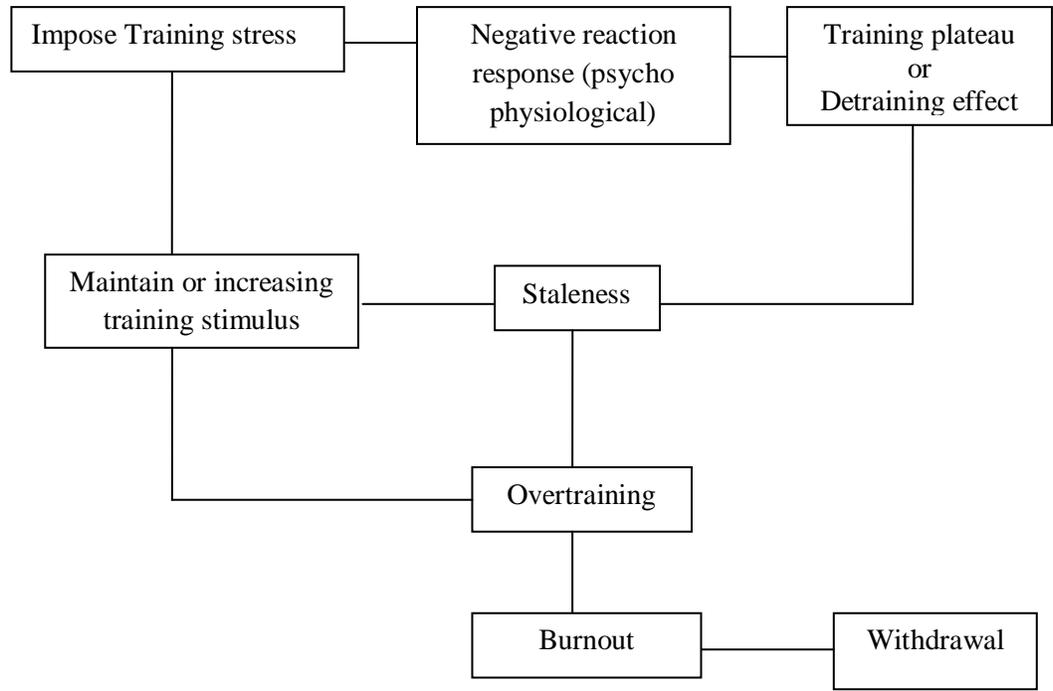
In sports, burnout is a response to stress of an athletic competition that can be denoted by feeling of emotional exhaustion and decreased athletic performance. From person to person, burnout symptoms may vary but mostly they will experience tiredness, hopelessness and irritability (Worchel & Goethals 1985). Common physical signs are feeling of exhaustion, gastric problem, headache, insomnia, shortness of breath and weight loss (Cardinell, 1980), behavioral symptoms include getting angered easily, instant aggravation, inability to hold feelings, feeling of helplessness, loss of caring for others (Cardinell, 1980). Freudenberger (1980) noted burnout persons expose more aggression and depression when failures occur.

According to Smith (1986) signs of burnout are tensions, fatigue, irritability, and significantly decreased energy, increased vulnerability to illness, sleep disorders, decreased efficacy and inconsistent performance. Heyman (1986) guesses that athletes

feels “empathy, isolated and alone”. Researches show that self efficacy also plays a major role in burnout process; individual who have low level of self efficacy are doubtful about the belief in their ability. When challenges come, they will reduce their attempt to deal with stressful events; it will raise their stress and result in burnout. Smith (1986) also defined the cause of burnout; he divided it in two categories namely environment factors and personal factors. Environmental factors include physical factors (over training and injury), logistic factors (time construal and organizational problems) and social interpersonal factors (problem with others). Personal factors include lack of enjoyment, high expectation, perfectionism, poor relationship skills, poor coping strategy and lack of personal control.

Silva (1990) presented a stress based model of how negative training stress syndrome could lead to burnout. Participation in competitive athletics will create physical or psychological training stress that the athletes could have to adapt to either positively or negatively. The positive training stress leads to higher output with effective coping and problem solving strategies. These positive improvements resulted in improved performance but the negative training stress syndrome increased the athletes stress level or over load conditions, this adaptation includes insufficient rest pattern, boredom and conflict. In the negative training stress syndrome first stage is the staleness which affects psychological and physiological adaptation to training stress and the training that failed to work. Overtraining is the next stage because body has repeatedly failed to cope up with training stress. Over training, burnout and withdrawal are the last stages. According to Silva burnout is a physical and psychological response to a repeated ineffective attempt to manage with intense training and competitive stressors.

Figure 1.1
Negative Training Stress Syndrome. Silva (1990)



Coakley (1992) suggested burnout as a social phenomenon rather than a personal failure. He proposed that burnout is directly attached to the social problem and social relationship while participating in sport. External demand on athletes is also a factor to be considered because parents and coaches may have higher expectations for success than the athletes due to which the athletes may develop negative attitude towards the activity and anger towards those who are placing demand on them and as a result become rigid by nature (smith, 1986). In fact burnout is a barrier for individual who works hard. It is a very important issue that should be prevented more effectively. A number of talented athletes are dropping out from sports because of the consequence of prolonged chronic stress and burnout which is characterized by emotional and physical exhaustion, reduced sense of accomplishment, sports devaluation and complete withdrawal.

Many athletes especially at the junior level with potential for national representation have lost their promising career at the budding stage because of the demand to excel much quicker than ever.

Kerala is one of the Indian state which has rich history of producing world class athletes but sports today is more competitive than ever and the amount of pressure put on athletes are also extremely high, the constant pressure to win could lead to mental and physical exhaustion and stress that could lead to burnout. In Kerala, state level competitions are extremely competitive and some of the athletes have won medals with national record, but later they have just disappeared from the field. I am one such victim of burnt out; when I was at my so called peak, I got burnt out or left the field. What could have happened to me? What could have happened to other similar, promising and talented athletes? Whether they were burnt out or left the field due to any other reason? If they were burnt out could it be due to effect of training stress or something else; if so could they be prevented from burning out? Can a better understanding be proposed on this phenomenon? Why should we keep losing promising athletes to an avoidable cause? Can this phenomenon be managed in better way? It is high time to identify such instances not only to save a potential world class or national level athlete but also to help the stakeholders understand the situation better and take corrective measures. Hence, it is very important to know the athletes stress level in order to prevent overtraining than to treat it after it has occurred. Not much work has been done to analyze the current scenario of training stress causing burnout of athletes in India. Under this circumstance the researcher was keen to select this problem with the purpose to find out the possible reasons that could cause burnout and expose the results to the stakeholders.

This study aims to identify the impact of training stress and burnout by understanding the level of stress which athletes are going through. By being aware of the causes of burnout, signs and symptoms to look for and the means to deal with it, the researcher intends to help the athletes from over training so that he/she could perform better and longer and avoid burnout.

Statement of the Problem

A large number of athletes are leaving the field due to burn out which could be due to incomplete recovery from previous training or over training which has resulted in excessive training stress. Hence, this study was taken up to identify the training stress and its effects among athletes and burnt out athletes of Kerala. This study also will examine their demography and its influence on burnout, if any.

Significance of the Study

Burnout is a product of excessive training stress and the training load over a period of time, training load can have both positive and negative effects. According to Silva (1990) the negative adaptation will lead to burnout and in extreme cases complete withdrawal of the athlete from sports or even from the society. This situation can be altered or corrected by revealing the construct behind the burnout. The result of the study could reveal the cause of training stress leading to burnout, and thus can be helpful in preventing burnout. It may also serve as a guideline to prevent over training, hence the athletes training and performance can be managed better. Moreover, research in this area through mixed method has been very scanty in India. Further, this could be the first time such study has been attempted on athletes of Kerala to the best of my knowledge.

Utilization of Mixed Method Approach

The present study used a mixed method research which employs a convergent parallel design; it gives deep and rich understanding of the topic. The study was conducted in two parts namely quantitative and qualitative. The data were collected concurrently to strengthen the validity and credibility of the study to provide a better understanding of the research problem (Creswell, 2009). Quantitative part helps to obtain information concerning the current status of training stress which athletes are going through and in the qualitative part, semi structured interview was utilized as a method to gather information about cause and consequences of burnout among athletes who were no longer active. The views of athletic coaches on cause of athletes burnout was also gathered as they were important stakeholders in the training process.

Aim of the Study

To test, if excessive training stress could cause an athlete to burnout

Objectives

As this study utilized a mixed method research, quantitative objectives and qualitative objectives as mentioned below have been described separately for the better understanding.

Quantitative objectives

The following were the quantitative objectives.

- To measure the level of training stress among athletes.
- To understand the demographic profiles of the athletes.
- To identify if the athletes are having sufficient recovery.
- To identify the most common stress factors leading to training stress

Qualitative objectives

Following were the objectives in the qualitative part.

- To analyze the cause of burnout among athletes who are no longer active.
- To understand the views of coaches on cause of athletes burnout.
- Suggest recommendations to the athletes so that they can avoid burnout and also create awareness among other stakeholders on burnout due to excessive training stress.

Hypotheses

The following hypotheses were formulated on the basis of quantitative objectives. Qualitative objectives were not hypothesized as they were not designed for hypothesis testing. It will give answer to only the research questions rather than test a hypothesis.

- H₁. It was hypothesized that athletes who are undergoing training currently will have excessive training stress than appropriate recovery.
- H₂. There would be significant difference in demographic variables (Age, Gender, Training age, Event, Level of performance, Current competition, Training hours, Injury and Education) and training stress among athletes.
- H₃. There would be significant difference in demographic variables (Age, Gender, Training age, Event, Level of performance, Current competition, Hours training, Injury and Education) and recovery among athletes.
- H₄. It is hypothesized that sports specific stress could be the most common factor leading to excessive training stress.

Delimitations

The following were the possible delimitations of the study.

- The study was delimited to athletes who were training currently, coaches who are engaged in training currently and burnt out athletes from the field less than a year ago.
- The study was delimited to the athletes between the age groups of 15 to 30 years.
- The study was delimited to athletes from Kerala state.
- The study was delimited to the athletes who participated in state level competitions or higher.

Limitations

The present study is an attempt to understand the training stress and its effects among athletes and burnt out athletes of Kerala. Any study which has such a wide scope may have some limitations too. Even though utmost care has been taken to make the study as perfect as possible, the investigator felt that the following would be the limitations of this study.

- Mixed method research has its limitations, any individual bias that the subject may have had in his responses was considered as a limitation of this study.
- Socioeconomic and religious factors of the subjects which are beyond the control of researcher, may have affected the responses of the subjects; these were considered as limitations for this study.
- The subjects living condition, life style, diets, personal habits, family heredity, emotional status, motivational factor were not taken into consideration for this study.

Operational Definitions

Operational definitions of the terms involved in the present investigation. They are explained below.

Burnout

Burnout is a psychological, emotional or physical withdrawal of the athletes from track and field due to excessive training stress.

Training Stress

Training stress is a stress which impacts athletes training or performance

Sports Specific Stress

Sports specific stress is a state of mental or emotional strain or tension resulting from sports field.

Social Stress

Social stress is the frequent arguments, fights, general upset, lack of humor and irritation concerning others.

Disturbed Breaks

Disturbed breaks is the recovery debit and interrupted recovery

Overtraining

Overtraining is a physical, behavioral or emotional condition that occurs when the volume and intensity of the training exceeds the athletes recovery capacity.

Recovery

Recovery is the adaptation to workloads after an athlete has been exposed to training or competition.

Being in Shape

Being in shape refers to being physically efficient and fit.

Athlete

Athlete means a sports person engaged in practicing and performing in track and field events.