

A Study on Mental Strength Among Popular Athletes and Para-athletes

Research Report



Aryan Joshi
July, 2020

INTRODUCTION



One of the most distinctive features of great athletes is their exceptional ability to continually improve themselves, while consistently churning out great performances at the highest levels. Irrespective of the sport, this ability to deal with pressure, capitalise on opportunities, out class opponents and perform consistently at top levels, comes from years of learning and practice of certain psychological characteristics and skills, collectively known as mental toughness.

The concept of mental toughness has attracted much attention from sports researchers in an attempt to understand the influence of psychological factors that optimise performance in sport.

Consequently, administrators, coaches, team managers, athletes and even sponsors across the globe recognise the vital role that sound mental training plays in optimising athletic performance. In order to produce top level athletes and sports persons, it is important to inculcate mental toughness from a young age onwards by training them in necessary skills, based on proven psychological guidelines that increase performance.

Unfortunately, despite India being a sport loving nation, having vibrant, diverse sports cultures and one of the largest talent pools in the world, mental toughness training for athletes is not considered a top priority. This document intends to propose a systematic mental strength training module for young sports persons of our country to help them identify internal and external challenges and acquire necessary skills to keep improving their game. This is developed based on existing research literature, some of which is described below, as well as a research study carried out on a large number of high performing athletes, by interviewing them on their understanding of what constitutes mental toughness.

UNDERSTANDING THE CONTEXT - THE INDIAN SCENARIO

Athletes are known to carry high expectations, despite those dire challenges they face such as having to perform under pressure, unexpected adversities as well as heightened anxiety. In a country like India, athletes, especially in small towns and rural areas face multiple hurdles in their pursuit of a sporting career. From finances to infrastructure, medical and healthcare facilities, nutrition, professional coaching environment, competent coaches, coupled with unfavourable attitudes, inadequate family support, favouritism, various forms of discrimination, there are many deterrent factors. The scenario becomes even more serious as young aspirants enter the arena of sports when closely contested competitions are lost.

The impact is felt in struggles with focus, motivation, confidence, insecurity and discouragement, which ultimately affects their performance, and sometimes careers. The impact becomes really critical when they compete in closely contested matches with marginal differences between opponents in their performance. Unfortunately, it is in such a backdrop that the success or failure of an athlete is determined. Competitive sports as a career requires athletes to maintain form, fitness and confidence regardless of setbacks, failures, injuries, obstacles and adversities.

It is in this context, the concept of mental toughness becomes relevant and needs to be introduced.

THE CONCEPT OF 'MENTAL TOUGHNESS' IN SPORTS

The psychological factors involved in athletic performance have garnered interest of professionals and the public alike. 'Mental toughness' refers to any set of positive attributes that help people cope with adversity. Though it is an old concept, in recent years, researchers use Clough's definition of mental toughness as "the capacity of an individual to deal effectively with stressors, pressures and challenges, and perform to the best of their ability, irrespective of the circumstances in which they find themselves" (Sorensen et al. 2016). It is considered a measure of an individual's resilience and confidence that may predict success in sports, education and the workplace. Therefore, in the context of performance enhancement, it is useful to understand the concept of mental toughness, in order to identify the specific variables it comprises of.

Traditionally, there are many psychological or mental factors that are known to influence an athlete's performance such as motivation, concentration, mental focus, emotional control, self- confidence, self- efficacy, discipline and a strong work ethic. Cowden (2016), based on a review of a large number of studies, expressed substantial support for the concept of mental toughness - that it corresponds to higher competitive standards, achievement levels and performance outcomes. Recently, citing a few studies conducted over the last few years, Liew et al (2019) stated that mental toughness is one of the highest ranked psychological characteristics that determine successful performance in sports. There have been a large number of studies that explored specific components of mental toughness in relation to sports and games. Some of the most commonly studied psychological variables include hardiness - the ability to endure difficult conditions, coping skills - investing one's own conscious effort to solve personal problems, optimism - hopefulness and confidence about the future or the success in something and resilience - the capacity to recover quickly from difficulties (Liew, 2019).

DEVELOPING MENTAL TOUGHNESS THROUGH TRAINING

Research supports the view that apart from social experiences, mental toughness can also be developed differentially through specific training techniques. More specifically, literature suggests, experiences and environments that individuals are exposed to in their formative years of development are crucial in determining the ‘experience-based aspects’ of mental toughness. Then there are aspects developed through the middle years, where performers benefit from others such as expert coaches, elite performers, role models, etc. Finally the use and development of psychological skills and strategies to enhance and maintain mental toughness are the ‘taught components’ of the construct. A recent review, carried out by Cowden (2016) on targeted interventions to improve mental toughness, clearly showed emerging support for amenability of mental toughness, both over time and through intervention efforts. In order to build mental toughness, Welnberg et al (2018) recommended coaches to be thoughtful and purposeful in both *‘how they think about athletes’* by being instructive and encouraging, fostering autonomy and seeing them as individuals as well as *‘what they do’* by creating adversity and, at the same time, teaching mental skills.

There are also indications that training yields best results when provided at the earliest possible point in time in an individual’s career. Young athletes have a distinct commitment to develop and implement in their respective fields through continuous acquisition of pertinent competencies. In this regard, Crust & Clough (2011) had proposed the development of independent problem-solving and personal responsibility through a challenging yet supportive environment. Further, in order for young athletes to cope better, a gradual exposure to demanding situations and competition through systematic training is recommended. This leads athletes to become more emotionally mature and increasingly involved in making decisions regarding their own development. Furthermore, they need to be encouraged and supported in reflecting upon setbacks and failures that occur as a part of the developmental process. Negative experiences as well as the confidence-boosting outcomes of achieving goals provide opportunities for personal growth and allow them to learn important lessons for future.

There are a couple of themes that clearly emerge from the literature,

1. there is a scope for training i.e., athletes can be trained in mental toughness, 2. a gradual and systematic approach in mental toughness training is required. 3. as far as training is concerned, 'the earlier, the better' – it is best to train sports persons when they are younger. These findings combined, there is an inevitable need for a systematic exposure of young sports persons to experientially rich environments as well as targeted training modules that cover appropriate, cost-effective and durable approaches that foster mental toughness. However, as a country, India faces numerous challenges as mentioned earlier, coupled with a lack of information on the variables that contribute to or hinder the development of mental toughness right from the grassroots level. In order for a noticeable change, every small step in the right direction, in inculcating the concept of mental toughness, will generate a momentum in nurturing and improving the quality of the sporting talent pool in the country.

STUDYING COMPONENTS OF MENTAL TOUGHNESS IN INDIA

Any systematic training warrants a thorough understanding of the key components that prove its efficacy, in order to make the training relevant to candidates and yield the optimal results. The most common findings from the available empirical literature is that mental toughness appears multifaceted and made up of multiple key components.

Almost two decades ago, it was noted that the literature on mental toughness was characterised by a general lack of conceptual clarity and consensus as to its definition (Jones, et al 2002). Unfortunately, despite frequent use of the term, many researchers consider the term ‘mental toughness’ to be highly subjective and one of the least understood terms still used in sports (Sorensen et al 2016; Bull et al, 2005). Further, as a society, we have a unique socio-cultural environment arrayed by religious beliefs and specific community-based customs and sentiments. It is reasonable to assume that the typical problems faced by sports persons depends largely on the kind of background they come from. It is also reasonable to believe that the problems and challenges Indian athletes face do have their genesis in the belief systems that we share. Obviously, the questions that arise are “what are they?”, “what needs to be done to deal with them?” and “how helpful or not are they for the youngsters?”. Sadly, there is an absolute lack of such specific information on our cultural context in India. As discussed earlier, in spite of its relevance, not much has been done. Therefore, it is important to look at the essential attributes required to be a mentally tough performer, keeping our socio-cultural context in mind. The best way to go ahead this is to talk to those, who have really made it big in their respective fields within the sporting fraternity. An attempt was made to learn from a large number of athletes, who have been successful at an international level, in the form of a research study.

Mental Strength Matters

Research Report



Due to the challenges associated with the term ‘mental toughness’, another comparable term ‘mental strength’ is considered for this study, conceptualising it to be a set of competencies that can be acquired through systematic training and practice. A general framework for competencies typically consists of integrated pieces of attitudes, knowledge, skills and values. This has been an effective framework used very commonly for training and development across fields, especially in human resource and performance management. This framework will help in the development of a training module with specific learning objectives that focuses on improved attitude, knowledge, skills and values constituting mental strength. These terms can be understood better with the following descriptions:

Attitudes: In general terms, attitude means the manner, in which a person typically deals with situations emotionally reflected in his or her behaviour. In 1980, Moody defined attitude as a mental state of readiness directed through experience that influences our responses to any object, person or a situation (cited from Ireland, John 2018). Specifically in sports, it includes belief systems, emotions, self-

assuredness and mental orientation about one's performance as well as affecting situations. Consequently, this can significantly impact motivation towards a goal.

Knowledge: It stands for a condition of being aware of something - facts or concepts and includes cognitively processing information. The capacity to remain confident in a stressful situation is possible only when there is a realistic appreciation of the situation, based on the knowledge possessed. Acquisition of knowledge is fundamental to modifying attitudes or applying skills to perform better at a task. Knowledge is, therefore, critical for mental strength. For example, knowing that 'breathing exercises improve concentration' or 'staying calm helps with focus and clarity in thinking' are important attributes one has to learn to come out on top in critical situations.

Skills: In general terms, it includes the ability to perform a task. It covers abilities and performance, measured in time and precision i.e., skills are mostly measurable. Skills can be acquired and improved through practice. Being able to stay calm and relaxed, keeping a strict practice regimen, dealing with people through interpersonal and social networking are skills that can be acquired and practiced. Competency and proficiency in the execution of skills require training and practice.

Values: This include principles or standards of behaviour or one's judgement of what is important in life. Values play an important role in decision making, especially during critical situations in our lives. Social psychologist Milton Rokeach (1973) defined values as a set of beliefs individuals have concerning desirable modes of behaviour or goals such as kindness, success, independence or security. Values motivate behaviour by guiding action and choice of activities.

METHODOLOGY

Aim:

To understand the role mental strength plays for athletes and sports persons in tackling challenges and adversity in their careers.

Objectives:

1. This study was conducted with the following objectives;
2. *To understand typical challenges and difficulties athletes face in their careers.*
3. *To study how athletes deal with problems and conceptualize mental strength.*
4. *To gain a better understanding of the components of mental strength: values, attitudes, knowledge and skills.*
5. *To put forward recommendations on mental strength training for sports persons.*
6. *To make relevant proposals to educational and sports councils for inclusion of mental strength training in curriculum for young athletes.*

Procedure:

Keeping the above-mentioned aim and the objectives in focus, 100 athletes and sportspersons were contacted and interviewed. Participants were athletes from diverse fields of sport, who have, by and large been a part of the national teams, having participated in international events. The

participants were asked about 4-5 questions in a semi-structured interviewing format and their responses lasted for 3-6 minutes, altogether. The interviews were conducted over video calls using facilities such as Zoom or WhatsApp and their responses were recorded and analysed. The responses were analysed and interpreted using a framework typically used to refer to competencies, namely, attitudes, knowledge, skills and values.

FINDINGS FROM THE STUDY

This study ‘Mental Strength Matters’ aimed at understanding the role of mental strength among athletes and sports persons. The main objectives were to identify the typical challenges faced by athletes and to study the specific components of mental strength as conceptualised by them. Findings from the study are presented in the following section;

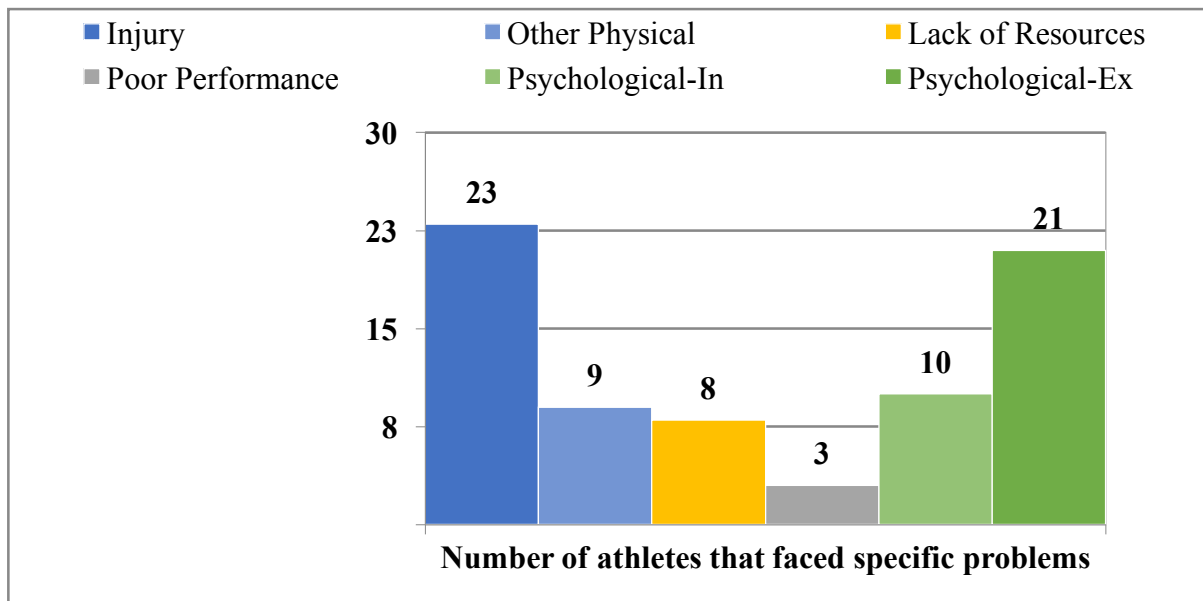
1. Typical challenges and difficulties faced by athletes

When asked what were the typical challenges faced in life, especially during their active career, athletes talked about multiple problems that could be divided into four major categories - **physical problems, psychological difficulties, inadequate resources and poor performance**. Physical problems included mainly injuries, however, there were also difficulties such as excessive travel, accidents, illnesses and treatments like surgeries. Psychologically, there were both internal factors-

not being able to deal with pressure, poor concentration, lack of clarity in thoughts as well as not being able to focus on their personal goals and external factors –

high expectations from people, rejection by team selectors, gender inequality among the professional circles, high amount of competition as well as personal life events such as a death of a family member. Many reported having had difficulty in accessing necessary and adequate resources such as finances, infrastructure and training equipment. Finally, they faced challenges in getting into the right form or maintaining consistency in performance.

Chart-1 shows number of athletes and specific difficulties faced by them.



As seen in Chart-1, out of 100 athletes interviewed, 23 of them reported having had injuries and 9 of them facing other physical difficulties, constituting it to be the largest category of problems faced by athletes with the total number being 32. Close enough are the psychological difficulties with a total of 31, of which 21 reported external factors affecting them psychologically and 10 of them being internal factors. Further, 8 of them reported difficulty in having or a lack of adequate resources, the biggest challenge they faced, of which financial difficulties were the most of common. Only 3 athletes reported poor performance being one of the greatest challenges they faced.

2. The way athletes conceptualise mental strength as they deal with problems they typically face.

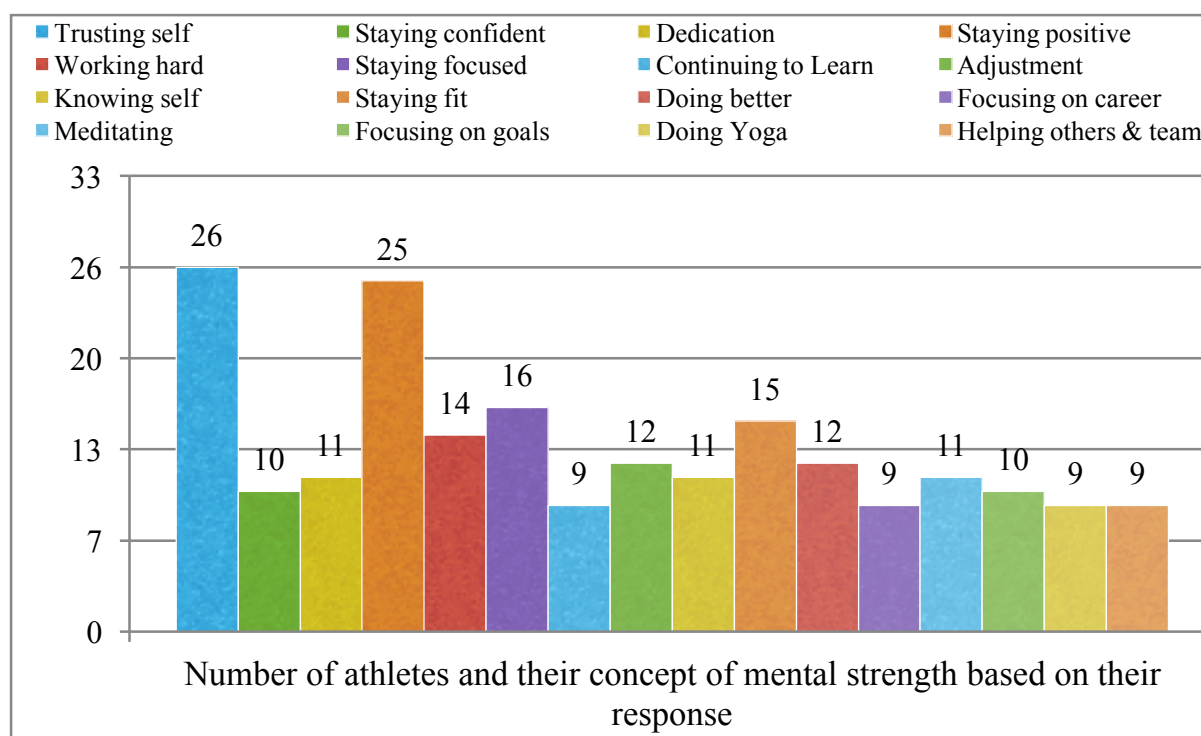
When asked how they looked at mental strength, athletes reported having used a variety of specific techniques to deal with the challenges they faced and maintain their performance. It was clear from their responses how varied their understanding was of what constituted their mental strength. Following is a list of terms and phrases they used in their responses and it is interesting to see how they considered a really large number of variables - beliefs, attitudes, daily practices, values, skills, habits, hobbies - to have helped them to deal with daily activities and challenges related to their game.

As expected, there were certain ideas in the list that were mentioned by a large number of athletes as they believed those concepts to have been an integral part of their mental strength as given in the list below - List 1. Further, in the chart given below, there are those most frequently talked about concepts along with the number of people, who have mentioned those concepts respectively.

List of variables athletes considered as constituting their mental strength.

- Sharing positivity
- Be passionate
- Be truthful & honest
- Appreciate different perspectives
- Respect everyone
- Stay confident
- Good communication
- Know yourself - strengths & weaknesses
- Stay humble
- Trust yourself
- Transform/Change
- Value self
- Will power
- Time management
- Understanding of the real situation
- Goal Setting
- Discipline
- Perform differently
- Mental exercise
- Dedication
- One thing at a time
- Visualisation
- Commitment
- Mental Awareness
- Take necessary care & safety
- Self affirmation
- Be patient
- Have clarity in thoughts
- Have a daily plan
- Resilience
- Watch inspiring videos
- Stay with positive people & environment
- Right decisions
- Dominate
- Practice Mindfulness
- Keep practicing
- Dream big
- Read self-help books
- There will be good days and bad days
- Take guidance
- Stay Strong
- Trust & Execute plans
- Focus on career
- Worry less
- Defence is the best way
- Wait for/understand the right opportunity
- Better yourself
- Stay positive
- Stick on to the basics
- Follow up well
- Right mindset
- Work step by step
- Work on what needs to be done
- Stay focused
- Be successful
- Learn from others
- Do yoga
- Hard work
- Learn from mistakes
- Tackle the situation/ Problem solving
- Meditation
- Perseverance
- Adjust & accept situations
- Value/ help team
- Face challenges
- Nothing is out of reach
- Staying active always
- Maintain balance
- Focus on 'now'
- Take a break & get back
- Endurance, Speed & Strength
- Stay motivated
- Determination
- Execute, Deliver, Reflect
- Stay strong
- Physical fitness
- Monitor every moment
- Stay with friends & families

Chart-2 shows the most common concepts that athletes believed constituted mental strength along with the number of people that supported each of the items.



As seen in the chart above, there were 26 athletes *considering trusting or believing in self* to be an important aspect of mental strength, leading the list, followed by *staying positive* (25), *staying focused* (16), *working hard* (15) and *staying mentally and physically fit* (14). The other few other concepts that were mentioned by at least 9 to 10 athletes - *staying confident*, *dedication/commitment*, *determination*, *continuing to learn*, *adjustment*, *knowing self*, *doing better (than earlier)*, *focusing on (building) career*, *meditating*, *focusing on the goals*, *doing yoga* and *helping others and team*.

3. Components of mental strength: attitudes, knowledge, skills and values

The response of the athletes in this sample were divided into 4 predetermined components of mental strength, namely: attitudes, knowledge, skills and values. It is a reality that these concepts are highly arbitrary and, therefore have some amount of overlap as any concept of mental strength will have these four components in varying degrees. In this study, attitudes were conceptualised to be the more emotionally loaded basic outlook towards life whereas knowledge is more specific approach in relation to an athlete's personal life.

Attitudes

- Be passionate (3)
- Stay confident (10)
- Nothing is out of reach (2)
- Trust yourself (26)
- Will power (2)
- Face challenges (5)
- Discipline (3)
- Determination./
Dedication/
Commitment (11)
- Be patient (5)
- Resilience (5)
- Dominate (1)
- Dream big (1)
- Stay Strong (3)
- Worry less (2)
- Stay positive (25)
- Execute. Deliver. Reflect
(1)
- Endurance. Speed. Strength
(1)
- Right mindset (6)
- Be successful (1)
- Hard work (14)
- Perseverance (6)
- Stay motivated (5)
- Stay focused (16)

Knowledge

- Learn from others & mistakes & take
guidance (9)
- Adjust & accept the situations (12)
- Know yourself well - strengths &
weaknesses (11)
- Worked on step by step (1)
- Understanding of the real situation (7)
- Take a break & get back (2)
- Take necessary care & safety (1)
- Stay with positive people & in
environment (1)
- There'll be good days & bad days (2)
- Stay mentally & physically fit (15)
- Better yourself (12)
- Wait for/understand opportunities (3)
- Follow up well (1)
- Work on what needs to be done (1)
- Transform/Change (1)
- Maintain balance (2)
- Perform differently (1)
- Trust & Execute plans (1)
- Defence is the best strategy (1)
- Stick on to the basics (5)
- Tackle situations/Problem solving (1)
- Right decision (4)
- Have clarity in thoughts (5)
- Focus on career (9)

Skills

- Meditation (11)
- Breathing exercise (5)
- Goal Setting (10)
- Mental exercise (1)
- Good communication (1)
- Yoga (9)
- Visualisation (4)
- One thing at a time (2)
- Mental Awareness (2)
- Self affirmation (1)
- Daily plan (4)
- Reading self-help books (4)
- Watch motivational videos (3)
- Staying active every moment (4)
- Keep practicing (1)
- Time management (1)
- Focus on now (1)
- Practice Mindfulness (1)

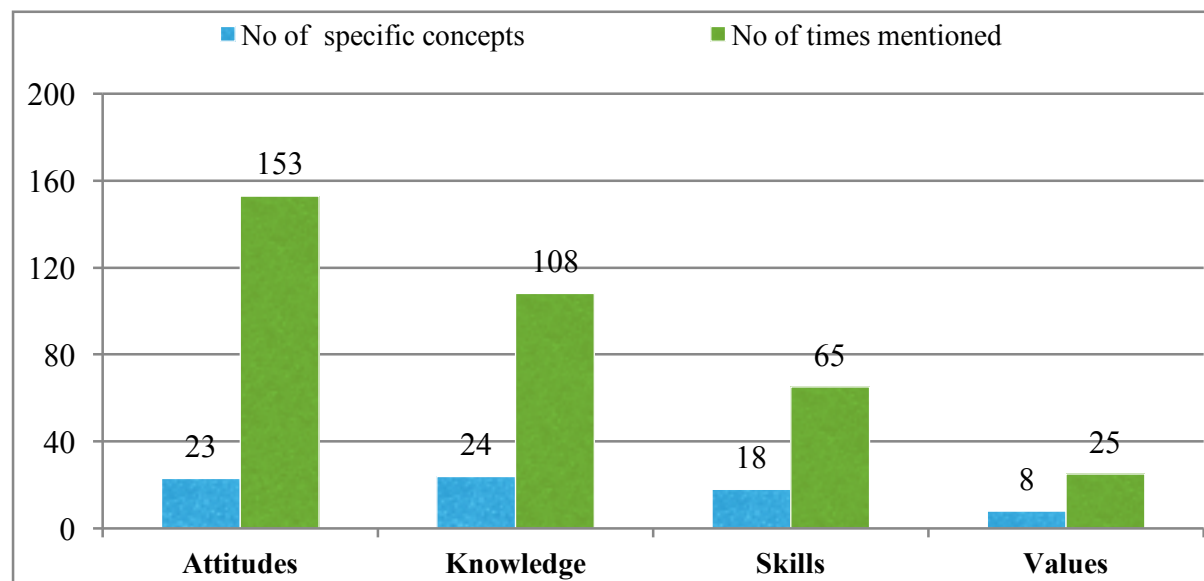
Values

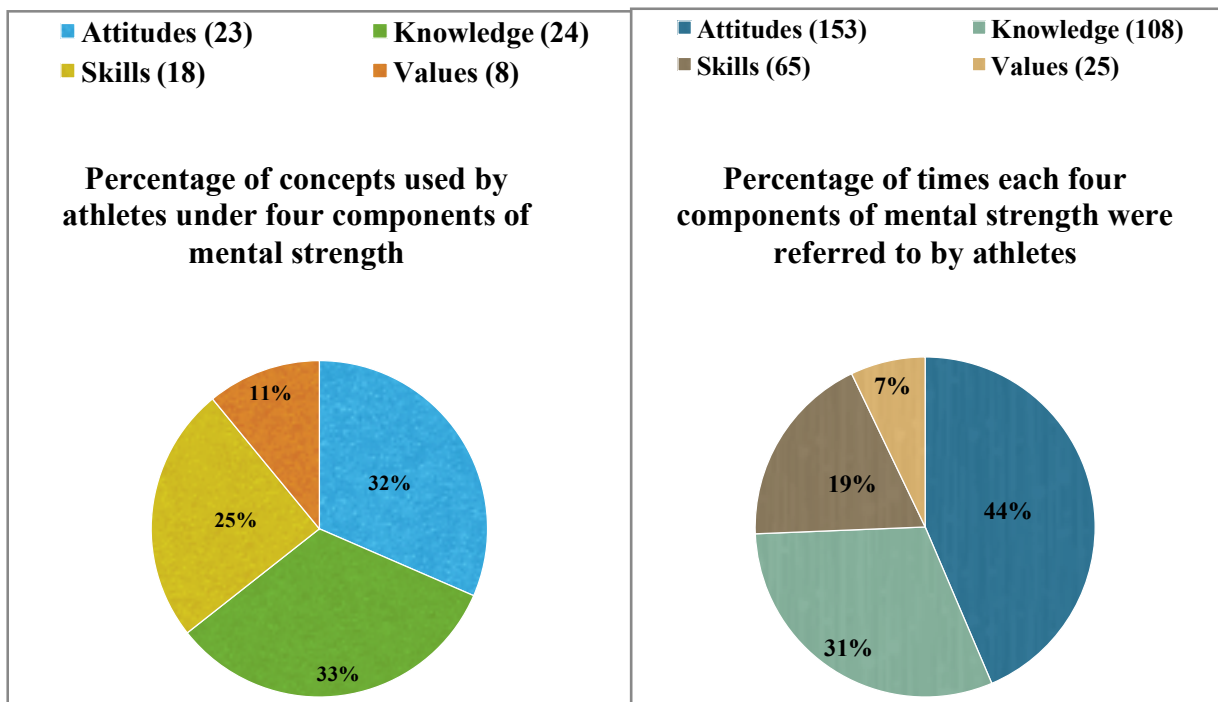
- Appreciate different views (1)
- Sharing positivity (2)
- Stay with friends & families (5)
- Be truthful/ honest (2)
- Respect everyone (2)
- Stay humble (1)
- Value & Help team (9)
- Value self (3)

List - 2 shows specific concepts related to mental strength under the 4 categories, *attitudes*, *knowledge*, *skills* and *values* along with the number of times each of them were mentioned by athletes.

The list above indicates the number of specific concepts under each category along with their respective percentages - attitudes (23 = 32%), knowledge (24 = 33%), skills (18 = 25%) and values (8 = 11%). Further, this list shows that the specific components of attitudes were mentioned highest number of times (153 = 44%), followed by knowledge (108 = 31%), skills (65 = 19%) and values (25 = 7%). This information is visually represented in the next two charts below;

Chart - 3 shows the total number of specific concepts within each of the components of mental strength as conceptualised for this study - *attitudes*, *knowledge*, *skills* and *values* along with the total number of times each was mentioned by the athletes.





Pie Charts show the percentage of specific concepts within each of the components of mental strength as conceptualised for this study - *attitudes, knowledge, skills* and *values* along with the percentage of times each component was mentioned by the athletes.

Mental Strength Matters

Summary of findings & Recommendations



The aim of this study 'Mental Strength Matters' was to understand the role of mental strength among athletes and sports persons with specific objectives being:

1. Identifying typical challenges faced by athletes.
2. Understanding specific components of mental strength as conceptualised by them.
3. Studying mental strength based on a framework that covers four components namely, attitudes, knowledge, skills and values.

The methodology adapted had short interviews carried out with 100 athletes and sports persons from various sporting disciplines. They were asked questions on the typical difficulties they faced in their sporting career, the ways they dealt with those challenges as well as their understanding of mental strength that helped them to maintain top performance so far in their career. Their responses were taken and analysed based on the framework mentioned above. Findings of the study can be summarised as follows:

1. The most common challenges faced by athletes were physical as well as psychological in nature. Physically, they included *injuries, frequent travel, accidents and health problems*. Psychologically, *difficulty dealing with stress, poor concentration, confusion* as well as *staying focused on the set goals* at an individual level and external factors were mostly *high expectations from people, uncertainty over selection, gender inequality among professional circles, high amount of competition* as well as *personal life events such as death of a family member*. They also had difficulty finding access to necessary resources that included financial support, adequate infrastructure and quality training equipment.
2. Athletes in this study conceptualised mental strength in terms of focus, positivity, commitment, dedication, determination, self-awareness, perseverance, knowing and trusting self, setting goals, making right decisions, having clarity of thought, time management, practicing meditation or yoga as well as co-operating with and helping others. Most commonly cited concepts were; trusting or believing in self, staying positive, staying focused, working hard and staying mentally and physically fit.
3. Responses of the athletes were divided into four components, *attitudes, knowledge*, skills and values, based on a competency framework utilised in the study. Findings indicated that the component *attitudes* had highest number of specific concepts (a total of 153 that is 44%) as given by the athletes, based on their understanding of what constituted mental strength. This was followed by *knowledge* (a total of 108 that is 31%), *skills* (a total of 65 that is 19%), and finally, *values* (a total of 25 that is 7%).
4. Some incidental findings of the study include:
 - a) Some ideas commonly believed to be useful for sports persons such as *perseverance, motivation, staying strong, taking right decisions, breathing or visualisation exercises, daily schedules, sharing positivity* etc. were not considered important by the sample in this study.

- b) Across the responses of the athletes, there was substantial variation on what they thought constituted mental strength, possibly as a result of adequate amount of formal training in mental strength., leading to usage of a loose-fitting terminology.
 - c) Most athletes were found to consider mental strength only as an idea or a 'make-belief ' concept rather than a set of skills that could be acquired through training and practice.
 - d) Only a low percentage of athletes seems to consider values, including those related to teamwork and co-operation, as an integral part of mental strength even though a large number of the said athletes represented team sports.
5. The above-mentioned findings indicate the need for a systematic formal training in various components of mental strength because of the great impact it has in the field of sports and games. Formal training can consider the four components mentioned - *attitudes, knowledge, skills* and *values*. Such training should be initiated at a young age and be made an integral part of regular education, especially the sports education and coaching. Further, it is important that we have subject experts and a well-prepared training module that covers all the components that were identified in this study.
6. A couple of limitations of this study and certain recommendations for further research in this area would be,
- Utilisation of standardised and objective assessment tools as well as information from other sources such as coaches and team members would have added a lot more strength to the findings of this study.
 - A comparative study that covers younger sports persons along with the current sample would have widened the scope of this research.
 - A more longitudinal approach to study mental strength over a couple of years, after formal training in the components described in this study, would have provided much larger amount of data on the subject covered

RECOMMENDATIONS

Research over the last few decades clearly show that mental strength is a critical determinant for a consistent performance in any athlete's professional career. Today, we have adequate amount of evidence to show that mental toughness can be developed in athletes through formal training. In recent years, there has been a surge in all the major sports and games in India, thriving at national and international levels. Tremendous young aspiring talent is pouring into the main stream in good numbers opting for sporting careers. There cannot be a better time for formal training in mental strength to be taken up by educational, district, state and national sports councils across the country in a systematic and organised manner. Based on the findings from the study mentioned above, the following are some of the recommendations:

The best results of mental strength training is when it is provided at the earliest possible time in an athlete's career. Therefore, incorporating aspects of mental strength in the regular school curriculum, especially in the field of sports education is the need of the hour. This will help youngsters approach their sporting career with a lot more emotional maturity and confidence, allowing them to make better decisions and enabling them to deal with stressful situations.

It is important to have a well-prepared comprehensive curriculum based on the framework, as mentioned in the study, with all of its four components, attitudes, knowledge, skills and values. As elaborated on in the study, this framework includes all the psychological aspects - the emotional, cognitive, behavioural as well as interpersonal/social. However, the focus needs to be on training athletes on practical aspects of mental strength to optimally utilise their competencies for better performances on and off the field.

Considering that competitive sport mandates the highest of standards, it is critical to have subject experts teaching and training candidates. In this regard, the faculty may include sports psychologists, mental health experts as well as performance coaches with extensive training and experience in psychological and behavioural sciences. They should be able to train the young sportspersons to deal with the emotional and intellectual changes that take place from a developmental perspective.

Obviously, another aspect that needs to be mentioned is the extensive work required in order to bring about awareness on the need for mental strength training among coaches, parents and all the other stakeholders. As one would assume, without such a collective effort it is impossible to achieve the objectives of mental strength training. This sort of approach will ease the emotional burden on athletes and stakeholders alike.

CONCLUSION

A collective effort in formal mental strength training, under the leadership of an educational or sports council, will ensure our athletes take themselves and best of their game confidently to the field, in turn improving not only individual and team performances, but also enhancing the quality of the sporting talent pool in this country in coming years.

To conclude, it is appropriate to quote Mahatma Gandhi, *“Strength does not come from physical capacity. It comes from indomitable will”*. Let the “will” be the cause as well as the effect of the initiative on mental strength training, especially for the younger generation.

REFERENCES

-
1. Bull, S. J., Shambrook, C. J., James, W., & Brooks, J. E. (2005). Towards an understanding of mental toughness in elite English cricketers. *Journal of Applied Sport Psychology*, 17(3), 209– 227.
<https://doi.org/10.1080/10413200591010085>.
 2. Cowden, R. G. (2017). Mental Toughness and Success in Sport: A Review and Prospect. *The Open Sports Sciences Journal*, 10, 1-14. [https:// opensportssciencesjournal.com/VOLUME/10/PAGE/1/](https://opensportssciencesjournal.com/VOLUME/10/PAGE/1/)
 3. Crust, L., & Clough, P. J. (2011). Developing mental toughness: From research to practice. *Journal of Sport Psychology in Action*, 2(1), 21–32. <https://doi.org/10.1080/21520704.2011.563436>.
 4. Ireland, John(2018).Attitudeandsportperformance. www.hoddereducation.co.uk.
[https://www.hoddereducation.co.uk/media/ Documents/Magazines/Sample%20Articles/JanFeb%202018/ PERev13_2_Jan2018.pdf](https://www.hoddereducation.co.uk/media/Documents/Magazines/Sample%20Articles/JanFeb%202018/PERev13_2_Jan2018.pdf)
 5. Jones, G., Hanton, S., & Connaughton, D. (2002). What is this thing called mental toughness? An investigation of elite sport performers. *Journal of Applied Sport Psychology*, 14(3), 205–218.
<https://doi.org/10.1080/10413200290103509>.
 6. Liew, G., Kuan G., Chin. N., Hashim H. (2019). Mental toughness in sport. Systematic review and future. *German Journal of Exercise and Sport Research*, 49:381–394.
<https://doi.org/10.1007/s12662-019-00603-3>.
 7. Rokeach, M (1973). *The Nature of Human Values*. Reprint by Simon and Schuster, 2018.
 8. Sorensen, S. , Schofield, G. and Jarden, A. (2016). A Systems-Approach Model of Mental Toughness: Understanding Inputs, Processes and Outputs. *Psychology*, 7, 1402-1423. doi: 10.4236/psych.2016.712141.
 9. Welnberg, R., Fresinger, V., & Mellano, K. (2018). How can coaches build mental toughness? Views from sport psychologists. *Journal of Sport Psychology in Action*, Volume 9, 2018 - Issue 1.
<https://doi.org/10.1080/2152070>