The word competition is defined as “a situation in which someone is trying to win something or be more successful than someone else.”[1] As such, competitive sports can be any form of sports where one individual or a team tries to win against another individual or a team, thus experiencing a demand to excel and outperform.

The importance of psychological factors in determining the level of performance by athletes is widely recognized by coaches, athletes, and laypersons. Further, the role of psychological factors in sports performance has also been systematically examined in the scientific literature. For example, one study reported that most athletes believe that a minimum of 50% of the course of a good game is the result of mental or psychological factors.[2] Despite this belief, it is observed that the actual practice of such mental skills is not on par with the perceived importance. For instance, one study found that most athletes used only 5%–10% of the entire training time for learning such skills.[3]

For the last few decades, especially with the evolution of the field of sports psychology, there have been a number of studies to understand such psychological factors that provide the “edge” for individuals’ participating in various competitive sports. The importance of psychological factors in determining the level of performance by athletes is widely recognized by coaches, athletes, and laypersons. Further, the role of psychological factors in sports performance has also been systematically examined in the scientific literature. For example, one study reported that most athletes believe that a minimum of 50% of the course of a good game is the result of mental or psychological factors.[2] Despite this belief, it is observed that the actual practice of such mental skills is not on par with the perceived importance. For instance, one study found that most athletes used only 5%–10% of the entire training time for learning such skills.[3]

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**ABSTRACT**

**Background:** Individuals undergoing training in competitive sports are required to deal with various challenges such as real and perceived pressures to perform and invest sustained efforts in rigorous training regimens. Global literature indicates successful inclusion of psychological components in the training of sports persons. It is well recognized that training programs need to be designed keeping in view the local contextual factors as well as felt needs. However, there are very few studies from India that have explored felt needs of individuals training in competitive sports. **Aim:** The study was conducted to explore felt needs for psychological inputs in youth selected for training in various sports by the Youth Empowerment and Sports Department, Government of Karnataka. 

**Method:** The sample composed of 166 youth (males = 98 females = 68), aged between 16 and 21 years, residing in state sports hostels of Bengaluru and Mysuru and undergoing training in competitive sports. A ten-item survey prepared based on the literature review, and a pilot study was used to assess felt needs for training in psychological aspect for performance enhancement. 

**Results:** Learning ways to maintain motivation for sports practice despite ups and downs in performance/other obstacles, maintaining self-esteem, managing disappointments, managing anger, and handling stress related to injuries received highest endorsements (75% or more) as strong felt needs in the overall sample. Only a few differences emerged between genders and age groups. **Conclusion:** The study has implications for integrating psychological training into the routine training of young sportspersons engaged in competitive sports.

**Keywords:** Enhancing performance, felt needs, sports
In one such study, where Olympic Games participants were interviewed, it was found that high performance was related to various psychological factors including self-confidence, focus on fun, and positive attitude. In a similar study in which Olympic-level athletes, their coaches, and parents and/or guardians were interviewed, stress-coping, ability to deal with anxiety, goal setting, and achieving goals emerged as the characteristics of the participants.

Attempts have also made to find out the ideal mind/body state that is related to peak performance of athletes in competitive sports. One review identified certain psychological profiles that are highly correlated with high-level performance. Specifically, it was found that the ideal state for optimal performance is characterized by (a) feelings of high self-confidence and expectations of success, (b) being energized yet relaxed, (c) feeling in control, (d) being totally concentrated, (e) having a keen focus on the present task, (f) having positive attitudes and thoughts about performance, and (g) being strongly determined and committed. Conversely, feelings of self-doubt, lacking concentration, being distracted, being overly focused on the competition outcome or score, and feeling over- or under-aroused were found to be associated with low levels of performance. Other psychological variables that are found to be associated with performance are self-confidence, motivation, mental toughness, high levels of hope, optimism, and adaptive perfectionism.

It would thus be logical to assume that if psychological factors play a role in determining level of performance in various sports, interventions that are targeted to change these psychological factors are likely to be useful for enhancing performance. Indeed, there is a research that supports the same. For example, use of mental imagery training has been found to be helpful in increasing players' attention skills. Interventions involving self-talk modifications are also reported in dealing with situational anxiety and fear of failure, along with many other variables. Studies have also shown that performance can be improved using psychologically oriented interventions such as goal setting and motivation management, emotional regulation skills, stress management, self-efficacy training, and mental toughness training.

These and many other similar studies suggest that a number of psychological factors play a significant role in determining the level of performance by athletes in competitive sports. Studies also show that psychological interventions can be effective in helping participants of competitive sports to improve their performance. This seems to stand true for individual as well as group performances. Furthermore, recent times have seen a surge in the number of people inclined to get into the various competitive sports all over the world. Although there have been studies on identifying various psychological factors associated with optimal performance, there is a scarcity of studies on understanding the felt needs of young athletes participating in competitive sports, particularly in the Indian context. There are significant efforts and investment at the government levels in early identification, selection, and training of youth in various competitive sports, and systematic inclusion of psychological components in training may yield rich dividends. Understanding the felt needs of young athletes has important implications in planning and developing psychological intervention components that have a high degree of receptivity and perceived utility in the target youth. In addition, inclusion of psychological components in the training of young athletes also becomes important owing to the fact that they are typically dealing with the demands of balancing academic pressures along with rigors of sports training. Moreover, youth is known as a vulnerability period for the onset of mental health concerns. In the above background, the present study aimed at understanding the felt needs of youth for incorporation of psychological inputs in their regular training for sports performance enhancement.

### MATERIALS AND METHODS

The study was undertaken on the insistence of the Department of Youth Empowerment and Sports (DYES), Government of Karnataka. The study employed single-group cross-sectional exploratory design. The sample of the study included 166 young athletes (98 males and 68 females) within the age range of 16–21 years selected for training in various sports by the DYES and residing in government-run hostels at Bengaluru and Mysuru. An attempt was made to contact all the youth who were residing in these hostels, were available during the data collection phase of the study, and were within 16–21 years of age range. Those providing written informed consent were recruited for the survey. A ten-item felt need survey was prepared based on the literature review and a brief pilot exercise. The research team developed a semi-structured interview to explore coaches' perceptions of various factors (apart from ability) that influence performance of youth under their training. A sample of 10 coaches, from various sports such as volleyball, badminton, basketball, football, and athletics, were interviewed. The coaches were also requested to identify 2–5 athletes under them who were showing more or less consistent performance in keeping with their ability as well as those who may be showing inconsistent performance, often underperforming as compared to their ability. This step was meant to help in recruiting youth who may be showing consistent as
well as inconsistent performance as per their coaches’ perceptions and observations. From a list of 65 youth thus generated, 30 youth representing different kinds of sports (15 each with consistent and inconsistent performance) were interviewed. The interviews with them focused on understanding their own evaluation of performance and factors that helped and those that interfered with performance. Based on the information gathered through these two sets of interviews and review of literature, a ten-item survey was developed to be used in the main phase of the study. The respondents rated the extent to which they felt they wanted inputs/areas mentioned. The ten items pertained to managing motivation, disappointments, anger, competition anxiety, focusing attention on the game without distractions, enjoying the game, managing other stressors that interfere with performance, handling criticisms about performance, dealing with stress related to sports injuries, and maintaining/improving self-esteem. Each item was to be rated on a five-point Likert scale to depict the intensity of felt need.

Standard translation and back-translation procedures were used to arrive at a Kannada version of the survey.

Administration procedure remained same across all participants. They filled out the original questionnaire of 10 questions individually. The questionnaire was administered in groups of approximately 15–20 athletes per group. The obtained data were analyzed for the frequency of responses and percentages of item endorsements. For this purpose, the responses in the last two extreme categories were merged (“very much want” and “certainly want”) to form the broader category of “inputs needed,” while responses in the “not sure” and “may be it would help” were clubbed together to form the “not sure” category. The responses in the “may not be needed” category are shown as such to indicate proportion, indicating low felt need for various items; age and gender differences in patterns of item endorsements were examined using Chi-square test.

### RESULTS

Table 1 shows the results of the felt need assessment survey. Learning ways to managing motivation, self-esteem, disappointments, stress related to injuries, and anger issues emerged as the strongest felt needs with 85% or more participants endorsing the same. The other felt need items which were relatively less frequently endorsed were “improving attention” (84.9%), “managing anxiety” (84.4%), “handling criticisms” (83.1%), and “enjoying the game” (79.2). The overall pattern of endorsements across the ten items indicated that low ratings of felt needs (inputs not needed) were highly infrequent, ranging from 10% (managing anger) to 1.2% (managing motivation). This indicates that almost all items were found to be relevant to the participants.

Table 2 shows the comparison of male and female genders on the various felt needs endorsed. There was a significant gender difference in the endorsement patterns with reference to the need for inputs for managing anger issues with significantly higher proportion of male participants endorsing the need for input to manage anger issues compared to female athletes. Analysis of the five least endorsed items revealed a significant gender difference in the endorsement pattern of the item “improving attention” ($P < 0.05$), with significantly higher number of male athletes endorsing the need for psychological input on improving attention.

Table 3 shows the comparison of two different age groups (16–18 years and 19–21 years) on the various felt needs endorsed. The groups differed significantly only on the felt need of managing anger issues with a significantly higher number of younger athletes reporting a need for managing anger issues compared to the older participants. Analysis of the five least endorsed items revealed that a significantly ($P < 0.01$) higher proportion of participants in the younger, 16–18 years age group reporting the need for psychological input on how to handle criticisms compared to the older athletes.

### DISCUSSION

The present study aimed at exploring the felt needs for psychological training and interventions to improve and enhance performance in competitive sports. Young athletes within the age range of 16–21 from state sports hostels of Bengaluru and Mysuru and undergoing training in competitive sports were selected using a purposive sampling for the study. The study tried to identify the various felt needs of the participants and the level of endorsements for each of these needs.

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**Table 1: Top five felt needs for psychological inputs expressed by the athletes for enhancing performance**

| Felt needs                                           | Psychological inputs |
|-----------------------------------------------------|----------------------|
| Learning ways to maintain motivation                | 96.4                 |
| Maintaining self-esteem                             | 95.8                 |
| Managing disappointments                            | 95.2                 |
| Handling stress related to injuries                 | 91.6                 |
| Managing anger issues                               | 86.7                 |

**Table 2:**

| Felt needs                | Male athletes (%) | Female athletes (%) |
|---------------------------|-------------------|---------------------|
| Learning ways to maintain motivation         | 94.5              | 98.4               |
| Maintaining self-esteem          | 95.8              | 96.3               |
| Managing disappointments        | 95.4              | 96.0               |
| Handling stress related to injuries      | 91.6              | 90.0               |
| Managing anger issues            | 87.3              | 91.6               |

**Table 3:**

| Felt needs                | 16–18 years (%) | 19–21 years (%) |
|---------------------------|----------------|-----------------|
| Learning ways to maintain motivation         | 93.3            | 96.0            |
| Maintaining self-esteem          | 94.5            | 95.8            |
| Managing disappointments        | 94.5            | 95.4            |
| Handling stress related to injuries      | 91.6            | 89.0            |
| Managing anger issues            | 89.0            | 92.3            |
The study revealed the inputs for maintaining motivation as the most endorsed felt need. This was true for both during training and during competitions. Human performance in general is considered to be influenced heavily by motivation and abilities/skills.\[^{17}\] In sports too, the role of motivation has received significant attention, and it has been observed that a significant proportion of the better performing athletes are optimally motivated.\[^{19}\]

The second most endorsed felt needs by the study participants were inputs for maintaining self-esteem. High self-esteem is found to be positively correlated with success in a variety of life situations.\[^{19}\] In sports, it is found that positive evaluations of self can lead to improved performance.\[^{20}\] Further, higher self-esteem and self-confidence may help people overcome issues with reduced motivation and poor willpower.\[^{21}\]

Managing disappointments was found to be the third most endorsed felt need in the present study. Disappointments can arise from poor performance in competitions and also from not being able to improve despite hard work. Irrespective of how hard an athlete tries to win a competition, whether it is preparedness, attempts at controlling emotions, etc., there still is a chance to lose.\[^{22}\] Furthermore, a failure in performance may reveal to the spectators as well as the athletes themselves, their comparative competence in sports.\[^{23}\] Hence, dealing with disappointments plays a crucial role in enhancing performance. Further, motivation, self-esteem, and managing disappointments are closely related to each other which makes these needs all the more important.

Managing anger issues was also found to be one of the felt needs endorsed by a large number of participants. This again is integral to any attempt at improving performance. Indeed, research shows that anger and aggression can have an adverse influence on performance.\[^{24}\] Nevertheless this issue needs to be explored further as the nature of anger as well as the way it is directed is likely to influence the nature of impact on performance.\[^{25}\]

Handling stress related to injuries was also found to be an important felt need among the participants. It is common knowledge that injuries frequently have a negative effect on the health of the sports personnel,\[^{26}\] which may lead to a great deal of psychological disturbance, causing both direct and indirect effect on performance. For example, injuries can be associated with increased anger, depression, and anxiety and decreased self-esteem.\[^{27}\]

Gender comparisons on felt needs revealed that the two groups differed significantly on only one of the top five felt needs, namely managing anger. The number of male athletes who strongly endorsed felt needs for inputs to managing anger was significantly higher compared to female athletes. No studies could be found on the gender differences on felt needs for anger management in young athletes, and the available literature, when it comes to emotion regulation in general, gives a mixed picture.
Athletes utilize a variety of emotion regulation strategies, and there is some indication in the existing literature that male sports competitors are likely to display higher levels of aggressiveness and unsportsmanlike behaviors as compared to their female counterparts. The present study indicates that sampled males were more likely to experience a need for inputs on anger regulation, suggesting greater levels of perceived challenges in managing this emotion. Future studies need to examine the nature and sources of frustration and anger experienced by young athletes in the present study context, to offer recommendations at individual and systematic levels. A significant gender difference was also found in need for psychological input for improving attention with significantly higher number of male athletes endorsing this need. It may be that, despite men having greater attention and vigilance, they also tend to be more impulsive than women, an issue that may make men more prone to mistakes. Further, the greater inhibitory capacity of women may protect them from committing errors, especially in sports where impulsivity can affect the performance.

The comparison of two age groups showed that a significantly higher number of younger participants endorsed inputs for managing anger as a felt need, compared to the older group. Although there is a scarcity of literature about differences in the felt need for managing anger with respect to age from studies on young people taking part in competitive sports, there are plenty of studies indicating that age does play a significant role in the way anger is experienced and expressed with increasing age. For example, as early as the 1980s, it was found that with increasing age, children’s anger becomes more constructive. Further, it was also found that, with an increase in age, individuals are better able to control their negative emotions, including anger. A significantly higher proportion of younger age participants reported the need for psychological input on how to handle criticisms, perhaps reflecting lower sense of efficacy and greater vulnerability to such stressors.

Development of training programs that incorporate psychological inputs in the areas of felt needs discussed above can be helpful not merely for performance enhancement in sportspersons but also have potential for positive youth development and mental health promotion. There is a need for further studies on the development of such programs for young Indian sportspersons based on felt needs, thorough situation analysis, and understanding of contextual factors as well as examination of long-term outcomes of the same on sports performance as well as in other life domains of the athletes.

#### CONCLUSION

The study found that the young athletes report a strong felt need for inputs/training on learning ways to maintaining motivation, maintaining self-esteem, managing disappointments, managing anger, and dealing with stress related to injuries. The overall findings indicated an array of needs which are consistent with the existing literature, and all the items in the felt needs survey were endorsed to a varying extent by the participants with nonendorsement rate being 10% or lower. Managing anger was the only item on which gender and age differences were observed with males and younger age group reporting stronger felt needs for inputs. The findings of the preliminary study point toward the nature of psychological components that are desired by the young athletes training for competitive sports. The study focused on understanding the psychological training needs of sports persons in government-run facilities. Generalizability of these findings to sports persons getting trained in other settings need to be examined. The study provide pointers regarding potential components that can be included as part of psychological intervention programs for young Indian athletes’ training in competitive sports.

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#### Conflicts of interest

There are no conflicts of interest.

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