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Cognitive Behavioural Therapy and Performance Enhancement: A Case Study

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Abstract

Sports and games have a little influence on the Indian society and we are least concerned about the physical and mental fitness. This is reflected in the curriculum where psychological interventions in the life of a sports person is perceived as unnecessary or as elitism. Most of us are fascinated by the achievements and successes of elite athletes, who train for years to have the opportunity to reach their goals on the world stage. Of all the skills that athletes and sportsmen possess, the most under appreciated ability is a sportsman's mental acuity.

Many athletes view the zone as this magical, hard-to-obtain state of mind. But the zone is really not that complicated or hard to achieve.As an interdisciplinary practice that explores the link between psychological and physical factors affecting performance in competitive sports and athletic activity, sports psychology incorporates the science of physiology, kinesiology and biomechanics to assist sports psychologists in treating a wide range of mental health issues. Cognitive Behavioural Therapy (CBT) is an action orientated form of psychotherapy that assumes that unproductive or unhelpful thinking patterns cause unproductive behaviour and undesired negative emotions.CBT allows sportspersons to

explore the relationship between their thoughts, emotions, and actions in order to optimize their performance. The case that the author cum coach involved is of a pole vault athlete. She was unable to perform well and had shown apathy. Through CBT exposure therapy, the coach was able to address her fear towards running and launching. The CBT therapy has proven effective to bring the athlete to the flaw state or in the zone.

Keywords: CBT, exposure therapy, withdrawal, flaw state, pole vault

In our culture, sports have a certainly pervasive influence. Lakhs of Indians engage in some form of competition, training, or physical exercise every day. Still, physical exercises and activities have given lesser importance in our curriculum than bookish learning. The only practice that we follow commonly as a form of exercise is Yoga, which is in fact contain only limited methods to attain fitness. With a lesser support from the system, the sportspersons sometimes find it difficult to compete in an international scenario that requires strong body as well as strong mind.

"Whether you think you can or you think you can't – you are right." This is Henry Ford's famous quotation about this powerful tool which we use every day, the mind. People are affected by their thoughts which can be empowering or destructive; these thoughts reflect their actions which will appear to be positive or negative, thus presenting themselves in certain ways that directly influence performance. Individuals are the dictators of their thoughts and behaviours: we are able to control what we think, how we think and when we think, so that we can achieve the expected outcome of our performance(Adas).

It takes a great deal of commitment and dedication in pursuing the field of sports. Most of us are fascinated by the achievements and successes of elite athletes, who train for years to have the opportunity to reach their goals on the world stage. Of all the skills that athletes and sportsmen possess, the most underappreciated ability is a sportsman's mental

acuity. While sports and games of all type require a great amount of physical ability, what separates a good player from a great player is how they analyse the game on the field(Andrei, 2012).

Athletes' psychological states – the temporary, brief, subjective experiences that happen during exceptional performance – are often collectively described as "the zone". The "zone" is a state of supreme focus helps athletes in all sports perform at their peak potential. It is when your mind fully connects with achieving a goal, such as getting a hit, or stealing a base. Attention is absorbed into the present – the here and now only. When you are in the zone, your mind only processes the thoughts and images that help you execute your task successfully. Entering the zone requires total commitment to your game plan and the process of winning. Many athletes have mental barriers that limit their ability to enter the zone, such as fear of failure, doubts, lack of trust, and over thinking(Edger, 2012).

Many athletes view the zone as this magical, hard-to-obtain state of mind. But the zone is really not that complicated or hard to achieve. The zone is simply a mental state of total involvement in the present moment without the mental burden of worry, doubt, or fear about results. Mentally tough athletes are at an advantage because they have the ability to tap into the zone more consistently in competition. When they are in the zone, fear of failure, worry, doubt, indecision, and other mental traps are forbidden from entering their focus. In this state of concentration, mental distractions struggle to compete for your attention, but lose the battle(Edger, 2012). Hence formation of a strong mind is essential to be successful as a sportsperson; and sports psychology answers this puzzle.

As an interdisciplinary practice that explores the link between psychological and physical factors affecting performance in competitive sports and athletic activity, sports psychology incorporates the science of physiology, kinesiology and biomechanics to assist

sports psychologists in treating a wide range of mental health issues commonly experienced by athletes and sports industry professionals in a clinical setting(Weinberg & Gould, 2014). It helps the young athletes and their families to build confidence and develop teamwork skills, as well as maximize the positive character.It helps the athletes to increase motivation, boost morale and build mental stamina(May, 2010).

The popularity and the value our culture places on competition have made sports a valid area of psychological inquiry. Since 1990s, the focus of international sports psychology has been on mental skills training, sports social psychology, exercise and mental health, anxiety, arouse and emotion of sports, the motor skill, and the sports motivation. Mental health is significantly important in relation to sport, with data indicating high rates of psychological distress and disturbance among athletes. Athletes experience additional mental health risk factors compared to non-athletes. Recent statistical analysesillustrates a considerable growth in athletes' mental health-related problems, such as concussion, overtraining syndrome, and identity crisis(Markser, 2011). Research in applied sport psychology has documented the nature of mental preparation, its implementation within sport, and its impact on various cognitive and affective indices among athletes. Considerable evidence has supported the proposed relationship between specific cognitive-behavioural strategies and positive affective outcomes among accomplished athletes(Ryska, 1998).

CBT in Sports Psychology

As a life science, Cognitive Behavioural Therapy (CBT) is an action orientated form of psychotherapy that assumes that unproductive or unhelpful thinking patterns cause unproductive behaviour and undesired negative emotions.CBT is basically a form of talk therapy. It is designed as a short-term treatment, taking anywhere from a few weeks to a few months to see results. CBT allows individuals to explore the relationship between their

thoughts, emotions, and actions in order to optimize their life experiences. Based on the assumption that cognitive activity affects behaviour and that this cognitive activity may be monitored and altered, the goal of this approach is to help achieve lasting behavioural and cognitive change (Dobson & Dozois, 2010).

After the World War II, psychoanalysis failed to give answers to changing social demands. This coincided with the development of new psychotherapeutic models, of which Behavioural Therapy (BT) played an initial starring role, first pioneered by John B. Watson. BT was open to change, integrating and incorporating continuing research not just in psychology but also in various other scientific fields, giving rise to new expressions of psychoanalysis and other strategic interventions. Hence, the merging of Behavioural and Cognitive Therapies is attributed to have given rise to the second generation of BT which is what many people today refer to as Cognitive Behavioural Therapy (CBT).

In the sport psychology literature, the CBT approach is one of the most employed and referenced intervention strategies(McArdle & Moore, 2012). In fact, many researchers have suggested that CBT interventions are effective in altering self-statements, regulating athletes' psychological states, and enhancing performance (Neil, Hanton, & Mellalieu, 2013).More specifically, according to Andersen (2009), the five most used cognitive behavioural techniques in the sport setting are self-talk, relaxation, imagery, goal setting and concentration.Additionally, the CBT approach can be useful in helping athletes positively change their cognitive appraisal of a stressful situation, and thus reduce performance anxiety(Dobson & Dozois, 2010).

CBT and the Flow State

As I mentioned earlier, a sportsperson's best performance comes out when he is in "the zone". In this state, they feel invincible, as if the game slowed down, the crowd noise

fell silent and they achieved an incredible focus on their mission. What is this Superman-like state and how can players enter it when they most need it? How can CBT help a sportsperson to be in the zone? Mihaly Csíkszentmihályi, psychology professor at Claremont Graduate University in California, coined the term "flow" in his book, "Flow: The Psychology of Optimal Experience"(1990) to explicate a sportsperson's feeling of being moved down a river by the current. Csíkszentmihályi developed an entire theory around the concept and applied it not only to sports, but also to work life, education, music and spirituality.

Csíkszentmihályi explains the concept of flow thus:

> In flow, we are in control of our psychic energy and everything we do adds order to consciousness. Following a flow experience, our self becomes more complex than that it had been before, due to two broad psychological processes – differentiation and integration. The self becomes differentiated as the person after a flow experience feels more capable and skilled. Flow leads to integration because thoughts, intentions, feelings and the senses are focused on the same goal. After a flow episode, one feels more together than before, not only internally but also with respect to other people and the world in general. Differentiation promotes individuality while integration facilitates connections and security(1990).

Csíkszentmihályi identifies several components of the state of flow — balancing skill and challenge, merging awareness and action, setting clear goals, receiving immediate feedback and adjust, effortless involvement without negative thinking, sense of control, losing self-consciousness, alteration of the concept of time, and autotelic experience(1990).Also, he differentiates flow from Yoga:

> The similarities between Yoga and flow are extremely strong; in fact, it makes sense to think of Yoga as a very thoroughly planned flow activity. Both try to achieve a

> joyous, self-forgetful involvement through concentration, which in turn is made possible by a discipline of the body. Some critics, however, prefer to stress the differences between flow and Yoga. Their main divergence is that, whereas flow attempts to fortify the self, the goal of Yoga and many other Eastern techniques is to abolish it(1990).

He rejects abolishing the self. The subjective experience remains important. "It is not the hearing that improves life, it is the listening"– he comments.

In essence, the flow state or being in the zone is a person's mental state in which he/she performs with a feeling of energized focus, full involvement, and enjoyment in the process of the activity.Cognitive Behavioural Therapy (CBT) is used to increase the unity of the observing and participating self by challenging negative self-talk and providing more balanced reality-tested alternatives. It helps sportspersons to be in the zone, or be in the state of flow as described in Csíkszentmihályi's positive psychology. When adopted in sport psychology, CBT can be seen as Cognitive Behavioural Training (Gustafsson & Lundqvist, 2016) by which athletes practice to change dysfunctional performance-related behaviours into functional behaviours to be in the zone.

Flow State: A Case Study of a Young Vaulter

The vaulter was a 16-year-old female. She was considered as a promising elite performer in her institution. The problem was her underperformance according to earlier performance standards. She was unable to be in the zone, to perform using her full potential.During the first CBT session, she described that she had been practising intensely in the previous pre-season and showed symptoms of overtraining syndrome, such as prolonged fatigue.In the previous season's first competition, the vaulter finished in the sixth position, gave an unexpected shock to everyone. The result affected her greatly and she felt like falling

downhill. She became extremely nervous before competitions, and especially became anxious about the moment of launching.

Her fear of failure had persisted during the season and it followed her. In the new season, she skipped one of the competitions due to anxiety. During the first session itself, a list of her problems was recorded, and identified the anxiety towards running and launching herself to the air.

Behavioural analysis

The behavioural analysis is conducted in a close collaboration between the coach and the vaulter, and specific situations are carefully studied to find foregoing elements. First, the coach analysed the situations and objects that the athlete fears and avoids. The competitions were the major traumatic situations and situations during training with her peers also were related to anxiety. Moreover, the communications with friends in the playground contributed to increased anguish. Thus, anxieties were heightened before the performance.The anxiety peaked during run when fatigue and a burning sensation in the stomach similar to Irritable Bowel Syndrome (IBS) were experienced. This anxiety leads her to anticipate negative events.The short-term consequences of the behaviours are slow pace and unable to beat the minimum height. Though she gets some sort of relief from her anxiety doing so, this will most likely lead to hindered sport development and performance over time.

CBT Intervention

As the next step, the coach helped her learn about the undesirable behaviours, their impact, and the reason for the CBT intervention.It was explained to the athlete that anxiety is a learnt response. Any behaviour adapted to avoid anxiety will prevent the athlete from learning about the actual situation or grapplewith various emotions during performance.She was informed that she would be exposed to her fears during guidance and the outcome is a

state of decreased anxiety when she manages to handle her own emotional responses. For an effective treatment, her parents and friends were also educated about the rationale behind CBT methodology.

Intervention was also made to help her understand the symptoms of anxiety. She was made aware of bodily sensations like dizziness, increase in heart rate, and the feeling of butterflies in her stomach.Through exposure to harmless physical sensations, the athlete increased her confidence in her ability to tolerate them.Home assignments are a core component of CBT and she was directed to practice breathing exercises and assess progress till the next intervention.

After the exposure to bodily sensations, vivo exposure was planned. Here she would be exposed situations which invoke fear and this would bring a disconfirming evidence of the fear. This means, after the exposure, she would realize that the fear would not be actualised.The collaboration between the client and the practitioner is important in all CBT treatment. So exposure is graded, from the least unpleasant to the most feared stimuli, and the coach and athlete work together in her way up the list of situations.Here, it is important that the client would not be forced to do anything she did not want to do. Based on the behavioural analysis, we decided together to expose her to the moment of pole vault launching.

The coach, being a former athlete did the exposure and after repeating the rationale for the treatment, the client was directed to practice. During the run, before launching she stopped because of having intense anxiety symptoms(she rated 100 on 1-100 scale).She was then instructed to do breathing exercise and when she was calm again the procedure was repeated three times. The second time she came 75% of the track and the third time she was able to jump over the bar with markedly lower symptoms (she rated 80/100 on the second

time and 60/100 on the third). During the three intervals and breathing exercise, the length of the interval doubled and the anxiety level decreased from 80 to 50 on a 100 self-rating scale.A 50% reduction in anxiety is considered to be a successful exposure(Taylor, 2006).The assignment involved repeating the intervals twice the next week.

The next session included a review of the assignment. The athlete had performed the planned assignments with great progress. During the interval sessions she had performed five repetitions and had lowered her anxiety even further (rated 30 on the 0-100 scale of anxiety) and she now did not perceive these sessions as troublesome.During the running sessions she had used behavioural testing of her fears of having panic attacks when she was training with her friends at the institution.

In the last consultancy session, a plan for themaintenance the newly acquired skills was developed and we developed a relapse management program(Kennerley, Kirk, & Westbrook, 2016). This planning included how the client could retain the skills, prepare for potential future problems, and the ways to handle them. Furthermore, a booster session is often scheduled to check the client's progress(Butler, Fennell, &Hackmann, 2008), and in this case, it was conducted after two months. This session included an update and a discussion of how the athlete could continue her practice. The athlete was in full training and had maintained the planned work from the last session.

Evaluation of the CBT Intervention

Prior to the intervention, the athlete had started to avoid specific situations including competitions, friends at the playground, training with her friends, and running and launching over the bar.After the intervention the athlete adopted new behaviour patterns when experiencing or anticipating anxiety. She began to practice with her friends and did the pole vault without experiencinganxiety. She stopped skipping competitions and started socializing

with friends and other athletes during competitions.There were also decreases in perceived anxiety ratings before and after vaulting.She was restored to focus on the main goal - participating in sport with the focus on performance; and not on anxiety. This indicated the end of the interventions.

Conclusion

As used in sports, Cognitive Behavioural Training(Gustafsson & Lundqvist, 2016), is based on helping the athlete/client practice using skills that will enhance both performance and well-being.In this case, I have exemplified how the CBT-framework and exposure technique can be used to assist athletes to manage anxiety and grapple with anxiety provoking situations. Based on the study, it has been proven that anxiety related problems and rejection are major obstacles for performance enhancement and for these situations exposure can be effective for athletes(Clark & Beck, 2010).

When encountering a threatening situation, the natural response from the part of the athlete would be to try and escape. It is important to remind the athlete that skipping challenging situations is another problem, though it gives a short-term relief of anxiety.Another problem that the coach faced is the under-engagement from the part of the athlete. To overcome this issue, the coach had to repeat the rational for exposure and validate the fear the athlete might have.There are contraindications shown to exposure therapy. In sports like pole vault, the athlete must accept and adapt to the fear if they want to continue in their sport.To summarize, I have presented how exposure therapy in CBT can be integrated in elite and competitive sports to bring the athlete in the zone. As a psychological therapy, I believe that CBT is a key methodology to help the athletes to be in a flow state and give their best performance.

References

Adas, L. F. The Power of Mind in Sports. Retrieved April 14, 2019, from Athlete Network website: https://an.athletenetwork.com/blog/the-power-of-mind-in-sports

Anderson, M. (2009). The "Canon" of Psychological Skills Training for Enhancing Performance. In K. F. Hays (Ed.), *Performance Psychology in Action: A Casebook for Working with Athletes, Performing Artists, Business Leaders and Professionals in High-Risk Occupations* (pp. 11–34). Washington DC: American Psychological Association.

Andrei, M. (2012, April 16). How a Sportsman's Mind Works. Retrieved April 14, 2020, from ZME Science website: https://www.zmescience.com/science/psychology-science/sportsman-mind-poker-strategy/

Butler, G., Fennell, M., &Hackmann, A. (2008). *Cognitive-Behavioural Therapy for Anxiety Disorders: Mastering Clinical Challenges*. New York: Guilford Press.

Clark, D. A., & Beck, A. T. (2010). *Cognitive Therapy of Anxiety Disorders: Science and Practice*. New York: Guilford Press.

Csíkszentmihályi, M. (1990). *Flow: The Psychology of Optimal Experience*. New York: Harper & Row.

Dobson, K., & Dozois, D. J. A. (2010). Historical and Philosophical Bases of the Cognitive-Behavioural Therapies. In *Handbook of Cognitive-Behavioural Therapies* (3rd ed., pp. 3–38). New York: The Guilford Press.

Edger, M. (2012, June 19). Understand THE ZONE in Sports. Retrieved April 14, 2020, from Sports Psychology Today website: http://www.sportpsychologytoday.com/youth-sports-psychology/understanding-the-zone-in-sports/

Gustafsson, H., & Lundqvist, C. (2016). Working with Perfectionism in Elite Sport: A Cognitive Behavioural Therapy Perspective. In A. P. Hill (Ed.), *The Psychology of*

Perfectionism in Sport, Dance and Exercise (pp. 203–221). New York: Routledge.

Kennerley, H., Kirk, J., & Westbrook, D. (2016). *An Introduction to Cognitive Behaviour Therapy: Skills and Applications* (3rd ed.). London: SAGE.

Markser, V. Z. (2011). Sport psychiatry and psychotherapy. Mental strains and disorders in professional sports. Challenge and answer to societal changes. *European Archives of Psychiatry and Clinical Neuroscience, 261*(2), 182–185. https://doi.org/10.1007/s00406-011-0239-x

May, R. K. (2010). Sport Psychology. In I. B. Weiner & E. Craighead (Eds.), *The Corsini Encyclopaedia of Psychology* (4th ed., Vol. 4). Retrieved from https://doi.org/10.1002/9780470479216.corpsy0937

McArdle, S., & Moore, P. (2012). Applying Evidence-Based Principles From CBT to Sport Psychology. *Sport Psychologist*, *26*(2), 299–310. https://doi.org/10.1123/tsp.26.2.299

Neil, R., Hanton, S., &Mellalieu, S. (2013). Seeing Things in a Different Light: Assessing the Effects of a Cognitive-Behavioural Intervention upon the Further Appraisals and Performance of Golfers. *Journal of Applied Sport Psychology*, *25*(1). https://doi.org/10.1080/10413200.2012.658901

Ryska, T. A. (1998). Cognitive-Behavioural Strategies and Precompetitive Anxiety among Recreational Athletes. *The Psychological Record*, *48*(4), 697–708. https://doi.org/10.1007/BF03395299

Taylor, S. (2006). *Clinician's Guide to PTSD: A Cognitive-Behavioural Approach* (1st ed.). New York: Guilford Press.

Weinberg, R. S., & Gould, D. (2014). *Foundations of Sport and Exercise Psychology* (6th ed.). Illinois: Human Kinetics Publishers.

