

INJURY MANAGEMENT USING CBT AND MENTAL ENDURANCE PROGRAMME

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ABSTRACT

There is growing evidence which suggests that athletes who suffer from injury experience feelings of anger, depressed mood and anxiety. It is also well-investigated that these negative psychological states have an unfavorable impact on the injury rehabilitation. The present paper is an in-depth case study of an athlete who suffered from an injury prior to a major competitive event following which she experienced significant distress – symptoms suggestive of mild depression. As a part of injury management and rehabilitation, Cognitive behavioral intervention was extensively used with the athlete, predominantly focusing on the use of verbal challenges and rational thinking and maintenance of dysfunctional thought diary. The paper also provides case formulation and intricate details of 10 psychological sessions and strategies used to deal with the cognitive distortions. A mental endurance programme, based on the available research was scripted for the athlete to help aid her performance during the competitive event.

Keywords: Injury management, athlete, mental endurance programme, cognitive behavioral intervention.

1. INTRODUCTION

In the recent years, the extent of available research in the area of sports injury has increased considerably (Naoi, & Ostrow, 2008). Studies have shown that injured athletes commonly experience tension, anger and depression (Smith, Scott, O'Fallon, & Young, 1990; Yang, Peek-Asa, Corlette, Cheng, Foster, & Albright, 2007). Leddy, Lambert, and Ogles, (1994) found that injured athletes are more

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depressed than non-injured athletes and recovered athletes. The common intervention for treating depression includes cognitive-behavioral therapy (CBT) which is considered as an evidence-based treatment (EBT). Cognitive behavioral therapy equips patients to identify, evaluate, and respond to their psychologically dysfunctional views.

The current case study uses cognitive behavioral intervention to help athlete deal with the injury and also charts out a mental endurance programme with the primary purpose of helping the athlete remain focused during the competition. The strategies used in mental endurance programme were influenced by the research studies. Silva, and Applebaum (1989), found that marathon runners finishing in the top 50 places altered between associative and dissociative strategies in the early part of the race (0-8 miles) and were more likely to utilize dissociative strategies in the latter stages of the race (18-24 miles) in an attempt to avoid pain. Some of the research studies have shown that women dissociate more than men due to cultural reasons, hence dissociative strategies of attention style was predominantly used with the client.

2. METHODS AND MATERIALS

2.1 Participant

Ms. A, age 21 years, unmarried female, pursuing graduation, belonging to lower middle socio-economic status was referred for Psychological Intervention. She is an active athlete participating in competitive events as a long distance Walker. She was referred by her coach with complaints of self-doubts on performance due to injury accompanied by sadness of mood. She also complained of decreased performance despite regular practice.

The client was qualified to participate in Asian Games 2014; however, she suffered an *adactor strain*, six months prior to the competition. As the client did not take adequate rest, she had a relapse of the same injury a month prior to the competition. The injury was severe enough to affect her participation and she was advised rest for 7-10 days by the physician.

Post recovery, the client feared re-injury which created self-doubts on her ability to practice daily and perform well in the upcoming competition. The client was also over concerned about disappointing her mother and coaches if she does not perform well. The constant concern about the performance resulted in the client feeling hopeless, sadness of mood, crying spells, decreased sleep and appetite. There was also reduction in the motivation level to practice as she was unable to reach the performance standards. On the whole, the client's performance started to decline drastically despite regular practice.

2.2 Psychological Intervention

Session 1

- The session was aimed at rapport formation, history taking and psycho-educating the client.
- Presence of attribution error to the problems she encountered and existence of significant pressure/stressors from the environment was observed and insight was built.
- It was also noticed that the client had high extrinsic motivation.
- Supportive session focussing on reassurance, explanation and catharsis was provided.
- Administration of BDI-II to assess the presence of any depressive features. Score obtained was 19 which indicated presence of mild depressive features.

Session 2 & 3

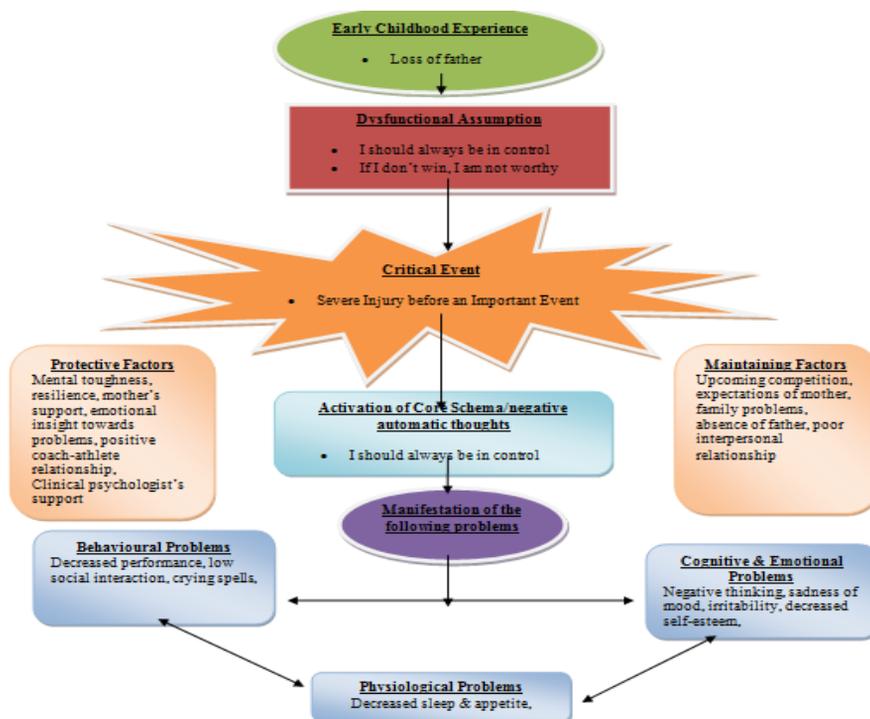
- Client made an attempt to give positive reinforcement to herself.
- Competitive State Anxiety Inventory – II (CSAI-II) was administered on the Client. Scores indicated moderate presence of Cognitive State anxiety, low presence of Somatic State Anxiety and presence of high Self-confidence.

The session was aimed to target the negative thoughts which affected her coping abilities. The nature of negative thoughts was explained and cognitive triad (*The Self- "I am not a good athlete," Current experience- "No matter how hard I train, I am not good," and The future- "I will never do well in the competition"*) was described to create awareness about the negative automatic thoughts.

- Presence of cognitive distortions of overgeneralization and dichotomous reasoning was observed in the client.
- Advantages and disadvantages of having negative thoughts were evaluated. She was encouraged to have an alternate, positive but realistic thought.
- At the end of the 2nd session, the client was asked to maintain the diary of dysfunctional thoughts where she would report the situation causing sadness, automatic negative thoughts associated with the situation, the emotions experienced and the rating of the emotions felt.

The case conceptualized on a CBT model (Figure 1) was explained to the client and feedback was also taken.

Figure 1: Case formulation based on cognitive behavioural assumption



Session 4 & 5

- The client was positively reinforced on her past achievements and present targets. She was encouraged to have an internal locus of control to improve her self-belief.
- Verbal challenges were undertaken for the underlying unrealistic beliefs.

Client showed tendency of setting for herself unobtainable standards. On non-fulfilment of these standards, she would experience extreme sadness of mood. Such standards included being responsible for the entire family, taking responsibility for her sister's marriage, being the best athlete on the field during every practice session and staying in control all the time.

Some of the statements like- "I have to worry about my mother", "I will feel good only if things go my way" etc were challenged.

Example of Verbal Challenging:

Ms. A- "I have to worry about my mother's well-being to be a good daughter"

CP- How helpful is it to constantly worry about your mother's well being, if you are not physically present with her?

Ms. A- No, it is not helpful to worry so much. But I am extremely concerned about her.

CP- What can you do instead to know your mother is feeling fine?

Ms.A- "I will call my mother everyday and check her health status and well-being. In case of any emergency my relatives can help out my mother".

Example of Verbal Challenging:

Ms.A- "I have to have my best timing whenever I perform" and "I should always do the best during all practice sessions".

CP- "If you do not do your best in the practice session every day then what will happen"?

Ms. A. - "I will feel very disappointed and will think that I will not be able to play well in the upcoming competitions. I tell myself that I am here to play and compete and if I can't practice my best every day then what's the point in being here".

CP- Has your coach reprimanded you recently for not being good in practice?

Ms. A. - No.

CP- Then what makes you think that you are not doing well?

Ms. A- Because I feel like I am a failure when I do not perform my best.

CP - Rate your performance/effort on a 0-10 scale of the previous week's practice sessions and try to see whether you can put your efforts as either 0 or 10 only. Can you give only 0 or 10 score to your performances? Is there any possibility of giving other numbers between 1 -9?

Ms.A- My performance can never be only 0 or 10. There are times when my efforts have been 10/10 and even 7/10 but nothing less than that. So does that mean that my feelings and thoughts are responsible for making me feel like a failure?

CP- Yes. But more important is your thought that you need to be best all the time or you are not good enough is what makes you feel bad.

Belief in her ability was emphasized and time management skills were also taught to the client to help her adjust her time through the day and engage herself in pleasurable activities. Engaging in activities which the client found to be fun contributed in increasing her self-worth and feeling of control ability.

At the end of fourth session, rational response to deal with the dysfunctional thoughts was added to the already existing diary of noting down dysfunctional thoughts.

Session 6 & 7

- Cognitive restructuring continued and positive self-talk was demonstrated and practiced.

- Behavioural Experiments were carried out in the sessions where her new ideas were put to test. For the behavioural experiments, client was asked to make a prediction about her negative automatic thought e.g., “*I am not taking care of my mother by being with her, I am not a good daughter*”.

The client believed this thought to be true with 90% of certainty and thus increased her sadness of mood.

Evidence for and against the thought was recorded.

CP- “*What is the evidence for the thought that you are not a good daughter?*”

Ms.A- “*My mother is alone and I am practicing here, I don’t get time to speak to her regularly, I am not physically present to meet her needs, I feel really bad that I am a bad daughter*”.

CP- “*Has your mother scolded saying you are a bad daughter?*”

Ms.A- “*My mother has not scolded me; she is very supportive*”.

CP- “*Has your mother complained that since you are not there with her, she finds it difficult to take care of herself?*”

Ms.A- *No, she has not told me that.*

CP- “*So is there any evidence that you are not a good daughter?*”

Ms.A- “*There is no evidence, but I just feel that I am not a good daughter*”.

- As the client was not completely convinced with the above statements, a behavioural experiment was carried out. As a part of the experiment, the client was asked to talk to her mother and ask her if the client was a bad daughter, as she was not physically present with her to take care of the needs. The client reported feeling better as the mother said she was very happy to have a caring daughter like her. Client’s self-confidence and self-belief got boosted when her mother told her that she is very proud of her and she will do her country proud by her efforts.
- By the end of the session, client expressed positive attitude towards the upcoming competition.

A Mental Endurance Program was developed and demonstrated to the client. The purpose of the mental endurance programme was to help the athlete remain focused and tough throughout the competition. The 20 kms walking race was divided into 4 phases of 5 kms each, in each of the four phases. The client was provided various strategies to use during the different phases of the competition. During the first 5 kms of the competition, associative cognitive strategy was used, where in the client was asked to focus on the internal cues from the body. Statements like “I have the competition under my control” were added to increase the control over environment.

During the 6-10 kilometres, focus was stressed on thinking about happy moments and memories in the client's life. This strategy was used in the middle of the race to help the client alleviate the pain caused by the long distance walking. Breaks were provided after every 5 kilometres to observe the opponents and also to increase the speed of the race accordingly.

Since the client exhibited high extrinsic motivation she was asked to observe the national flags and her supporters to gain momentum in the race. During the last five kilometres, aim was to bring her focus back to the race. Visualization was also emphasized and positive self-talks were stressed to help her complete the race successfully.

Post competition, the client provided feedback about the use of mental endurance programme in the race. The client reported chanting God's name during the tough phases of the competition. The more she chanted the more persistent she became in the race, henceforth, the mental endurance programme was revised based on the needs of the client. Religious and cultural background of the client was incorporated to successfully use the mental endurance programme.

Sessions 8 – 12

- Cognitive restructuring and supportive sessions continued.
- Behavioral experiments were carried out for various negative automatic thoughts.
- Feedback was taken about the usefulness of the mental endurance programme. Changes were made to the mental endurance schedule according to the needs of the client.
- Self efficacy techniques were added.

3. CONCLUSIONS

The current study highlights the effectiveness of cognitive behavior intervention in injury management and rehabilitation of an elite athlete who suffered from an injury a month prior to Asian Games 2014. The study also brings to lights the psycho-social factors that affect recovery such as parental pressure, social support, athlete's personality traits etc. Cognitive behavioral intervention mainly focusing on the use of verbal challenges and rational thinking and dysfunctional thought diary was extensively used in the study. The strategies used to deal with the cognitive distortions and the mental endurance programme developed was found to be effective in enhancing the performance of the athlete. Studies can also focus on the importance of developing and testing mental endurance programmes for various sports.

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