

Significance of positive mental health in student athletes

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Sports have been considered beneficial for the better functioning of an individual. Indulgence in sports activities is rich and rewarding experience. However athletes who are involved in competitive sports as well as academics tend to experience greater amount of mental strain that has negative impact on their performance in the field. Therefore, it is important that focus should be given on mental health of student athletes. While efforts have been directed towards reducing the mental distress experienced by student athletes, there is comparatively lesser attention paid towards enhancing their mental health. The application of positive psychology in the field of sports has given due consideration to importance of positive mental health among athletes. Positive mental health has been found as one of the most important factor that facilitates the cognition and assists in effectively handling the multiple demands experienced by athletes. However, there is a dearth of literature with regard to significance of positive mental health among student athletes. The purpose of the present paper was to highlight the importance of positive mental health among student athletes.

Keywords: positive psychology, positive mental health, student athletes, well-being

Mental health of a person is a serious concern worldwide. Mental health of person is a serious concern worldwide. There are more than 300 million people that suffer from depression, 60 million have bipolar affective disorder, and 21 million people have schizophrenia (World Health Organization (WHO, 2017). Demanding work conditions, unhealthy life style, physical illness, social exclusion, etc. are some of the perpetuating factors associated with poor mental health of an individual (WHO, 2016). The decrease in the mental health negatively impacts academic performance, workplace productivity and personal relationships (Chopra, 2009; Eisenberg, Golberstein, & Hunt, 2009; Hysenbegasi, Hass, & Rowland, 2005; Nezlek, Hampton, & Shean, 2000; Steger & Kashdan, 2009; Woo et al., 2011). The staggering figure of mental disorders (anxiety & depression) and negative consequences of mental illness has drawn the need towards preventing and treating mental illness as well as promoting positive mental health (Kessler et al., 2001; Keyes, 2007; Keyes, Dingra, & Simoes, 2010; Westerhof & Keyes, 2010). The definition of mental health was redefined as more than mere absence of disease; it is a state of well-being that makes individuals realize their potential, cope successfully with everyday life stressors and contributes productively to the society (WHO, 2016). This definition highlights that the mental health of a person should be studied in more positive manner rather than solely on the basis of absence of disease or disorder.

The advent of positive psychology has changed the traditional approach of focusing only on the mental pathologies with more emphasis on nurturing and cultivating the strengths and competencies of an individual. Importance has been given on promotion of positive mental health (Park, Peterson, & Seligman, 2004; Seligman & Csikszentmihalyi, 2000). Keyes (2002) conceptualised positive mental health as amalgamation of positive feelings and positive functioning of an individual. Positive feelings also labelled as subjective and emotional well-being incorporates

happiness, positive emotions and satisfaction with one's life (Ryan & Deci, 2001; Delle-Fave, Massimini, & Bassi, 2011; Diener, 1984). Positive functioning comprises of psychological and social well-being of individual such as personal growth, realization of one's inherent potential, having a sense of purpose in life, and thriving socially (Huta & Ryan, 2010; Keyes, 2002; Ryff, 1989; Ryff & Keyes, 1995). Previous studies revealed that positive mental health builds positive resources that enhance coping and resistance to everyday life stressors (Diener & Diener, 1995; Frisch, 2000) act as a buffer against stress/pressure and helps in regulating the behaviour and health of an individual (Bohem, Peterson, Kivimaki, & Kubzansky, 2012; Rozanski & Kubzansky, 2005; Scheier & Carver, 1985).

It has been found that regular indulgence in some form of physical activity such as sports/games promotes better bodily functioning, regulates one's emotions, contributes towards better mental health and overall quality of life (Biddle, Mutrie, & Gorely, 2015; Sanchez et al., 2009). Though there are numerous benefits entailed by participation in sport, however, findings of the different studies revealed mixed results. On one hand, it was found that as athletes are involved in physical activity through their involvement in games/sports they tend to be better in terms of overall health as compared to non athletes that are not involved in any such activity (Dehkordi, 2011; Sguizzatto, Garcez-Leme, & Casimiro, 2006; Snyder et al., 2010). On the other hand, the spirit of competitiveness mars the reviving and rejuvenating experience resulting from involvement in sport activities. Rigours physical activity undertaken by athletes to meet the performance expectations and to perform their best leads to overtraining, burnout and increased risk of injury (Hedstrom & Gould, 2004; Kallus & Kellmann, 2000; Malina, 2010). Athletes experiences time and energy constraints, loss of autonomy and psycho social problems (Firestone, 2012; Hedstrom & Gould, 2004; Smith, 2004; Walker, Thatcher, & Lavallee, 2007). Those athletes who are involved in academics as well as sports have to bear the additional burden of managing the responsibility of both. The additional stressors/pressures stemming from sports and academics negatively impact the mental health of student athletes (Broughton & Neyer, 2001; Etzel, Watson, & Maniar, 2006;

Thompson & Shearman, 2007; Wilson & Pritchard, 2005). Therefore, mental health of student athletes becomes the matter of utmost concern.

Previously majority of the emphasis has been given towards alleviating mental illness and distress experienced by student athletes (Brent, 2004; Pinkerton, Hinz, & Barrow, 1989; Steadman, 2011). Lesser attention has been paid towards the positive mental health of student athletes. Recently, the emergence of positive psychology gave impetus towards fostering of positive mental health in athletes. The benefits of positive mental health on athletes have been explored. Building of mental strength has been found beneficial for athletes' long term success (American Psychological Association, 2015). Successful athletes have been found to show better mental health as compared to the unsuccessful athletes (Morgan, 1985). However, not much emphasis was given on importance of positive mental health in student athletes. Considering the importance of positive mental health in student athletes as well as dearth in literature, the aim of the present paper was to highlight and discuss the importance/significance of positive mental health in student athletes.

Method

For the present paper, studies pertaining to the interest of the study were gathered through numerous online databases (Google scholar, PubMed Central, Elsevier, Questia, Emerald, Taylor, & Francis Online Journal, ProQuest, Online published thesis).

The present paper has been divided into following sections: Firstly, the mental health of student athletes was presented. Secondly, the importance of positive mental health in student athletes was highlighted. Third, intervention programmes focusing on enhancement of positive mental health of student athletes were discussed. Lastly, conclusion and suggestions for future research work were given.

Mental health in student athletes

The increase in the mental health problems of athletes has captured

the attention of the researchers. Numerous qualitative, quantitative, and review based studies focusing on the mental health problems faced by athletes have been carried out. For instance, cross sectional study on 224 elite athletes in Australia was carried out by Gulliver, Griffiths, Mackinnon, Batterham, and Stanimirovic (2015). It was found that 46.4 percent of athletes have one of the following mental health problems- depression, eating disorder, general psychological distress, social anxiety, generalised anxiety disorder, and panic disorder. Rice et al. (2016) conducted systematic review on the mental health of elite athletes. They concluded that elite athlete's experiences range of mental disorders due to the stressors experience by them. Athletes who are injured, about to get retired and those facing performance difficulty are at greater risk to develop mental health problems. Nixdorf, Frank, Hautzinger, and Beckmann (2013) did cross-sectional study on 134 elite athletes to investigate the prevalence of depressive symptoms and its possible associated factors. There was 15 percent prevalence rate of depression symptoms among elite athletes. In addition, depression symptoms were found to be associated with high level of chronic stress, negative coping strategies and negative stress-recovery states.

Recently efforts have also been directed towards mental health of student athletes. Student athletes refer to the set of population that is involved in academics as well as sports. Due to their dual involvement, student athletes encounter the problems to a greater extent in comparison to non-student athletes (Broughton & Neyer, 2001; Pinkerton et al., 1989; Wilson & Pritchard, 2005). Student athletes experience time management problem between academic and sports-participation, meeting the demands of social relationships (Kissinger & Miller, 2009; Romo, 2014) identity conflict, alcohol abuse, concern about body weight and image (Pinkerton et al., 1989; Selby, Weinstein, & Bird, 2010). All these factors negatively impact the mental health of student athletes. Previous studies have revealed the mental health problems in student athletes (see Table 1).

Table 1: Studies on mental health in student athletes

Author (s)/(year)	Title of the study	Participants	Key findings
Armstrong & Oomen-early (2009)	Social connectedness, self-esteem, and depression symptomatology among collegiate athletes versus non athletes.	227 collegiate athletes (n =104), non athletes (n =123)	Higher self-esteem, social connectedness and lower depression in athletes than non athletes.
Cox, Ross-Stewart & Foltz (2017)	Investigating the Prevalence and risk factors of depression symptoms among NCAA Division I collegiate athletes.	NCAA D-I athletes (n=950)	33.2 percent of athletes showed symptoms of depression. Further female, underclassmen, recently injured and in-season athletes, experienced higher depression rates compared to other athletes.
Donohue, et al.(2010)	Examination of psychiatric symptoms in student athletes	Recreational (non-competitive) athletes, n = 64), NCAA (competitive) athletes, n =72), under graduate non athlete (n= 435)	Similarity in the severity of psychiatric symptoms among recreational & competitive athletes. Together they showed less severe global psychiatric symptoms compared to undergraduate non-athlete.

Table 1: Studies on mental health in athletes (continued)

Author (s)/(year)	Title of the study	Participants	Key findings
Maurer & Roh (2015)	Depression and associated negative stressors: The collegiate athlete vs. non-athlete	Review	Student-athletes suffer from anxiety, fear of failure in competition, lack of sleep, alcohol use and abuse, disordered eating, overtraining, and feelings of exhaustion as compared to the non-athlete. Female athletes and athletes with severe injury, showed higher levels of depression. However overall athletes have lower incidence of depression compared to non-athletes.
Norseth (2017)	Stress, depression, social Support, and help seeking in college student athletes	Undergraduate college student-athletes (n=134) and graduate college student athletes (n=2).	No effect of social support on depression, stress and help seeking. Depression and stress were positively associated. Pressure and stigma in athletic culture could be the possible reason for lack of help seeking attitude among college student-athletes despite the experience of stress and depression.
Proctor, Boan -Lenzo, (2010)	Prevalence of depressive symptoms in male intercollegiate student-athletes and non athletes	Male intercollegiate team sport athletes (n = 66) and male non athletes (n = 51)	Lesser depressive symptoms reported by athletes than non athletes when coping strategy selection was controlled. 29.4 percent non athletes, 15.6 percent athletes came

Table 2: Studies on mental health in athletes (continued)

Author(s)/(year)	Title of the study	Participants	Key findings
Storch,Storch, Killiany & Roberti (2005).	Self-Reported psychopathology in athletes: A comparison of intercollegiate student-athletes and non-athletes	Undergraduate students (n=398) and intercollegiate athletes (n=105)	under depression criteria. Female athletes reported higher mean scores on social anxiety and depressive symptoms, and lower mean scores on social support, than male athletes and male and female non athletes.
Wolanin et al. (2016)	Prevalence of clinically elevated depressive symptoms in college athletes and differences by gender and sport	Student athletes (n=465)	Prevalence of 23.7 percent of clinically relevant level of depressive symptoms was found. Female athletes showed 1.84 times more the risk of male athletes. By sport type, female track and field athletes scored higher on relative risk ratio for having clinically relevant depressive symptoms.
Yang et al. (2017)	Prevalence of and risk factors associated with symptoms of depression in competitive collegiate student athletes	257 collegiate student athletes (n=167 males, n=90 females)	Twenty-one percent student athletes experience symptoms of depression. Further depression symptoms were associated with higher scores on anxiety.

Abbreviation: NCAA = National Collegiate Athletic Association, D-I = Division I

On summarizing the results of the studies, it was found that student athletes' was found to suffer from severe psychological problems. Female, injured, and underclassman athletes exhibited more psychological problems compared to other athletes. Secondly, some of the comparative studies revealed higher prevalence of psychological problems in non athletes as compared to the student athletes. Studies also stressed that the due to perceived social stigma attached with mental illness there is comparatively less help seeking attitude, under utilization of mental health services that prevents student athletes from reporting for their problems despite its severity.

Positive mental health among student athletes

The principles of positive psychology have been applied in the field of sports. Within the field of sport, psychological/mental health was considered as one of the most imperative factors for athletes' success (Brady & Cleave, 2017; Dale & Robbins, 2010; Mann & Narula, 2017; Salama-Younes, 2011). It was found that mental health influences the performance of an athlete to greater extent (Raglin, 2001). As athletes are involved in high pressure competitive sport environment, it has become important that mental health of an athlete looked after (Lunquist & Sandlin, 2014).

Presence of negative emotions inhibits and narrows down athletes' cognitions that could diminish their mental health and in turn their performance (Fredrickson, 2001; Tamminen, Crocker, & McEwen, 2016). Importance has been given on fostering positive emotions among athletes. Nicholls, Remco, Polman, Andrew, and Levy (2012) revealed that presence of positive emotions among athletes has positive impact on their performance. Athletes with positive emotions perceive their performance stress in a more challenging way and employs tasks oriented coping which in turn positively impact their performance. On the other hand, negative emotions makes athletes perceive their performance stress in more threatening way and encourage use of more disengagement/ distraction oriented coping which have negative impact on their performance. Lane et al. (2010) examined relationship between emotions and performance among athletes (n=284). They found positive relationship between positive emotions (includes happiness, vigour, & calmness) and optimal sport performance, between negative emotions and dysfunctional performance. Lundqvist and Sandin (2014) found that athletes with positive mental health use strategies to protect themselves from setbacks, have ability to regulate their autonomy, shows satisfaction with

life, experience positive outcomes in sport such as being happy and enjoying one's sport.

Although the importance of positive mental health among athletes has been explored; however there are relatively fewer studies on positive mental health of student athletes (see Table 2). Overall, these studies revealed that student athletes with higher level of subjective well-being, life satisfaction and happiness perceive their life experiences as less negative, perceives lower stress level, use coping skills (freedom from worry, goal setting/mental preparation) and achieve success in their sport (Master & Tobar, 2009; Malinauskas, 2010; Tabeian, Zaravar, Shokrpour, & Baghooli, 2013). Student athletes' have moderate to high level of well-being when studied across time however their emotional and social well-being was significantly affected by their adverse reaction to stressors, depressive mood states experienced by them. Higher level of perceived stress and lower level of perceived social support are associated with decrease in life satisfaction in student athletes with major injuries than minor injuries. Lastly, positive thinking among student athletes are related with greater positive affect and lesser mental distress (Slingerland, 2016; Surujlal, Zyl, & Nolan, 2013; Smith, 2015).

Table 2: Studies on positive mental health/ wellbeing of student athletes

Author(s)/ (year)	Title of the study	Participants	Key findings
Malinauskas (2010)	The associations among social support, stress, and life satisfaction as perceived by injured college athletes.	Student athletes (n=123)	Perceived stress along with lower level of perceived social support predicted decrease in their life satisfaction of student athletes with major as compared to minor injuries.

Table 2: Studies on positive mental health/ wellbeing of student athletes (continued)

Author(s)/ (year)	Title of the study	Participants	Key findings
Master & Tobar (2009)	Subjective well-being sport performance, training load and life experiences of college athletes.	Student athletes (n=66)	Student athletes with level of well-being perceive life experiences as less negative than student athletes with lower level of subjective well-being. No difference was found in terms of performance or training load.
Slingerland, Durand-Bush & Rathwell(2016).	(1)Levels and prevalence of mental health functioning in canadian interuniversity sport (CIS) student-athlete (2) Investigating university student-athletes' mental health functioning in relation to their stress, mood, self-regulation capacity, and perceptions of coaching climate	Student athletes (Time 1, n=388, Time 2 n=110)	(1) Presence of high to moderate level of mental health functioning (MHF) across time. No significant difference in MHF from time 1 to time 2 across gender, living situation, year of program, and type of sport. (2) Student athletes' MHF was affected by how they reacted to the stress and depressive mood states. Perception of supportive autonomy coaching environment positively related with psychological well-being. Self regulation was stable over time and positively associated with social and psychological well-being.
Smith (2015)	Optimism and psychological health.	Student athletes (n=36)	Student athletes with more positive thinking experience greater positive affect and lesser mental distress.
Surujlal et al. (2013)	Perceived stress and coping skills of university student-athletes and the relationship with life satisfaction.	Student athletes (n=500)	Higher level of satisfaction with life was linked with perceived lower level of stress. Positive association exist between student athletes' life satisfaction and their usage of coping skills (freedom from worry, goal setting/mental preparation).

The importance of positive mental health in student athletes can be drawn from “broaden and build theory”. As per the theory, developing and building positive emotions broadens one's thought action repertoires that increases one's personal psychological resources over time which promotes resilience and coping at time of adversity (Fredrickson, 1998-2004). During stressful time, student athletes with positive mental health cope up with unfavourable circumstances. The presence of positive emotions among student athletes facilitates their cognitions that help them to adopt broader/flexible thinking style and encourage use of more problems focused or task oriented coping style to overcome the obstacles (Crocker & Graham, 1995; Gaudreau, Gunnell, Hoar, Thompson, & Lelièvre, 2015; Ntoumanis, & Biddle, 1998).

Positive mental health in student athletes increases their resilience (positive psychological resource) that acts as a protective buffer towards negative emotions encountered by them. Higher level of positive psychological resources (resilience, optimism) promote coping, foster more positive emotions that leads to better performance (Kawataa et al., 2015; Secades et al., 2016). Hosseinia and Besharata (2010) pointed out that higher level of resilience leads to positive emotions in student athletes that have positive impact on their mental health and sports performance. Similarly, higher level of optimistic thinking was found to be positively associated with greater psychological well-being among student athletes. Further, enhanced psychological well-being combats the negative emotions and helps in achieving best performance in high pressure environment (Hardy, Jones, & Gould, 1996; Smith, 2015).

Intervention for enhancing student athletes' mental health

It is clear from previous studies that positive mental health of student athletes leads to positive outcomes. There are numerous intervention studies on increasing the well-being and decreasing the mental distress of athletes (Breslin, Shannon, Haughey, Donnelly, & Leavey, 2017; Reese, Pittsinger, & Yang, 2016). However as compared to athletes, there are comparatively lesser intervention studies focusing specifically on enhancing the positive mental health of student athletes. Some of the intervention studies that have been carried out for enhancing the mental health and well-being of student athletes are as follows:

Vento (2017) studied the effect the effects of progressive muscle relaxation on the subjective well-being of collegiate athletes using pre-post test design. Student athletes were randomly assigned to two groups. Intervention group were subjected to progressive muscle relaxation whereas control group were told to lie-down comfortably. It was found that there was within group increase in well-being and decreased in the stress and fatigue level of both the group of student athletes that were subjected to progressive muscle relaxation intervention and those that were told to lie-down comfortably. However, there was no significant difference between two groups on stress, fatigue and well-being level.

Golby and Wood (2016) examined the effect of psychological skills intervention on enhancing the mental toughness and psychological well-being (self-esteem, perceived self-efficacy, positive affect & dispositional optimism) among student athletes (n=16). Psychological skill intervention was given to student athletes that included increasing their self-confidence, awareness, concentration, controlling negative thought, focusing more on positive self talk. Results indicated significant improvement in

mental toughness, self esteem, perceived self efficacy and positive affect (psychological well-being). Mental toughness was found to be positively associated with self-efficacy, dispositional optimism and positive affect. It was concluded that for successful performance of student athletes emphasis should be given towards development of their positive psychological states. Lastly, intervention aimed at increasing the student athletes' well-being and decreasing their stress and burnout was carried out by Dubuc-Charbonneau and Durand-Bush (2015). Self regulation intervention was followed where in student athletes (n=8) were taught to regulate their perceived demands/obstacles, manage emotions, make use of effective coping strategies (goal setting/ preparation). Repeated-measures analysis of variance revealed increase in the well-being and decrease in the stress and burnout level of student athletes. Researchers suggested that student athletes' ability to self-regulate their emotions, thoughts and behaviour can lead to their optimal functioning.

Conclusion

Positive mental health is extremely important for long term success of the student athletes. Apart from focusing on reducing the mental distress, efforts should be directed at the development of a positive mental health. Developing positive mental health will have positive impact on cognitions and emotions of student athletes which will enhance their well-being and performance. Student athletes with higher level of well-being will be able to effectively handle the demands experienced by them within their sports environment as well as in their everyday lives.

Suggestions for the future research

From the previous studies it becomes quite evident that positive mental health of student athletes is extremely crucial. The research work on positive mental health of student athletes is still in its nascent stage with lack of complete examination of positive mental health that can be explored in future research. There is scarcity of intervention studies on enhancing the positive mental health of student athletes that opens the avenue for future research. As application of positive psychology in sports found to have positive impact on student athletes, therefore, in future studies on role of positive psychological construct (flow, hope, mindfulness, optimism, resilience, self-efficacy, etc.) for building the positive mental health of student athletes can be undertaken.

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