Omar-Fauzee et al. (2012) examine the mental toughness perceived by selected the National football players. A sample of twelve Malaysian footballers (current and ex-players), aged 19 to 57 years old agreed to participate. All of them have been playing in the Malaysia National Football League that consists of four former national footballers, four former state footballers and four currently active footballers. Among them, five individuals are active as a coach. A semi-structure interview scheduled was used in the research. All of the respondents have signed the informed consent letter for tape-recorded during the interviewed. The transcribed verbatim from the tapes were content analyzed by the authors to identify the themes. Results show that eight themes emerged from the interviews, which are motivation, negative energy, self-confidence, positive energy, visual and imagery control, patriotic spirit, perseverance and attention control.

Bhambri et al. (2005) examining the effect of psychological interventions such as General relaxation, Imagery and combination of both on the mental toughness dimensions of Table-Tennis players. The study was carried out on 32 national level table–tennis players in the age group of 12-17 years. Loehr psychological performance inventory was administered to assess their mental toughness on seven variables viz. self confidence, negative–energy, Attentional control, visual and Imagery control, motivational level, positive energy and attitude control. The data obtained was analyzed using ANOVA, t test and percentage distribution. The results indicate that all the 3 psychological interventions enhanced mental toughness dimensions of sports persons. However combined intervention consisting of both relaxation and imagery therapies showed the maximum effect on mental toughness dimensions.

Daniels (1972) conducted a study on pain tolerance and cardiac response to pain of low and high anxious subjects before and after exercise. It was the purpose of this study to investigate the effects of anticipating pain and experiencing pain upon resting heart rates and exercise heart rates of low and high anxious college women. The subjects for this study were 40 college women who scored in the fifteenth percentile or below and the eight fifth percentile and above on the Sielberger Trait Anxiety Scle. Subjects meet individually with the experimenter for three different sessions. The first session meet individually with the experimenter for three different sessions. The first session was an orientation in which the equipment and apparatus used in the study were shown and demonstrated. The second and third sessions were for
measurement purpose and were conducted under conditions of rest and exercise. At each of the two measurement sessions, three 30-second heart rate responses and subject’s pain tolerance were recorded. The heart rate measurement included baseline, anticipatory to pain, and heart rate while pain was experienced. The pain tolerance of each subject was measured with a mechanical presser device and was recorded in millimeters of mercury. The conclusions of this study were:

1) Pain tolerance of women is approximately the same during rest and during exercise.
2) The heart rate of women of different anxiety levels is approximately the same at rest, during anticipation of pain, and during pain.
3) Anticipation of pain and actual pain produce an increase in the heart rate of women.
4) The increase in the heart rate in response to anticipation of pain and to pain is approximately the same during rest and during exercise.

Kaiser conducted a study on pain tolerance. The purpose of this study was to determine any relationship or differences in pain tolerance and mental toughness with in collegiate football players. Subjects for this study were sixty-five varsity football players at Idaho State University who competed in at least one varsity play during the 1980 football season. The study employed the use of an adaptation of Poser’s mechanical gross pressure stimulator to measure pain tolerance and the athletic motivation to measure pain tolerance and the athletic motivation inventory as the measuring tool for mental toughness. The statistical analysis included correlation coefficients for all variables and an inspection of unit and position means. The conclusion of this study was evident between the pain tolerance and mental toughness within collegiate football players.

Mohamad et al. (2009) explore the affect of higher score of mental toughness in the early stage of the league towards winning among Malaysian football players. The instrument used in this study was the questionnaire of Psychological Performance Inventory (PPI), Loehr, 1986. The difference between the mental toughness between the categories of elite and non-elite, professional and amateur players was measured. Other than that, the relationship between the players’ category, status and achievement with the seven dimension of mental toughness (Self confident (SC), Negative energy control (NE), Attention control (AT), Visual imagery control (VI), Motivational (MT), Positive energy control (PE) and Attitude control (AC) was evaluated.
The results from the descriptive analysis showed that the mental toughness of Malaysian football players is at an excellence level. T-test had been conducted and the results who showed there is no significant difference on the mental toughness from the aspect the players’ category, \((p = 0.136 > 0.05)\), but there is a significant difference on the status of the players, \((p = 0.02 < 0.05)\). One way ANOVA and Pos Hoc test show a significant difference between the four dimensions of mental fitness among the players from various teams of different achievements. The results obtained are \(NE \left[(3,128) = 7.768, P < 0.05\right]\), \(AT \left[(3,128) = 8.828, P < 0.05\right]\), \(VI \left[(3, 128) = 5.789, P < 0.05\right]\) and \(PE \left[(3,128) = 4.896, P < 0.05\right]\). There is no significant difference on the dimensions of SC, MT and AC \((P > 0.05)\). Pearson Correlation analysis shows a low and significant association between the status and mental fitness of the players \((r = -0.262, p = 0.02, < 0.01)\). The findings who the dimension of SC \((r = -0.270, p = 0.002 < 0.01)\); NE \((r = -0.175, p = 0.045 < 0.05)\); AT \((r = -0.249, p = 0.004 < 0.01)\) and VI \((r = -0.176, p = 0.043 < 0.05)\) have a low correlation and inversed relationship between the dimensions and the status of the players. Overall, this study shows that the mental toughness of Malaysian football players is at an excellent level. Status is seen as a factor that gives a lot of impact on the player especially in motivating them to attain their best achievement and also affect their mental toughness. This means that the mental toughness of the players could be enhanced if the players really understand the professionalism of the game and put it into practice.

Balaji and Jesudass (2011) study was to find out the differences in Mental Toughness among Cricket Players of different age groups. To achieve this purpose, ninety Cricket players at the age group of 10-21 years were selected from Chennai District, who regularly practice the game and participate in various tournaments. “Mental Toughness Questionnaire” a standardized sports psychological inventory designed by Dr. Goldberg, was responded by all the subjects. The collected data was analyzed using simple analysis of variance (ANOVA). The results of the study showed that there was a significant difference in Mental Toughness among Cricket Players of different age levels at 0.05 level of confidence. It was concluded that Cricket Players of age group 18-21 years showed significantly greater mental toughness than the other two age groups. This may be due to their experience in the game.
Chen and Wang (2010) investigate the relationship between the competition confidence and the career development of college table tennis players in Taiwan. A total of 360 players (256 males and 104 females) were surveyed. The competition confidences of different categories are described. The findings include the career exploration, career orientation, career decision and environmental exploration are presented in contrast with the competitor confidence scale. With the positive correlation of competitor confidence and careers development, but player's academic record with negative correlation.

Dureja and Singh (2011) studied the self-confidence and decision making abilities between psychology and physical education students. A total of eighty (N = 80) male subjects participated; forty (N = 40) psychology students and forty (N = 40) physical education students from various affiliated colleges of Panjab University, Chandigarh were randomly selected for the collection of data. The age of the subjects ranged between 19 to 25 years. Self-confidence was measured by applying self-confidence questionnaire and decision making was measured by applying decision making questionnaire. The “t” test was applied to find out the difference between mean scores of psychology and physical education students. The level of significance was set at 0.05. The results revealed significant difference with regard to variable self-confidence between psychology and physical education students. However, the results with regard to the variable decision making were found statistically significant between psychology and physical education students. Physical education students have better self-confidence and decision making level as compared to their counterpart psychology students.

Rattanakoses et al. (2009) examines the relationship between imagery and confidence in athletes. The Sport Imagery Questionnaire and a Self-Confidence questionnaire were used to collect data. The samples consisted of athletes who are from the Khon Kaen Sport School in Thailand and who regularly participate in sports training (5 days a week). All subjects (n=120) were selected by purposive sampling and consisted of 71 (59.2 %) male and 49 (40.8 %) female athletes. Our analysis considered two parameters, imagery and self-confidence, which were evaluated with regards to the physical fitness level and experience of the athletes. The data was
analyzed using a t-test to determine the difference of the means between imagery and self-confidence measures in males and females. Analysis of variance (ANOVA) (P<0.05) was used to evaluate differences across the groups, and linear regression and correlation analyses (r =0.71) were used to compare between genders, physical fitness, and experience levels. The results show that there are significant correlations between males and females in terms of imagery and self-confidence. This result suggests that imagery and self-confidence in male and female athletes are associated with high levels of physical fitness and more experience in sports situations.

Neff and Vonk (2009) examined self-compassion and self-esteem as they relate to various aspects of psychological functioning. Self compassion entails treating oneself with kindness, recognizing one’s shared humanity, and being mindful when considering negative aspects of one self. Study 1 (N52, 187) compared self-compassion and global self-esteem as they relate to ego-focused reactivity. It was found that self-compassion predicted more stable feelings of self-worth than self-esteem and was less contingent on particular outcomes. Self-compassion also had a stronger negative association with social comparison, public self-consciousness, self rumination, anger, and need for cognitive closure. Self-esteem (but not self compassion) was positively associated with narcissism. Study 2 (N5165) compared global self-esteem and self-compassion with regard to positive mood states. It was found that the two constructs were statistically equivalent predictors of happiness, optimism, and positive affect. Results from these two studies suggest that self-compassion may be a useful alternative to global self-esteem when considering what constitutes a healthy self-stance.

Hildingh et al. (2006) studied to compare stress in daily life, health complaints and self-confidence in 26-year old women in two different cultures. A health survey study was performed among Swedish women (n ¼ 386) and American women (n ¼ 201) living in urban areas at the West coast of Sweden and in Minnesota. Both Swedish and American women reported stress in their everyday life, with higher figures for the Americans. Overall health was rated lower by the Swedish women and they reported more health complaints such as headache, general tiredness, irritability, depression and sleeping disorders. There was a difference between groups in self-confidence with higher figures for excellent self-confidence among American women. However, low self-confidence was reported by more American than Swedish women. A good work situation predicted self-confidence in Swedish women and financial confidence in American
women. Physical fitness was associated with self-confidence in both groups. Young women in both cultures experienced high level of stress but health related complaints were more common among Swedish women. High stress and health complaints must be taken seriously and interventions to support young women in the midst of transition to adulthood should contain stress reduction as well as empowerment performed in a more effective way than today in different health care settings and at place of work.

Woodman and Hardy (2003) investigated two relationships in competitive sport: (1) state cognitive anxiety with performance and (2) state self-confidence with performance. The cognitive anxiety mean effect size was \( r = 0.10 \) (P<0.05). The self-confidence mean effect size was \( r = 0.24 \) (P<0.001). A paired-samples t-test revealed that the magnitude of the self-confidence mean effect size was significantly greater than that of the cognitive anxiety mean effect size. The moderator variables for the cognitive anxiety–performance relationship were sex and standard of competition. The mean effect size for men (\( r = 0.22 \)) was significantly greater than the mean effect size for women (\( r = 0.03 \)). The mean effect size for high-standard competition (\( r = 0.27 \)) was significantly greater than that for comparatively low-standard competition (\( r = 0.06 \)). The significant moderator variables for the self-confidence–performance relationship were sex, standard of competition and measurement. The mean effect size for men (\( r = 0.29 \)) was significantly greater than that for women (\( r = 0.04 \)) and the mean effect size for high-standard competition (\( r = 0.33 \)) was significantly greater than that for low standard competition (\( r = 0.16 \)). The mean effect size derived from studies employing the Competitive State Anxiety Inventory-2 (\( r = 0.19 \)) was significantly smaller than the mean effect size derived from studies using other measures of self-confidence (\( r = 0.38 \)). Measurement issues are discussed and future research directions are offered in light of the results.

Donahue et al. (2009) examine the interplay between harmonious and obsessive passion and aggressive behavior in sports. It was hypothesized that players who are obsessively-passionate about basketball should report higher levels of aggressive behaviors than harmoniously-passionate players in general, and especially under self threat. Using the Dualistic Model of Passion (Vallerand et al. (2003), Journal of Personality and Social Psychology, 85,
756–767) as a guiding framework, basketball players indicated their level of passion and aggression during typical basketball situations using a self-reported questionnaire. Results: In Study 1, results demonstrated that athletes with a predominant obsessive passion for basketball reported higher levels of aggression on an aggression scale than athletes with a harmonious passion. In Study 2, harmoniously-passionate and obsessively-passionate athletes were randomly assigned to one of two conditions: self-threat and self-affirmation. We predicted that under self-threat, obsessively-passionate players should report higher levels of aggressive behavior than harmoniously passionate players. However, no differences were expected between obsessively and harmoniously passionate players in the self-affirmation condition. These hypotheses were supported. The present findings reveal that having an obsessive passion is associated with aggressive behavior, especially under identity threat. Thus, the love for one’s sport may lead to some maladaptive interpersonal behavior, especially if such love is rooted in a sense of identity that is contingent on doing well in that sport.

Ramirez (2008) reviews the results of two decades of research on moral approval of aggressive acts conducted in several countries with different religious and cultural backgrounds. A nationally-adapted version of the Lagerspetz and Westman questionnaire was administered to university students in Finland, Poland, Spain, Japan, Iran and India. Respondents had to indicate levels of justification of several aggressive acts of different quality and intensity in the context of different social justifications. Although slight method variations preclude the possibility of direct comparison, the pattern of effects in the different countries leads to interesting conclusions. In all countries: more drastic forms of aggression (e.g., killing, torture) are less accepted than non-dangerous forms of such behavior (e.g., hindering, being ironic); and aggressive acts that are socially justified (in terms of protection of self or other) are clearly more accepted than ones with
no such justification (problems of communication). However, there are also some striking
differences among the samples studied. Thus, patterns of moral approval of various kinds of
aggressive acts are only to some extent common to most cultures, while there are some culturally
bound differences in these attitudes.

Slabbert and Ukpere (2010) Rugby and football (soccer) are both international sports, and
economic entities in their own right, as evidenced by the growth in attendance and television
viewership at the respective World Cups. The issue of sport as catharsis, or conversely, as
aggression-generating event, has always been controversial. In order to assess the orientation of
rugby and football spectators towards violence, 404 spectators were surveyed. Results indicate
significant differences between rugby and football spectators, with football spectators exhibiting
higher levels of aggression towards the referee and opposing players. It emerged that the concept
of sport as catharsis is not a reality when the spectators’ side loses a match. A call is made for
extensive education of all role players in football if the sport is not to be negatively affected.

Palmer (1993) examines patterns of anger, aggression, and humor during 95 floor hockey
games in a small fishing village in Newfoundland. The observed behaviors meet the prediction,
based on evolutionary theory, that anger and aggression will be more frequent among males at
the age when mate competition is most intense. Aggression was also found to be combined with
humor most frequently in interactions among players attempting to form social relationships.
This last finding is consistent with the hypothesis that combining humor (smiling and laughing)
with what would otherwise be interpreted as aggressive behavior is a means of establishing
trusting relationships between individuals. The potential contribution of an evolutionary
approach to studies of anger and aggression is discussed.