Chapter - II

REVIEW OF RELATED LITERATURE

The known facts build up the edifice of new theories and principles. Review of research studies serve as a buckle between the old and the new, between the known and the unknown. It is a milestone leading the research on the high road of future. Review of literature develops the researcher’s insight and establishes his intellectual superiority over others. A study of relevant literature is an essential step to get a good comprehension of what has been done with regard to the problem under study. The literature in any field forms the foundation upon which all future work will be built. The literature relevant to the present study which has been collected from different sources of reference is described in this chapter. Studies that define and clarify issues related to coping strategies in sports are reviewed.

All studies relevant to the topic of coping in general and related to sports qualified for inclusion in the literature review, this includes qualitative and quantitative research that were conducted both overseas and in India. The focus was on studies that investigated intra individual and interpersonal studies on coping, studies on team and individual sports, studies on gender and coping in sports and measurement and assessment of coping strategies in sports. Studies that dated between 1985 and 2011 were included. In order to access information a literature search was conducted by performing keyword searches for articles in English on the online data basis, CD-ROM data basis, internet and dissertation abstracts international, using library catalogues, books and conference presentations.

ATHLETIC COPING SKILL

Madden et al. (1989) completed a study titled coping styles of competitive middle distance runners. The Ways of Coping with Sport (WOCS) was administered to a
population of middle distance runners selected to attend a training camp for elite athletes. The 66-item WOCS, which has been previously administered to amateur and elite basketball players (Madden, Summers and Brown, 1988), yields a similar factor structure to the Ways of Coping Checklist of Folkman and Lazarus (1985). Eight factors were identified through the application of principal components analysis. In the current study, coping profiles were determined for international, national and state level middle distance runners. The items comprising Seeking Social Support (scale 2), increased effect and Resolve (scale 4) and Problem-Focused Coping (scale 1) were reported consistently as strategies for coping with a slump in personal performance in competitive running. The results were discussed in relation to history of injury, extent of training, and level of competitive experience.

Smith (1989) completed study on effects of coping skills training on generalized self-efficacy and locus of control. A number of studies have shown that mastery experiences strengthen self-efficacy expectancies that are specific to the mastery situation, in this study I assessed the effects of cognitive-behavioral coping skills training on generalized expectancies concerning self-efficacy and locus of control in test-anxious college students. Compared with a waiting-list control group, the trained subjects exhibited significant decreases on trait and state measures of test anxiety and a higher level of academic performance on classroom tests, as well as changes in specific self-efficacy expectancies relating to test anxiety management and academic performance. Consistent with generalization predictions derived from self-efficacy theory, the coping skills group also exhibited decreases in general trait anxiety and increased scores on a trait measure of generalized self-efficacy. Locus of control was unaffected by the program, and changes in general self-efficacy were unrelated to changes in locus of control, suggesting the possibility that different parameters of experience are related to changes in the two types of generalized expectancies.

Prinz et al. (1994) did a study on “An evaluation of peer coping-skills training for childhood Aggression”. Peer coping-skills (PCS) training is a new school-based intervention designed to promote pro social coping among school-age children. The
intervention is based on a coping-competence model that addresses the development of antisocial and asocial coping among youth at elevated risk for conduct disorder. PCS training was tested in a controlled evaluation with children in Grades 1 to 3 who exhibit high rates of aggressive behavior, and it was found to increase prosocial coping via information exchange, improve social skills, and reduce aggression. These improvements were maintained into the next school year, as reacted in a 6-month follow-up assessment by teachers. Competent-non aggressive children who also participated not only showed no adverse effects but demonstrated kill enhancement. Children, parents, and teachers in the ethnically diverse sampler tend PCS training as highly acceptable. It is recommended that PCS training be combined with family am? Classroom intervention strategies over multiple years to prompt the development of competence and to increase the likelihood of preventing conduct disorders in high-risk youth.

Smith (1995) did a study on “Development and Validation of a multidimensional measure of sports specific psychological skills: The athletic coping skills inventory-28.” Confirmatory factor analysis was used as the basis for a new form of the athletic coping skill inventory (ACSI). The ACSI-28 contains seven sport specific subscales: Coping with adversities, peaking under pressure, goal setting/mental preparation, concentration, freedom from worry, confidence and achievement motivation, and coachability. The scales can be summed to yield a Personal coping resource score, which is assumed to reflect a multifaceted psychological skill construct. Confirmatory factor analyses demonstrated the underlining factor structure for both male and female athletes. Psychometric characteristics are described, and evidence for construct and predictive validity was presented.

Anshel (1996) completed a study on coping styles among adolescent competitive athletes. The use of approach and avoidance coping styles and task-focused and emotion-focused coping strategies in competitive sport was explored. Four hundred twenty-one adolescent males from New South Wales, Australia, who were currently competing in team sports indicated their usual responses to each of 8 acute stressors commonly experienced in sport, using a 128-item inventory. The reliability coefficient (Cronbach’sα
Seiffge-Krenke & Klessinger (2000) in a prospective study, long-term effects of avoidant coping on adolescents’ depressive symptom, the impact of different types of coping styles on adolescents’ depressive symptoms was investigated. One hundred and ninety-four adolescents participated in 4 annual assessments of coping styles and depressive symptoms. Longitudinal analyses revealed long-term differences in depressive symptoms, depending on coping style. Adolescents with an approach-oriented coping style reported the fewest depressive symptoms at Time 3 and Time 4, whereas avoidant copers reported the most at both times. Higher levels of depressive symptoms 2 years later were found in all adolescents who used avoidant coping, irrespective of whether they used avoidant coping consistently at Time 1 and Time 2 or changed from approach-oriented coping to avoidant coping at Time 2. This effect was independent of gender and time. The results suggest that most adolescents show an overall adaptive way of coping, but a small subgroup shows a fairly rigid use of avoidant coping. They further suggest that all forms of avoidant coping, whether stable or not, were linked with high levels of depressive symptoms even 2 years later.

Cunningham et al. (2002) conducted a study titled enhancing coping resources in early adolescence through a school-based program teaching optimistic thinking skills; anxiety, stress, and coping. This study examined the effectiveness of a universal school-based prevention program that was designed to increase coping resources in preadolescents through the modeling and teaching of optimistic thinking skills. School psychologists, together with classroom teachers, implemented an eight-week program in eight Year 5 and 6 class groups as part of the regular school curricula. One hundred and sixty children who participated in the program were compared to 135 children in 8 control groups on pre- and post-test questionnaires. Post-test responses show that children
who participated in the program reported significant improvements in coping efficacy, and reductions in depressive attributions and use of the non-productive coping strategies of worry, wishful thinking, not coping, and ignoring the problem when compared to controls. These results support the feasibility of implementing low-cost, non-intrusive programs in school settings that address the emotional health of all young people. Support is also provided for theories that suggest attributions for events and coping efficacy influence the selection of coping strategies.

Prakash and Coplan (2003) in their study ‘shy skaters’? Shyness, coping and adjustment outcomes in female adolescent figure skaters, examined the associations between shyness and adjustment outcomes in competitive adolescent figure skaters. At Time 1, 40 female figure skaters completed self-report of shyness, athletic self-esteem and psychological coping style. At Time 2, approximately nine months later, skaters completed a measure of competitive anxiety immediately prior to a competitive performance. Competitive placement at this performance was also recorded. Results revealed that shyness was associated with increased outcomes associated somatic (physiological) anxiety prior to competitive performance. Additionally, shyness was negatively related to athletic self-esteem and competitive performance, but these relations were moderated by the skaters’ use of psychological coping styles. The results are discussed in terms of the role of coping style as a protective factor against the potential negative with shyness in the realm of athletics.

Frydenberg et al. (2004) conducted a study titled prevention is better than cure: coping skills training for adolescents at school. They suggest that Children and adolescents today face a plethora of stressful problems, including family and relationship conflict, death of close family members or friends, and academic and social pressures. Such problems have been found to contribute to an increased risk of various emotional-social-cognitive difficulties in adolescence. These include academic failure, social misbehavior, interpersonal problems, and depression. Programs that promote coping with normative stress, delivered to the whole population, have been considered to represent a promising direction for the prevention of social emotional difficulties. The best of
coping: developing coping skills program (Frydenberg & Brandon, 2002) was introduced in two school settings on four separate occasions. Evaluation of the results provides modest support for coping skills enhancement but provide a warning about the need for caution when implementing and evaluating the Program. First, it appeared to have some opposing effects on males and females. Second, improvements in students’ coping responses were apparently related to the authenticity of implementation of the Program. The findings are discussed with regard to the need to implement programs through which we can teach adolescents coping responses, which include optimism and problem-solving skills, so that they may handle problems and stressors more effectively. Additionally, an important feature of such programs is a focus on the reduction of the use of non-productive coping skills. With an increase in psycho-social problems, the need to provide school-based programs is discussed, with emphasis placed on program implementation. In particular, the probable need for ongoing involvement of psychologically trained school counselors with teachers, through the life of the program.

Anshel & Si (2008) in their study tried to determine the extent to which approach and avoidance coping styles are consistent in response to different sources of acute stress experienced during sport competition, a test of trait and transactional coping theories. Elite athletes from the Peoples Republic of China (N = 391, 253 males and 138 females) indicated their coping strategy following each of eight sources of acute stress experienced during the contest. Eight items were designated as approach coping and eight items were avoidance coping items. Confirmatory factor analysis with approach coping and avoidance coping was a satisfactory fit for all stressors (GFI = .92, RMSEA = .06, X^2 [461] = 79.02, p<.25). Low Pearson product-moment intercorrelations, examining the relationship between coping styles for each stressor, indicated relative independence between coping styles among stressors. Moderate to high intra-item reliability (i.e., Cronbach alphas) indicated that responses to approach and avoidance coping items were consistent for each stressor. Taken together, these results lent support for the transactional coping theory that coping style is a function of the type of stressful event, and provide insights into the coping patterns of elite athletes from the Peoples Republic of China.
Omar-Fauzee et al. (2009) in their study the effectiveness of imagery and coping strategies in sport performance investigated the effectiveness of imagery and coping strategies in sport performance. Participants were 106 persons, both male (n=42) and female (n=64) aged between 17 and 45 years old who represented the different level of participants of sport. Which is State players (n=46), National players (n=38) and District/university players (n=22) in various sports competitions. Participants completed the SIQ questionnaires to measure imagery skill while using ACSI-28 questionnaires to measure coping skill. Result showed Malay respondents is the higher interested in the study are 79 persons. Meanwhile, sports involved of respondents are others sport (archery, football/futsal, netball, rugby, hockey and athletics) which are 50%. The most level of age participated are 21 to 24 years old. Most probably, in this age level, some of them represented for national (n=38) and state (n=46). The result of this study showed that the SIQ and ACSI-28 is reliable to the respondents participated which is the Cronbach’s alpha coefficients, mean and standard deviation of all the variables are presented were .932. For the ACSI-28, the participants most frequently used coping skills is the confidence (M=2.0802, SD=.5644) and the least frequently used is coachability (M=1.5519, SD=.4361). From the resulted, there were significant differences in one subscales of ACSI-28 coping with adversity between male and female, which are concentrated with t (106) = 2.118, p = .037. One Way ANOVA analysis subscales with level of participants result showed that all subscales imagery (SIQ) were significant differences with levels of participation. In addition five subscales ACSI-28 also were significant differences with level of participations in this study. It might be because of the participated from a national and state player (n=38, n=46). In addition, result showed only subscales coping with diversity are significant differences where p=.037(M=2.0448, SD=.5115) compare the rest of subscales ACSI-28.

**COGNITIVE COPING STRATEGIES**

Mullen & Suls (1982) in their study the effectiveness of attention and rejection as coping styles: A meta-analysis of temporal differences. The purpose of this study was to conduct a meta-analysis of research comparing the effects on physical adaptation of two
cognitive strategies for coping with stressors: attention and rejection. Attention refers to focusing attention on the stressor and/or on one’s rejection to it; rejection refers to focusing attention away from the stressor and/or one’s reaction to it. For studies examining the immediate effects of attention and rejection, rejection produced better physical adaptation (i.e. fewer symptoms, reduced physiological responses) than attention. For studies looking at the long term effects of attention and rejection, attention produced better physical adaptation than rejection. Mechanisms which could produce these effects, and their implications, are discussed.

Suls and Fletcher (1985) studied the relative efficacy of avoidant and no avoidant coping strategies: a meta-analysis, a casual review of the research literature on coping strategies suggests that strategies involving avoidant tactics are effective in reducing pain, stress, and anxiety in some cases, whereas nonavoidant strategies (called here attention), appear to be more effective in others. This article reports the results of a series of meta-analyses to ascertain whether there are systematic patterns in the empirical literature that describe when attention strategies are more or less effective than avoidant strategies. In particular, we consider the role of different kinds of attentional sets and also the role of time—whether some kinds of strategies work best in the early phases of the stress experience, and others are more efficacious in later phases of the stress experience. Results of an overall analysis of studies providing tests of attention versus avoidance indicated little evidence for one strategy’s superiority. However, supplementary analyses, motivated by theoretical reasons, suggest there are boundary conditions that define the relative efficacy of a specific strategy. Overall, avoidance was associated with more positive adaptation in the short-run. However, attention was superior to avoidance if the former involved a focus on sensory schemata rather than emotional processing. If attention involved an emotional interpretational set or no explicit set, then it was associated with more negative outcomes than avoidance. In terms of long-term outcomes, avoidance indicates better outcomes initially, but with time, attention was associated with more positive outcomes. A final set of analyses found that both attention and avoidance facilitate adaptation as compared with no instruction controls. The meta-analyses suggest the important role of interpretational set and whether one looks at the immediate or at the
long-term effects of coping. Limitations of the analyses and directions for future research are discussed.

Compas and Bruce (1987) in their article coping with stress during childhood and adolescence”, research on how children and adolescents cope with stress and coping’s role in reducing the adverse psychological states associated with stress is reviewed. Child and adolescent coping is reflected in seven different lines of research—infants’ responses to maternal separation, social support, interpersonal cognitive problem-solving, coping in achievement contexts, Type- A behavior pattern in children, repression–sensitization, and resilience to stress. A variety of different coping resources, styles, and specific strategies are important in successfully adapting to stress, including efforts that focus directly on the problem, as well as attempts to deal with adverse emotions associated with stress. Directions for future research are identified, emphasizing the need for more systematic comparisons of coping across different types of stress and over time in response to a single stressful episode.

Compas, et al. (1988) did a study on coping with stressful events in older children and young adolescents. Both the capacity to generate alternative solutions to cope with stressful events and the strategies actually used to cope with interpersonal and academic stressors were examined in a sample of junior high school age youngsters. Subjects were moderately consistent in the generation and use of problem- and emotion-focused coping with the two types of events, and they adjusted the number of problem-focused alternative solutions they generated to match their appraisals of the controllability of the cause of interpersonal stressors. The number of alternative solutions generated and strategies used for interpersonal stressors was related to both self-reports and maternal reports of internalizing and externalizing motional/behavioral problems. Specifically, the problem-focused alternatives generated and strategies used were negatively related to emotional/behavioral problems, whereas the emotion-focused alternatives generated and strategies used were positively related to emotional/behavioral problems. Coping with academic stress was not related to emotional/behavioral problems. Self-reported emotional/behavioral problems varied as a function of the match between
perceived control and the generation of problem-focused alternatives for coping with social stressors but did not vary as a function of the match between perceived control and other coping strategies.

Masters (1989) conducted study on the relation between cognitive coping strategies, reasons for running, injury, and performance of marathon runners. The primary purpose of this investigation was to better understand the cognitive strategies used by marathon runners as they negotiate the rigors encountered in the running of a marathon and to therefore promote the process to theory construction as it relates to these phenomena. Only participants in the 1987 St. George Marathon in St. George, Utah were eligible for the study. The participants in this study showed a clear performance for the associative strategy while running in the marathon; however, they were more inclined to disassociate or use both strategies while in training runs.

Masters, Kevin, Lambert and Michael (1989) in their study the relations between cognitive coping strategies, reasons for running, injury, and performance of marathon runners, employed the concepts of association and dissociation (Morgan and Pollock, 1977) to examine the cognitive strategies used by 30 male and 18 female runners (aged 13–55 yrs) participating in a Utah marathon. Measures of dissociation/association, performance time, injury, and reasons for running a marathon were taken. Ss showed a preference for the associative strategy (maintaining awareness of performance factors) while running in the marathon; however, they were more inclined to dissociate (block out sensory feedback) or use both strategies while in training. Association correlated negatively with Ss’ performance time and positively with a drive/competition factor. Whether or not individuals associate while running may be primarily related to their reasons for running.

Crocker, Peter (1992) examined how competitive athletes cope with sport-related stress. 237 athletes (aged 16–32 yrs) answered a 68-item modification of S. Folkman and R. S. Lazarus’s (see record 1985-18642-001) Ways of Coping Checklist based on a recent stressful athletic situation. Results indicate that athletes used a variety of cognitive
and behavioral coping strategies, which could be classified into 8 dimensions: active-coping, problem-focused, seeking social support, positive reappraisal, self-control, wishful thinking, detachment, and self-blame.

Halstead et al. (1993) did research on measuring coping in adolescents: An application of the ways of coping checklist. Administered a modified version of the ways of coping checklist to 306 adolescents to examine the reproducibility of a five factor structure that had been previously established using adults. Four of these factors were confirmed: problem focused, seeks social support, wishful thinking, and avoidance. However, the factor blamed self was not supported. Adolescents typically identified stressful situations involving school, family, and social contexts, whereas they infrequently depicted issues related to health and recreational activities. Subjects commonly identified issues concerning themselves or their parents and less frequently described stressful situations regarding a boyfriend/girlfriend, peer, or supervisor. Females’ stressful episodes involving a boyfriend/girlfriend more often than did males. Females tended to employ seeks social support and wishful thinking coping strategies, whereas males used more avoidance. African-American children used more coping strategies than did Caucasian children and more frequently appraised a stressful episode as one that could be changed.

Holahan et al. (1994) the purpose of this study was to apply an integrative predictive model to examine interrelationships among parental support, adaptive coping strategies, and psychological adjustment among late adolescents. Findings using new measures of parental support and adaptive coping with 241 eighteen-year-old college freshmen supported hypotheses. Social support from both mother and father and a nonconflictual relationship between parents were positively associated with adolescents’ psychological adjustment. Adolescents with high parental support were better adjusted and less distressed than were those with low parental support. Additionally, an integrative structural equation model showed that parental support was associated with psychological adjustment both directly and indirectly through a higher percent of approach coping strategies.
Herman-Stahl et al. (1995) in a study approach and avoidant coping: implications for adolescent mental health. A short-term longitudinal study was conducted to examine the structure of coping behavior and the relationship between coping style and depression during adolescence. Approach copers reported the fewest symptoms of depression, while avoidant copers reported the most.

Grove and Heard (1997) in their study optimism and sport confidence as correlates of slump-related coping among athletes, sport performers (N = 213) completed either a questionnaire measure of dispositional optimism or a questionnaire measure of trait sport confidence and then provided information about how they cope with performance slumps. The use of task-focused, emotion-focused and avoidance-oriented coping strategies was assessed with a slump-referenced version of the coping inventory for stressful situations (CISS; Endler & Parker, 1990a). Results indicated that both personality measures were positively related to the use of problem-focused strategies and negatively related to the use of emotion-focused strategies. These findings are discussed in relation to previous research on confidence in sport and a model of sport-related coping proposed by Hardy, Jones, and Gould (1996). Practical implications for the effective management of performance slumps are also addressed.

Anshel & Kaissidis (1997) in his study coping style and situational appraisals as predictors of coping strategies following stressful events in sport as a function of gender and skill level. The purpose of this study was to examine links between coping style, situational appraisals and the subsequent use of coping strategies in response to acute stress among competitive Australian basketball players (N = 190, 93 men and 97 women, ranging in age from 18 to 44 years). Regression analyses indicated that participants’ approach and avoidance coping responses varied across four sport-related stressful situations. In addition, both personal and situational factors accounted for significant variation in players’ approach coping responses, with situational factors better predictors of approach coping than personal dispositions. For avoidance coping, situational appraisals (i.e. perceived stress and controllability) were again better predictors than
personal dispositions. The results lend credence to the interactional (contextual) model of coping in which participants’ use of coping strategies is at least a partial function of situational demands.

Anshel et al. (1997) studied “Cross-cultural and gender differences on coping style in sport”. The extent to which athletes used similar coping strategies in response to various acute stressors as a function of culture and gender is evaluated. College students from the southeast US (N = 296, M age = 20.7 yrs) and from New South Wales, Australia (N = 337, M age = 20.6 yrs) who were currently competing at various levels of sport participated in the study. Males included 53% and 38% of the U.S. and Australian samples, respectively, while females comprised 47% and 62% of these samples, respectively. The inventory was comprised of 134 items in which subjects indicated their usual response to each of seven acute stressors commonly experienced during the contest: (1) after making a physical or mental error; (2) after being criticized by the coach; (3) after observing an opponent cheat; (4) after experiencing intense injury or pain; (5) after receiving a bad call from the official; (6) after successful performance by opponent; and (7) after poor environmental conditions such as bad weather, poor ground, or crowd reactions. Individual responses were recorded according to whether they were task-focused or avoidance focused and a multiple discriminant analysis was conducted using all 134 items for the four country-gender groups. Differentiation between groups was significant and accounted for 95% of the total dispersion. Females preferred approach coping strategies, while males favored avoidance strategies. US respondents preferred approach task strategies in more of the situations than did Australian respondents.

Ntoumanis and Biddle (1998) conducted a study titled, the relationship of coping and its perceived effectiveness to positive and negative affect in sport. This article examined the ability of six different coping strategies and their perceived effectiveness in predicting positive and negative affect in sport. Furthermore, it was investigated whether perceived coping effectiveness moderated the influence of coping strategies on affect. British University athletes (N = 356) were requested to recall a recent important competition in their sport when they had a stressful or challenging experience. They were
then asked to rate the extent to which they relied on a number of different coping strategies to deal with the situation and the degree to which they found these effective. In agreement with the theoretical predictions of Folkman (1984), problem-focused coping predicted positive affect whereas emotion-focused coping predicted negative affect. Furthermore, for almost all the coping variables, their perceived effectiveness predicted, in a positive way, positive affect and negatively, negative affect. Moreover, the perceived effectiveness of the coping strategies of seeking social support, venting of emotions, and behavioral disengagement, moderated the influence of those strategies on affect. Lastly, a comparison between high and low effective coping groups showed that the former was associated with more pleasant affective experiences.

Eklund, et al. (1998) in a study the measurement of slump-related coping: factorial validity of the cope and modified-cope inventory, tried to evaluate four psychometric models for Carver, Scheier, and Weintraub’s (1989) cope inventory, and for Crocker and graham’s (1995) sport-specific modification of the cope inventory for measurement of individual differences in coping with sport-related stress. Slumping athletic performance (i.e., an extended, unexplained loss of competitive form) was employed as the frame of reference for the coping responses. Data collected from 1,491 athletes (870 for the cope analyses and 621 for the modified-cope analyses) were evaluated in the empirical, double cross-validation design analyses (Cudeck & Browne, 1983). Results revealed a 14-factor model of the cope inventory and a 10-factor model of the modified-cope inventory as the most appropriate psychometric models for these inventories in examining slump-related coping among athletes. Key words: coping with sport stress, slumping athletic performance, scale development.

A. M. Pensgaard, H. Ursin (1998) did a study on Stress, control, and coping in elite athletes. The main object of this study was to explore different dimensions of the stress experience and the following coping efforts among elite athletes. Sixty-nine Norwegian winter Olympic athletes, competing in the Lillehammer Games in 1994 participated in the study. Recall of the most stressful experiences was reported through open-ended questions following the Olympic Games, and the actual time of the
experience with the following coping efforts were measured with the cope inventory (19). The stress was mainly experienced during the time period prior to the competition. External distractions and expectations were the most frequently reported stress experiences. The coach was viewed as a major source of stress by some athletes, with a subsequent lack of control and low satisfaction with performance. Type of stress more than the time of the experience seemed to have a detrimental effect on performance. Problem-focused coping strategies were employed at all times, while cognitive defense strategies were employed more days before (time phase 1) and after the competition (time phase 4).

Dumont& Provost (1999) conducted study titled resilience in adolescents, protective role of social support, coping strategies, self-esteem, and social activities on experience of stress and depression. In this study, 297 adolescents (141 eighth graders and 156 eleventh graders) were classified into 3 groups created from crossing scores of depressive symptoms and frequency of daily hassles: well adjusted, resilient, and vulnerable. A discriminant function analysis was performed to investigate group differences on self-esteem, social support, different strategies of coping, and different aspects of social life. The analysis revealed that self-esteem, problem-solving coping strategies, and antisocial and illegal activities with peers helped to discriminate groups: Well-adjusted adolescents had higher self-esteem than adolescents in the 2 other groups; in addition, resilient adolescents had higher self-esteem than vulnerable adolescents. For the second significant discriminating variables, antisocial and illegal activities with peers, both resilient and vulnerable adolescents had higher scores than well-adjusted adolescents. Finally, resilient adolescents had higher scores on problem-solving coping strategies than adolescents in the 2 other groups.

Folkman&Moskowitz (2000) conducted study titled, stress, positive emotion, and coping. There is growing interest in positive aspects of the stress process, including positive outcomes of stress and antecedents that dispose individuals to appraise stressful situations more as a challenge than as a threat. Less attention has been given to the adaptational significance of positive emotions during stress or to the coping processes
that sustain positive emotions. We review evidence for the occurrence of positive emotions under conditions of stress, discuss the functional role that positive emotions play under such conditions, and present three types of coping that are associated with positive emotion during chronic stress. These findings point to new research questions about the role of positive emotions during stress and the nature of the coping processes that generate these positive emotions.

Connor-Smith et al. (2000) in their study titled responses to stress in adolescence: measurement of coping and involuntary stress responses, the development of a measure of coping and involuntary stress responses in adolescence is described. The responses to stress questionnaire (RSQ) reflects a conceptual model that includes volitional coping efforts and involuntary responses to specific stressful events or specified domains of stress. The psychometric characteristics of the RSQ were examined across 4 domains of stress in 3 samples of adolescents and parent reports obtained in 2 samples. The factor structure of the RSQ was tested and replicated with an adequate degree of fit using confirmatory factor analysis across 3 stressors in 2 samples. Internal consistency and retest reliability for the 5 factors were adequate to excellent. Concurrent validity was established through correlations with another measure of coping, heart rate reactivity, and correlations of self- and parent-reports. Significant correlations with both adolescents’ and parents’ reports of internalizing and externalizing symptoms were consistent with hypotheses.

Hudek-Knežević et al. (2000) completed paper titled the effects of dispositional and situational coping, perceived social support, and cognitive appraisal on immediate outcome. The effects of coping styles and strategies, perceived social support, and primary and secondary cognitive appraisal on immediate outcome were examined in this study. Two theoretical models were tested via linear structural equation modeling in a sample of 116 23–58 yr old women. The 1st model was derived from the structural approach to stress and coping, while the 2nd was based primarily on a theoretical position of the transactional approach to stress and coping process. Both models were tested twice, by taking into account appraisal of threat and appraisal of controllability. The
results indicate the importance of cognitive appraisals and their effects on adaptational outcomes and situational coping efforts, as well as their mediating role between some coping resources and adaptational outcomes. The main differences obtained in the models tested account for the type of cognitive appraisal included in the analyses. The appraisal of threat proved to be a more central component of stressful experience than appraisal of controllability. The results also show that dispositional as well as situational coping strategies exert relatively weak effects on immediate outcome.

Anshel et al. (2000) in a study titled coping style following acute stress in competitive sport. The purpose of this study was to ascertain coping styles among competitive athletes in response to various acute stressors. Specifically, the authors used a 134-item survey to measure approach and avoidance coping styles, with task-focused and emotion-focused coping tendencies nested hierarchically as sub dimensions under each. Australian and U.S. college-aged participants indicated the extent to which they used approach, avoidance, task-focused, and emotion-focused coping strategies (a 4-factor model) in response to selected acute stressors experienced during sport competition. The authors computed confirmatory factor analysis to test the theoretically driven model. The authors computed confirmatory factor analysis to test the theoretically driven model. The criterion loading of .30 and above for each of the factors reduced the survey to 65 items. Findings indicated stronger links between the 2 approaches, constructs of task- and emotion-focused coping than between the 2 avoidance constructs of those sub dimensions. The goodness-of-fit indices for the 4-factor model were 0.58 and 0.57 for Australian and U.S. samples, respectively, and .71 overall. Concomitant low correlations between the 2 approach (0.18) and the 2 avoidance dimensions (0.43) reflected relatively high residuals between stressors. In general, psychometric analyses suggest that coping style may be more prevalent in some situations than others, lending partial support for the transactional model of coping.

Griffith et al. (2000) done a study titled development and cross-situational differences in adolescents’ coping strategies. In this study, we investigated developmental and cross-situational differences in strategies adolescents use to cope with family, school, and peer stressors. We also examined the relation between adolescents’ use of coping
strategies and two indices of adjustment (self perceptions of their adjustment as a result of coping with the specific stressor and state anxiety). The sample included 148 seventh graders, 124 ninth graders, and 103 twelfth graders (n = 375). Approach coping increased across the three grade levels, especially in relation to family and peer stressors. Adolescents used more avoidance than approach coping strategies for family stressors, and more approach than avoidance strategies for school and peer stressors. Across stressors, approach coping predicted more favorable outcomes and avoidance coping predicted less favorable outcomes. Coping strategies in response to a specific stressor were more strongly predictive of stressor-specific adjustment than state anxiety, suggesting the need to include both stressor-specific and global measures of adjustment in assessing the relation between coping and adjustment.

Anshel and Wells (2000) in a study personal and situational variables that describe coping with acute stress in competitive sport, examined the degree to which competitive basketball players in Australia were consistent in their cognitive appraisals and coping strategies in response to 4 types of stressful situations that they had experienced during previous basketball games as functions of perceived stress intensity. The authors predicted that both approach and avoidance coping strategies would be dependent on the type of stressful event, in accord with the transactional model. The results supported that prediction: Approach strategies were more prevalent than avoidance strategies following 3 of the 4 events. Cognitive appraisals and perceived stress intensity also strongly influenced the participants’ use of coping strategies, accounting for 34% of the variance.

Anshel M H (2001) conducted a study on the qualitative validation of a model for coping with acute stress in sport. Primary purpose of this article is to propose a model for coping with acute stress in sport competition based on the conceptual and empirical research literature, using a qualitative research design. The model consists of: (1) perceiving a stimulus or experiencing an event, (2) appraising that event as stressful, (3) using either approach or avoidance coping strategies, each consisting of either cognitive (thoughts) or behavioral strategies (actions), and finally, (4) enacting post-coping activity
that consists of either remaining on task, reappraising the stressful situation, examining the effectiveness of the coping strategy, or disengaging from further sport participation, that is, going off task, mentally or physically. The model was tested based on interviews with 28 Australian Rugby League players from New South Wales, Australia, during the researcher’s involvement with the team over two seasons. Structured personal interviews provided insight into the coping process following two highly intense stressful events they had experienced during the previous match. The results, using deductive content analyses at each stage of the model confirmed the use of harm/loss, threat, and challenge appraisals, approach and avoidance coping strategies, and three categories of post-coping activity. While further research is required on quantitative validation of the model, the results of this qualitative study contributes to understanding the coping process in sport.

Campen and Roberts (2001) investigated coping strategies of runners: perceived effectiveness and match to precompetitive anxiety. The purpose of this study was to describe coping strategies and to investigate the correspondence, or “match,” between these strategies and dimensions of anxiety. A sample of 52 recreational runners (31 males and 20 females, one participant’s gender was unknown; 17-58 years of age; and with mean age of 37 age) who participated in a road race [in USA] completed a survey of their use of coping strategies and how effective they perceived these strategies to be, as well as measures of anxiety. Study findings revealed that all participants used at least one strategy within each of the four coping subtypes (somatic, behavioral, cognitive, and social), with social and cognitive strategies being the most frequently used. Social strategies also were perceived to be the most effective in reducing precompetitive anxiety. Female runners, in particular, showed a preference for social strategies such as affiliating with other runners or coaches, to reduce anxiety. Trait anxiety, age, perceived effectiveness of cognitive strategies, and number of coping strategies predicted overall levels of precompetitive anxiety. Further, there appeared to be support for a matching of coping strategy and dimension of anxiety, with use of cognitive strategies predicting cognitive components of anxiety, and use of social and somatic strategies predicting somatic components of anxiety.
Hammermeister and Burton (2001) conducted a study on stress, appraisal, and coping revisited: examining the antecedents of competitive state anxiety with endurance athletes”. This exploratory investigation examined the value of using the stress model, Emotion and adaptation R. Lazarus (1991) New York, Oxford University Press to identify the antecedents of cognitive and somatic state anxiety for endurance athletes. This study also assessed whether endurance athletes with qualitatively similar levels of cognitive and somatic anxiety demonstrate differential antecedent profiles. Participants were 175 triathletes, 70 distance runners, and 70 cyclists who completed stress-related questionnaires 1-2 days prior to competition and the CSAI-2 (Competitive Stress and Anxiety Inventory) approximately one hour before competing. Results revealed that all three components of Lazarus’ stress model predicted both cognitive and somatic state anxiety better than did individual model components. Moreover, perceived threat accounted for a greater percentage of variance in cognitive and somatic anxiety than did perceived control or coping resources. Cluster analyses revealed distinct antecedent profiles for high, moderate, low, and “repressed” anxious endurance athletes, suggesting that multiple antecedent profiles may exist for highly anxious athletes in endurance sports.

Anshel et al (2001) in their study cognitive appraisals and coping strategies following acute stress among skilled competitive male and female athletes, describes the manner in which skilled athletes interpreted and coped with various sources of acute stress experienced during sport competition. For each of eight sources of acute stress, male (n = 174) and female (n = 77) Israeli athletes were asked to assess the extent of using 12 different cognitive appraisals, based on Lazarus and Folkman’s (1984) appraisal model. The appraisals were compared to the athletes’ subsequent use of coping strategies, using the approach and avoidance coping framework (Roth & Cohen, 1986). Repeated measures ANOVA compared the appraisal categories of harm/loss, threat, challenge, and the coping categories of approach and avoidance across eight stressors, with gender as a between-participant factor. There was a significant appraisal by stressor interaction (p [less than] .001), with significant main effects for stressor and appraisal and a significant interaction between appraisal category and gender (p [less than] .02). Females
experienced more threat and fewer harm or challenge appraisals than males. A 12 (appraisal items) x 2 (gender) x 8 (stressors) repeated measures MANOVA revealed a significant main effect of appraisal item (p [less than]. 001), and a significant appraisal item by stressor interaction (p [less than] .001). In addition, approach coping strategies were significantly related to each of the three appraisal categories of harm, threat, and challenge. However, correlations between categories of appraisal and coping for each source of stress indicated that these relationships differed as a function of the source of stress. The results of this study confirmed that cognitive appraisals of stressful events influence subsequent use of coping strategies. Additional quantitative and qualitative research is needed to understand the underlying personal and situational factors that influence appraisals and coping in competitive sport, and the development of validated inventories that measure these constructs.

This qualitative study by Poczwardowski and Conroy (2002) identified and categorized the coping responses to failure and success of 16 elite athletes and performing artists. Data from individual, in-depth interviews were inductively analyzed for content and yielded 36 coping strategies (as lower-order themes). The identified strategies extended descriptive lists of coping behaviors reported in the performance psychology literature. Categories in coping—such as problem-focused, emotion-focused, appraisal-focused, avoidance-focused, and failing in coping—were used to organize the results. Cross-domain comparisons revealed a number of qualitative differences, such as “greater motivational changes after failure” being reported only by athletes and “letting ego go in an attempt to improve performance” reported only by performing artists. Cross-domain studies hold promise for clarifying the psychological aspects of performance for sport psychology consultants, whose services are increasingly invited by non-sport clients. Accounts of general, domain-specific, and individual patterns in coping behaviors can guide future research and consulting efforts.

Giacobbi and Weinberg (2000) in one of their study; an examination of coping in sport: individual trait anxiety differences and situational consistency, examined the coping responses of different subgroups of athletes (e.g., high and low trait anxious
athletes), and to assess the consistency of athlete’s coping behaviors across situations. Two-hundred and seventy-three athletes completed the sport anxiety scale (SAS) by Smith, Smoll, & Schutz (1990) and coping assessments in trait and state versions of the sport adapted cope (MCOPE) by Crocker and Graham (1995). The state coping measures assessed coping responses of situations for which the athletes actually experienced. The results of three separate, doubly multivariate, repeated measures, MANOVA’s showed that high trait anxious athletes responded to stressful situations using different coping behaviors (e.g., denial, wishful thinking, and self-blame) than the low trait anxious athletes. In addition, coping appears to be more stable than situationally variable as Pearson correlational coefficients computed between the three measures ranged from 0.53 to 0.80. The results are discussed with regard to theoretical, research, and applied issues.

Gaudreau et al. (2002) completed study titled athletes’ cope during a competition: relationship of coping strategies with positive affect, negative affect, and performance-goal discrepancy. This study examined the changes in athletes’ coping and affect across the phases of a sport competition and the extent to which performance-goal discrepancy (PGD) moderated these changes. Also, it explored the mediating role of coping strategies in the PGD-affect relationships. Method: Sixty-two French-Canadian male golfers, aged from 13 to 20 years, completed a French translation of the MCOPE (The Sport Psychol. (1995b), 9, 325-338) and the PANAS (J. Pers. Social Psychol. (1988), 54, 1063-1070) two hours prior, one hour after, and twenty-four hours after the competition. A subjective (The Sport Psychol. (1995b), 9, 325-338) and objective indices were used to assess PGD. Results: In order to assess the moderating role of PGD in the temporal patterning of coping and affect, a series of PGD × Phase analysis of variance, with repeated measures on the last factor, were conducted. Results showed that positive affect and negative affect as well as behavioral disengagement, increased effort, active coping/planning, suppression, and positive reappraisal changed across the phases of the competition for athletes with high PGD whereas venting of emotion and humor changed for athletes with medium and low PGD. Multivariate path analyses were used to explore the mediating roles of coping in the PGD-affect relationship. Whereas active coping/planning and
behavioral disengagement mediated the PGD-positive affect relationship during the 
competition, positive reappraisal mediated it at post-competition. Also, behavioral 
disengagement mediated the PGD-negative affect relationship during the competition. 
Conclusions: The moderating role of PGD on the temporal patterns of coping and affect 
implies that their dynamic nature might be far more complex than depicted by Lazarus 
and Folkman (1984). (stress, appraisal and coping. New York: Springer). Also, the PGD-
 affect relationships and the mediating role of coping in these relationships outlined the 
need of considering self-referenced criteria of performance in studies of coping and 
affect.

Hoedaya and Anshel (2003) conducted a study on use and effectiveness of coping 
with stress in sport among Australian and Indonesian athletes. The purpose of this study 
was to determine the most common coping strategies used by Australian and Indonesian 
competitive athletes and the effectiveness of those strategies following stressful events 
experienced prior to (pre-game) and during (game) sport competition analyses, using 2 
7(pre-game) and2 9(game) MANOVAs, supported the predictions of significant cultural 
differences on selected measures. In addition, more frequent use of a coping strategy was 
not necessarily associated with increased perceived effectiveness of that strategy. 
Australian and Indonesian athletes differed on the perceived effectiveness of these 
strategies as a function of the type of stressor, and the increased use of selected coping 
strategies is not necessarily concomitant with heightened effectiveness of using that 
strategy. Thus, the frequency and perceived effectiveness of using coping strategies 
appear to be independent.

Pensgaard et al. (2003) conducted a study on achievement goal orientations and 
the use of coping strategies among winter Olympians. Purpose is to examine the 
relationship between task and ego orientations and the use of stress-coping strategies 
among athletes participating in the 1994 Winter Olympic Games. We expected that 
athletes who were high on task and low on ego orientation would employ more problem-
solving strategies than athletes with other ego and task profiles. We also expected that 
athletes high in ego and low in task orientation would employ more emotion-focused
strategies than other athletes with other ego and task profiles. Gender differences were also investigated. Design: Cross-sectional, retrospective. Data were collected immediately after the closing of the Olympic Games. Methods: Norwegian athletes (N=69, 50 males and 20 females, mean AGE=25.2 years) participated in the study. Goal orientations and coping strategies were assessed using questionnaires. After a median split on the task and the ego orientation scales to determine the athletes who were high/low, high/high, low/high or low/low in task and ego orientation respectively, 54 athletes remained in the final analysis. Several separate univariate 2×2 analyses of variance were conducted. High task/low ego orientation was related to the use of active coping and social emotional support, while low task/high ego orientation was related to the use of positive redefinition and growth strategies. High ego orientation was associated with less use of active coping and planning strategies among female athletes, but was related to the use of denial as a coping strategy. Conclusions: The relative strength of high and/or low task and ego orientation has an impact on elite athletes’ use of coping strategies in competition. Being high in ego orientation seems to be more influential among female than male elite athletes in their use of coping strategies.

Haglind and Daniel, (2003) conducted a study is to investigate how athletes and coaches perceive and experience success and failure. Objectives of the study consist of examining how athletes and coaches define, react and cope with success and failure, how they perceive consequences and how coaches help athletes to cope with success and failure. Ten (n=10) individual semi structured interviews was carried out with seven (n=7) elite athletes and three (n=3) coaches in track and field. An interview guide based on the objectives of the study was developed. 385 raw data units were identified. These were categorized according to the objectives. The analysis showed that athletes and coaches defined success as achieving goals and a typical reaction to success was to feel happy. A typical consequence that follows success was increased self confidence and athletes cope with this by setting new goals. The analysis of coaches showed that coaches create an understanding for the athletes, what they want and what they need. Failure was most frequently defined as injury. The most common reaction to failure was increased
negative thinking and athletes coped with that by “clenching the fist”. Coaches help athletes to cope with failure by adapting the training. Development was considered to be a significant consequence of failure. (Haglind, Daniel, 2003).

Giacobbi et al. (2004) in their study broken clubs and expletives: the sources of stress and coping responses of skilled and moderately skilled golfers, assess the sources of stress and coping responses of skilled and moderately skilled golfers with regard to performance related stress. Semi-structured interviews were conducted with 11 golfers who played a minimum of 10 rounds of golf during the current golf season. Using the analytic strategies described by Côté, Salmela, Baria, and Russell (1993) and Lincoln and Guba (1985), a research team performed an inductive analysis that resulted in the emergence of the following coping strategies: cognitive strategies, relaxation techniques, off course efforts, golf course strategies, avoidance coping, and emotion-focused coping. The results are discussed in terms of current coping research in sport and applied implications are offered.

Puente-díaz and Anshel (2005) in their study sources of acute stress, cognitive appraisal, and coping strategies among highly skilled Mexican and U.S. competitive tennis players tried to identify sources of acute stress, cognitive appraisal (i.e., perceived controllability), and the use of coping strategies as a function of culture among highly skilled tennis players from Mexico and the United States. Participants were 112 competitive tennis players, 54 of whom were from Mexico (44 boys, 10 girls), and 58 of whom were from the United States (30 boys, 28 girls). A qualitative analysis indicated that the most common sources of acute stress in tennis include “receiving negative comments from coaches and relatives” and “opponent cheating.” The authors adapted the COPE Instrument (Carver et al.1989) to ascertain the athletes’ use of coping strategies. Regression analysis assessed the extent to which culture predicted the athletes’ perceived controllability of the stressors and their use of coping strategies. The results indicated that culture significantly predicted both perceived controllability and the use of coping strategies. The authors discussed implications for the role of culture in predicting cognitive appraisal and coping in sport.
Kowalski et al. (2005) conducted a study on adolescents’ control beliefs and coping with stress in sport. 231 female and 113 male adolescent sport participants recalled a stressful situation experienced in sport followed by measures of perceived stress, coping, and control beliefs. Hierarchical regression analysis showed that perceived stress explained significant variance in emotion-focused coping beyond control beliefs for both females and males. Overall, the results supported most of the basic tenets of Compas et al.’s (1991) model that problem-focused coping should be related to an individual’s perceived control over the stressful situation, whereas emotion-focused coping should be more strongly related to overall level of stress experienced. Perceived stress is important to consider in a model of control beliefs and coping; however, the strength of its importance seems to depend on the dimension of control beliefs.

Thelwell et al. (2006) conducted a study titled batting on a sticky wicket: identifying sources of stress and associated coping strategies for professional cricket batsmen. The purpose of this study was to examine the sources of stress and associated coping strategies as reported by professional cricket batters. Nine male professional cricket batters completed a semi-structured interview to examine their stress sources and associated coping strategies. A combination of inductive and deductive content analyses provided a detailed data analysis for the two areas of investigation. The interviews revealed a total of 25 general dimensions for the sources of stress and 23 general dimensions for the coping strategies. Despite the overlap between stress sources and coping strategies to previous literature, practitioners need to be aware of the specific demands of the sport in which they are working. Future research suggestions are made regarding the study of stress and coping in sport.

and brief cope (Carver, Scheier&Weintraub,1989) on 4 occasions over the 6 weeks before dissertation submission. Repeated measures multivariate analysis of variance indicated a significant main effect for gender, with no main effect for changes over time and no significant interaction effect. Results demonstrated that males perceived the dissertation to be significantly more threatening and less challenging than females. With regard to coping, males used more active coping, positive reframing, planning, and acceptance of the stressor, with lower scores for self-blame, venting of emotions, and behavioral disengagement. The results suggest that, for this student population, the dissertation did not become increasingly stressful in the period before submission. Clear relationships were also evidenced between primary appraisal, secondary appraisal, and coping. Future research should seek to identify factors that moderate the influence of situational stressors on coping responses among undergraduate students.

Smith et al. (2007) in a project, relations between personality and coping: a meta-analysis personality may directly facilitate or constrain coping, but relations of personality to coping have been inconsistent across studies, suggesting a need for greater attention to methods and samples. This meta-analysis tested moderators of relations between big five personality traits and coping using 2,653 effect sizes drawn from 165 samples and 33,094 participants. Personality was weakly related to broad coping (e.g., Engagement or Disengagement), but all 5 traits predicted specific strategies. Extraversion and conscientiousness predicted more problem-solving and cognitive restructuring, neuroticism less. Neuroticism predicted problematic strategies like wishful thinking, withdrawal, and emotion-focused coping but, like extraversion, also predicted support seeking. Personality more strongly predicted coping in young samples, stressed samples, and samples reporting dispositional rather than situation-specific coping. Daily versus retrospective coping reports and self-selected versus researcher-selected stressors also moderated relations between personality and coping. Cross-cultural differences were present, and ethnically diverse samples showed more protective effects of personality. Richer understanding of the role of personality in the coping process requires assessment of personality facets and specific coping strategies, use of laboratory and daily report studies, and multivariate analyses.
Nicholls (2007) conducted a study on longitudinal phenomenological analysis of coping effectiveness among Scottish international adolescent golfers. The aim of this study was to explore coping effectiveness among international golfers. Five Scottish international adolescent golfers (mean age 16.6 years, s\(\bar{ }\)=\(\bar{ }\)0.6) maintained daily coping effectiveness diaries over a 28-day period during their competitive season. Data were thematically analyzed using interpretive phenomenological analysis (Smith & Osborn, 2003). The participants reported 56 effective coping strategies and 23 ineffective coping strategies. The unique finding from this study is that the same coping strategies were often rated as being both effective and ineffective, even when they were employed to manage the same stressor. This suggests that the goodness-of-fit approach and the choice of coping strategy theories may not be adequate explanations of coping effectiveness. Applied practitioners working with golfers are encouraged to teach their clients a variety of coping strategies, which should be deployed in combination.

Bjrkly (2007) in his study soccer players’ perceptions of their coping strategies: a screening evaluation before and after a sport psychology service delivery The purpose of this explorative small-scale evaluation was to examine the effects of a ten-month team-based sport psychology service delivery aimed to enhance the coping skills of 21 professional soccer players. Principles from cognitive behavior therapy were instrumental in each weekly match preparation. A 16-item screening questionnaire on the individual player’s perception of his coping capacity and strategies was dispensed to each player prior to and after the intervention period. It covered various aspects of coping skills before and during matches and addressed if and how each player would seek to help a team-mate with match performance problems. The comparison of pre and post service delivery scores showed a significant increase in the amount of sport psychology literature read, the use of specific coping skills during matches, and the offering of more specialized help to team-mates after the intervention.

Gilbert & Morawski (2007) conducted study on coaching strategies for helping adolescent athletes cope with stress: Reduce the stress about reducing stress in your athlete. The authors conducted with a competitive adolescent soccer team and its two
coaches over an eight-month period. To ensure a comprehensive picture of the types of stress that young athletes may encounter, data were collected in all parts of a season (i.e., indoor and outdoor seasons, spring training, playoffs, and tournaments). The purpose of this article is to describe common stressors related to sport competition and strategies that coaches can use to help their young athletes cope with stress. These strategies are based on suggestions provided by the coaches and athletes involved in the study and are supported by the coaching and sport psychology literature.

Melinda et al. (2008) conducted a study on trait anger, appraisal, and coping differences among adolescent tennis players. The purpose of the study was to determine whether high-trait-anger adolescent athletes appraise and cope with anger-provoking events differently than lower-trait-anger athletes. A second purpose was to assess gender differences in anger appraisal and coping. A sample of 103 competitive adolescent tennis players completed the adolescent anger rating scale (Burney, 2001), the coping function questionnaire (Kowalski & Crocker, 2001), and measures of primary and secondary cognitive appraisals of recent anger provoking events. High-trait-anger athletes used significantly more problem- and emotion-focused coping strategies than those who scored lower. Additionally, those participants who scored higher in reactive anger reported significantly more anger outbursts than those who scored lower. No gender differences were observed. Applied cognitive and behavioral recommendations are discussed.

Nicolas and Jebrane (2008) conducted a study titled Consistency of coping strategies and defense mechanisms during training sessions and sport competitions, a longitudinal study of 26 athletes was conducted to examine the consistency of coping strategies (CS) and defense mechanisms (DM) during competitions and the training sessions preceding races throughout a season. Furthermore, the effects of both disposition and situation on CS and DM were investigated. The findings indicated a relative lack of coping consistency for the majority of CS. Two situational CS (problem-solving and seeking social support) changed significantly over time and between situations (training/competition). In contrast, all DM showed strong stability across situations and
periods of time. Two DM were related to personality factors. Mature DM correlated with extraversion and openness. Immature DM correlated with Neurosis. As hypothesized, CS was not consistent either across situations or time. In contrast, all the DM showed evidence of relative stability in all situations and time periods. Furthermore, personality was related to DM but not to CS. These results suggest that perhaps CS are more a function of the situation, whereas DM are more dependent on the individual’s personality. Despite some limitations, the results suggest that canoeists show evidence of different process adjustment patterns depending on the situation (competition and training session) and in terms of methodology for evaluation and preparation are examined in the discussion.

Reeves et al. (2009) conducted a project to examine stressors and coping strategies among early (12-14 years) and middle adolescents (15-18 years). Forty male academy soccer players, aged between 12-18 years (M age = 14.22 years), period of season. The consequences for practitioners and trainers participated in semi-structured interviews, which were inductively and deductively content analyzed. Findings revealed that middle adolescents reported more stressors than early adolescents and that these two groups experienced both common and different stressors. Early adolescents identified making errors, opponents, team performance, and family as salient stressors. Making errors, team performance, coaches, selection, contracts, social evaluation, and playing at a higher level were more prominent among middle adolescents. Middle adolescents reported a greater number and repertoire of coping strategies than early adolescents, and used more problem- and emotion-focused strategies, but fewer avoidance strategies than early adolescents. Based on these findings, it is recommended that applied practitioners working within soccer academies take into account the players’ age when providing psychological support.

Anshel M H et al. (2009) examined racial and gender differences on sport-related sources of acute stress that competitive athletes perceived as highly intense and experienced during the competitive event. Athletes (N = 332, 176 men, 156 women; 59 African Americans: 27 men, 32 women; 232 Caucasians: 125 men, 107 women; and 41
Hispanics: 24 men, 17 women) who competed in sport on a high school or college team participated in this study. The sources of the acute stress and the coping style in sport scales, which M. H. Anshel and T. Sutarso (2007) developed, required the athletes to indicate their perceived stress intensity and their “typical” coping responses after experiencing the two stressors they perceived as most intense. A multivariate analysis of variance indicated that Caucasians experienced higher stress intensity more often than did African Americans on each of two sources of acute stress, and Caucasians tended to use an approach-behavior coping style. Women reported higher stress intensity for coach-related sources of acute stress and used approach-behavioral and avoidance-cognitive coping styles more often than did their male counterparts. Hispanic athletes did not differ from other groups on any measure. The authors conclude that race and gender influence the coping process in competitive sport.

Fernando and Cláudia (2010) completed study titled coping strategies, multidimensional competitive anxiety and cognitive threat appraisal: differences across sex, age and type of sport. The purpose of this study was to examine the levels of anxiety, threat perception, and the coping strategies used by Portuguese athletes, and to assess differences between athletes of different sexes, ages and sports. In this investigation there were 550 male and female participating athletes, aged between 15 and 35 years (19.8 ± 4.5), representing several individual and team sports. Subjects filled out the Portuguese versions of the sport anxiety scale [34] and of the brief cope [4], as well as the cognitive appraisal scale in sport competition – threat perception [9]. The results showed that all athletes experienced anxiety and threat perception, and used varied coping strategies, with a preference for adaptative strategies. Female athletes displayed higher levels of anxiety and threat perception, in addition to a greater use of diverse emotion- and problem-focused coping strategies; male athletes reported a greater substance abuse. Younger athletes seemed to use less efficacious coping strategies, and athletes from individual sports reported higher levels of anxiety, threat perception and venting of emotions; athletes from team sports reported a greater use of humor and substances.
Gaudreau al (2010) in their study the ups and downs of coping and sport achievement: an episodic process analysis of within-person associations examined the relationship between coping and sport achievement at the within-person level of analysis. Fifty-four golfers completed diary measures of coping, stress, and sport achievement after six consecutive rounds of golf. Results of hierarchical linear modeling revealed golfers’ episodic task-oriented coping and disengagement-oriented coping were associated, respectively, with their better and worst levels of subjective and objective achievement. Distraction-oriented coping was not significantly associated with achievement. These results were obtained after accounting for between-subjects differences in ability level and for within-person variations in perceived stress across both practice and competitive golf rounds. These results contribute to an emerging literature on the relationship between coping and sport achievement, and highlight the promises of an episodic process model of sport achievement to understand the transient self-regulatory factors associated with within-person variations in athletic achievement.

Niefer et al. (2010) in their study, coping with social physique anxiety among adolescent female athletes explored how adolescent female athletes cope with social physique anxiety (SPA). Participants, 73 female athletes age 13-19 years, reported their state SPA, coping strategies, coping function, and perceived coping effectiveness for a self-identified situation within sport in which they experienced SPA. Trait SPA was also assessed. Participants reported 129 coping strategies (1-4 strategies per participant). Strategies were coded into 13 categories based on Kowalski and colleagues’ (2006) taxonomy of coping with body-related issues. Social support, behavioral avoidance, short-term appearance management, humor, cognitive avoidance, and acceptance were the most commonly reported strategies. Number of coping strategies was associated with state SPA (r = .34, p < .05). Trait SPA was related to avoidance coping function (r = .21, p < .05). Results demonstrated that coping strategies were used for multiple functions, and coping functions had distinct associations with short-term, long-term, and health related effectiveness.
Bahramizade & Besharat (2010) investigated the impact of styles of coping with stress on sport achievement. Forty-eight student athletes (26 boys, 22 girls) were included in this study. All participants completed the sport stress coping styles scale (SSCSS). The athletes’ coaches were asked to rate the sport achievement scale (SAS) in order to measure students’ sport achievement. Approach coping style was negatively associated with sport achievement. Avoidant coping style was positively associated with sport achievement for male athletes but not female athletes. It can be concluded that both approach and avoidant coping styles will influence sport achievements.

Hurst et al. (2011) conducted a study titled, towards a dispositional version of the coping inventory for competitive sport. The aim of this study was to modify the original coping inventory for competitive sport instrument to explore its factor structure for use as a dispositional coping measure and to determine if the factor structure is comparable across division I and division II athletes. A sample of 596 male and female athletes, ranging in age from 18 to 23 years old, were administered the dispositional coping inventory for competitive sport. The DCICS assesses an athlete’s typical utilization of 10 coping strategies within the competitive sport environment. Internal reliability for the ten scales varied between .60 and .80. Fit indices for the original 39-item, 10 factor model did not indicate a good fit for the data. However, removal of two items from the distancing scale significantly improved the fit of the data. Therefore, results confirmed a modified 37-item 10 factor model instruments for measuring dispositional coping. Invariance testing indicated between-group factor invariance can be assumed for the DCICS across NCAA division I and division II athletes, suggesting the factor structure of the DCICS is comparable across athletes participating in sports at different levels of competition. Applications of the DCICS and future research directions are discussed.

Reeves et al. (2011) examined the effects of coping effectiveness training for adolescent soccer players (CETASP) intervention on coping self-efficacy (CSE), coping effectiveness (CE), and subjective performance. The participants were five male soccer players aged between 13 and 14 years (M = 13.6, SD = 0.55), who played for an English Premier League Soccer Academy. A single-subject multiple-baseline, across individuals
design was employed. Results suggested that participants’ CSE, CE, and subjective performance improved as a result of the CETASP intervention. Additionally, the social validation findings indicated that the participants were satisfied with the development of their coping skills and enjoyed the CETASP. This study provides empirical support for a framework that applied practitioners can use in “real world” settings to develop effective coping among academy soccer players.

Reeves et al. (2011) conducted a study titled “Longitudinal Study Compared Stressors, Perceived Stressor Control, Coping Strategies, And Coping Effectiveness among Early and Middle Adolescent Soccer Players, Across a Competitive Season”. Fifty academy soccer players completed at least one booklet, of eight daily diaries, across four phases of a season. Diaries included a stressor checklist, a Likert-type scale of perceived stressor control, an open-ended coping response section, and a Likert-type scale of coping effectiveness. The results revealed subtle age differences as stressors such as receiving criticism and injury were much more prominent among the middle adolescents, whereas observing an opponent cheat was more salient among early adolescents. The frequency of stressors also fluctuated across the distinct phases of the season differently for the early and middle adolescents. Middle adolescents reported using more emotion-focused and avoidance coping strategies than early adolescents. Middle adolescents also coped significantly more effective than early adolescents.

**GENDER DIFFERENCES IN COPING**

Tamres et al. (2002) investigated Sex differences in coping behavior: A meta-analytic review and an examination of relative coping. They used meta-analysis to examine recent studies of sex differences in coping. Women were more likely than men to engage in most coping strategies. The strongest effects showed that women were more likely to use strategies that involved verbal expressions to others or the self—to seek emotional support, ruminate about problems, and use positive self-talk. These sex differences were consistent across studies, supporting a dispositional level hypothesis. Other sex differences were dependent on the nature of the stressor, supporting role
constraint theory. They also examined whether stressor appraisal (i.e., women’s tendencies to appraise stressors as more severe) accounted for sex differences in coping. They found some support for this idea. To circumvent this issue, they provide some data on relative coping. These data demonstrate that sex differences in relative coping are more in line with our intuitions about the differences in the ways men and women cope with distress.

Anshel and Sutarso (2006) in their study Relationships between sources of acute stress and athletes’ coping style in competitive sport as a function of gender. The objectives of this study were to determine athletes’ sources of acute stress (SAS) perceived as highly intense and experienced during the competitive event, their respective coping styles (CS) for two different (highly intense) stress sources (SAS), the relationship between the acute stressors and their CS (approach and avoidance coping in cognitive and behavioral forms), and the generalizability of the SAS and the CS scales as a function of gender. Athletes (N=332, 176 males and 156 females, M age=21.6 years) who were former or current sports competitors for their high school or college team completed a two-part inventory generated for this study. The athletes were asked to indicate their perceived stress intensity for common SAS’s (part 1) and the manner in which they typically coped with two of the stressors perceived as the most intense (part 2). Theory-driven categories of acute stress sources were labeled “performance-related” and “coach-related,” and CS’s were grouped as “approach-behavioral,” “approach-cognitive,” and “avoidance-cognitive.” Intra-reliability (Cronbach alphas) for the stressor and coping style items were .81 and .82, respectively. General CS was significantly related to general sources of acute stress (p<.0001). Structural equation models indicated that the athletes’ coping styles were positively related to their respective acute stressors category. The coping stress style three-factor model showed a good fit with the data. The results of the analyses indicated valid and reliable relationships between CS and SAS among the athletes. The results indicated that athletes who experienced intense coach-related acute stress were more likely to use primarily an approach-behavior CS followed by the other CS. Finally, the athlete’s gender was a mediating variable in determining CS in response to selected sources of stress. Structural equation model techniques showed that athletes
who experienced acute stress used their respective CS consistently. The CS three-factor model showed a good fit with the data. In addition, gender mediates the relationship between source of stress and subsequent use of CS. Future studies in this area are needed to determine whether situational characteristics within sports contests influence the athletes’ coping responses, an additional test of trait and contextual coping theory.

Nicholls et al. (2007) in their study Stressors, coping, and coping effectiveness: Gender, type of sport, and skill differences. The aim of the study was to examine stressors, coping, and coping effectiveness as a function of gender, type of sport, and skill. The sample consisted of 749 undergraduate athletes (455 males, 294 females) aged 18 - 38 years (mean = 19.8 years). Skill was classified as international/national, county, university, and club standard. Participants completed a stressor and coping concept map (Novak & Gowin, 1984). The results revealed gender, type of sport, and skill differences in relation to stressor frequencies, coping strategy deployment, and coping effectiveness. In contrast to previous research, females used a variety of problem-focused (e.g. planning, communication, technique-orientated coping) strategies more frequently than males. Team sport athletes reported a variety of sport-specific stressors relating to the demands of playing in a team environment. The group of national/international athletes reported using more planning, blocking, and visualization and also reported that their coping was more effective than that of less-skilled athletes.

OVERVIEW OF THE REVIEWS

Sport psychologists (researchers and practitioners), coaches, sports commentators, sports fans, and athletes acknowledge the importance of coping in sporting performance. Over the last few years there has been a considerable increase in research related to coping in sports. An increased amount of high quality research was however reviewed and these studies were conducted on various topics. The review also revealed that there were a significant number of qualitative and quantitative researches. The majority of studies focused on performance slumps and competitive demands. They used within persons and between persons research designs. The focuses of the studies were to
demonstrate the casual relationship and comparing individual response to stress and coping. Knowledge of the interconnections between different cognitive coping techniques and athletic coping style is clearly in a genesis stage. There are several fundamental conceptual issues awaiting clarification and these issues have implications for future research and measurement of coping.

Researchers like Lazarus and Folkman (1984) contend that coping is conscious psychological and physical efforts to improve ones resourcefulness in dealing with stressful events. The current literature in coping also suggests the existence of gender differences in coping responses (Crocker and Graham et.al, 1989). Researchers hold that sex role stereotypes and role expectations predispose male and female athletes to respond difficulty to stress. Few studies indicated that female athletes are more likely to use emotion focused coping and avoidance coping particularly in response to uncontrollable stressors (Miller &Kirch,1987; Ptaack,Smith&Zanas,1992), whereas male athletes are more likely to use problem solving and approach coping in dealing with stress (Carver et.al;1989) A study conducted on marathon runners showed clear performance for the associative strategy while running, however they were more inclined to disassociate or use both strategies while in training runs (Masters 1989). Anshel et al. (2001) in one of their study confirmed that cognitive appraisals of stressful events influence subsequent use of coping strategies.

During the past years, researchers have sought to examine strategies athletes use to cope with stress in competitive situations. In general, these investigations have found that athletes employ a variety of coping strategies, often in combination, simultaneously trying to manage the person/stressor environment and to regulate distressing.

Despite the perceived importance of this area to the enhancement of athletic performance, few studies have simultaneously examined threat perception and coping strategies used by athletes in competitive situations. Thus, for research in this area to move forward, it is crucial to address the study of stress, anxiety and coping in distinct subgroups of athletes, analyzing the role of moderator variables such as sex, age, type of
sport or competitive level, in ecologically valid sport settings. Moreover, considering that, generally, investigations in the domain of sport psychology study elite populations and/or reduced samples which calls into question the generalization of results to the remaining population, research examining larger samples, with athletes of lesser ability and from different sports, could provide more comprehensive and generalizable information about the dynamic interdependencies between stress, anxiety and coping.

Based upon the above review, the purpose of this study was to examine the relationship between Athletic coping skill and Cognitive coping strategies used by athletes in stressful situations. A secondary purpose of this study was to explore gender and type of sport differences in Athletic coping skill and Cognitive coping strategies.