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A Season-Long Mental Skills Training Program for Collegiate Volleyball Players

Taryn Kelly Morgan
University of Tennessee - Knoxville

To the Graduate Council:

I am submitting herewith a dissertation written by Taryn Kelly Morgan entitled "A Season-Long Mental Skills Training Program for Collegiate Volleyball Players." I have examined the final electronic copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Education.

Craig A. Wrisberg, Major Professor

We have read this dissertation and recommend its acceptance:

Leslee A. Fisher, Jeffrey T. Fairbrother, Schuyler W. Huck

Accepted for the Council:

Carolyn R. Hodges

Vice Provost and Dean of the Graduate School

(Original signatures are on file with official student records.)

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Accepted for the Council:

Anne Mayhew
Vice Chancellor and
Dean of Graduate Studies

(Original signatures are on file with official student records.)

A SEASON-LONG MENTAL SKILLS TRAINING PROGRAM FOR COLLEGIATE VOLLEYBALL PLAYERS

A Dissertation

Presented for the Doctor of Philosophy

Degree

The University of Tennessee, Knoxville

Taryn Kelly Morgan

May, 2006

DEDICATION

This dissertation is dedicated to my parents, Tim and Karen Lynn.

Thank you for the support and love you have provided

throughout this long journey. I couldn't

have done it without you.

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ABSTRACT

The purpose of this study was to examine the impact of a season-long mental skills training (MST) program based on a conceptual framework informed by humanism and cognitive-behaviorism on the anxiety, confidence, mental skills usage, quality of life, and performance of an intact team. Participants consisted of a team of 14 female NCAA Division III collegiate volleyball players. The MST program was molded by the players and consisted of relaxation, team building, imagery, goal setting, pre-serve and pre-performance routines, anxiety management, focus words, confidence building, cognitive restructuring (positive self-talk), refocusing after mistakes, and defining roles on the team. The Sport Anxiety Scale (SAS), the Trait Sport-Confidence Inventory (TSCI), the Athletic Coping Skills Inventory-28 (ACSI), the Test of Performance Strategies (TOPS), and the Athlete Life Quality Scale (ALQS) were given during the pre-season, mid-season, and post-season. Consultant effectiveness was also measured during the post-season using the Sport Psychology (Mental Training) Consultant Evaluation Form. A repeated measures MANOVA revealed no significant differences over time for any of the questionnaires (F [4, 10] = 2.25, $p > .05$), although the TSCI approached significance ($p = .05$). ACSI and TOPS scores were used to assign players to high and low mental skills usage groups. Athletes who reported high usage had significantly lower anxiety and significantly higher confidence than athletes who reported low usage. The players were also grouped based on academic class (freshmen or non-freshmen). Over the season, the anxiety of freshmen increased and the anxiety of non-freshmen decreased. Both freshmen and non-freshmen increased in confidence over time, but non-freshmen had significantly

higher confidence than freshmen. Non-freshmen also had significantly higher life quality than freshmen. The high usage players performed significantly better than low usage players for the following statistics: assists/game average, kill percentage, kills/game average, ace/game average, and digs/game average. Overall, it was concluded that the MST program with this team affected athletes differentially and it is recommended that consultants remain flexible with respect to the frequency and content of MST sessions they offer.

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Part I: Introduction

Preface

The current study utilized a case study approach to examine the effect of a season-long mental skills training (MST) program on the performance, anxiety, confidence, mental skills usage, and life quality of an intact collegiate volleyball team. Therefore, the format of this dissertation varies from that used in traditional dissertations. The first section includes a brief review of the relevant literature, an overview of the conceptual framework used to guide the MST program, the statement of the problem, and the purpose of the study. The second section describes the methods employed in the current study and includes a description of the questionnaires completed by the players. Based on the extant literature, the primary mental skills the consultant anticipated implementing during the season are also described. The third section provides a narrative explaining each mental training session that occurred during the season, the MST consultant's experience of facilitating the season-long MST program within her conceptual framework, and how the MST program components were employed based on player feedback. In the fourth section, quantitative and qualitative results are presented and in the fifth section a discussion of the results, future research directions, applied implications, and conclusions are provided.

Introduction

The purpose of this study was to examine the impact of a season-long MST program based on a conceptual framework informed by humanism and the methods of cognitive-behaviorism on the anxiety, confidence, mental skills usage, quality of life, and performance of a team of collegiate volleyball players. In addition, an attempt was made

to develop a comprehensive MST package that could be implemented with other volleyball teams. In this section, a brief review of literature regarding the potential efficacy of MST is provided. The major topics include: (a) a working definition of applied sport psychology, (b) an overview of the concept of MST programs, (c) a discussion of previous research that has been conducted with intact collegiate teams and volleyball players, and (d) the conceptual framework used to guide the MST program employed in the present study.

Applied Sport Psychology

Applied sport psychology focuses on the application of psychological theories and techniques to sport in order to enhance the performance and personal growth of athletes (Williams & Straub, 2001). The primary purpose of applied sport psychology is to "promote personal growth while providing athletes of all ages and skill levels with mental and emotional skills to produce their best possible performance" (Hill, 2001, p. viii). Applied sport psychology began in the 1920s with the work of Coleman Griffith, who provided sport psychology consultation for athletes and coaches at both the collegiate and professional levels (Gould & Pick, 1995). Griffith also wrote two books entitled *Psychology of Coaching* (1926) and *Psychology of Athletics* (1928), which summarized his views on the field of applied sport psychology. After Griffith's death, the field entered a dormant stage and was not revived until the 1960s when Bruce Ogilvie and Thomas Tutko wrote the book *Problem Athletes and How to Handle Them* (1966). At the heart of applied sport psychology is the integration of psychological theories and techniques in order to enhance the competitive edge and mental toughness of athletes.

Mental Skills Training (MST) Programs

Psychological factors have a considerable influence on sport success and systematic mental skills training (MST) programs have been shown to have the potential to enhance the athletic performance of athletes of various ages and from different sports (Daw & Burton, 1994; Greenspan & Feltz, 1989; Martin, Vause, & Schwartzman, 2005; Thelwell & Greenlees, 2003). The effectiveness of individual or combined MST for enhancing competitive cognitions, emotions, and performance has generally been supported in the applied sport psychology literature (Behncke, 2004; Burton, 1989; Miller & McAuley, 1987; Vealey, 1994; Weinberg & Comar, 1994; Weinberg & Williams, 2001). However, there is no consensus as to the best way to implement MST programs and there is considerable variability in the approaches taken by sport psychology consultants (Weinberg & Williams). Some studies have examined the relationship between cognitive-behavioral mental training programs and sport performance and most of these have shown that systematic mental training has a positive influence on performance (Driskell, Cooper, & Moran, 1994; Feltz & Landers, 1983; Martin, Moritz, & Hall, 1999; Martin, Vause, & Schwartzman, 2005; Weinberg & Comar). To date, however, limited research has examined the effects of a season-long MST program on the performance of athletes in an intact team setting (Daw & Burton, 1994; Schoenfelt & Usry, 2005).

MST and Intact Collegiate Teams

Hall and Erffmeyer (1983) compared the effectiveness of two MST programs on the free-throw shooting accuracy of a team of female collegiate basketball players. One

MST group utilized relaxation and imagery while the second utilized relaxation and imagery but also viewed a videotaped model. The results revealed that after 10 sessions, the group given the model in addition to relaxation and imagery had a greater improvement in free-throw shooting accuracy than the group that utilized relaxation and imagery alone. The group that viewed the model improved their free-throw shooting percentage from 72% to 81% while the group that did not view the model remained at their pre-intervention percentage of 70%. Therefore, the introduction of a videotaped model appeared to be the intervention that produced improvements in free-throw shooting percentage for the team of female collegiate basketball players.

In another study, Burton (1989) implemented a goal setting training program in which 30 Division I collegiate swimmers were taught to set performance goals. Burton then compared the goals, perceived ability, competitive cognitions, and performance of this group to those of another Division I team of 35 swimmers not receiving goal setting training. Overall, swimmers on the team that received goal setting training set more accurate performance goals than swimmers on the team that did not receive goal setting training. Female swimmers on the goal setting training team set more accurate goals during the late season than did their male counterparts. The swimmers on the goal setting training team placed greater importance on performance-related achievements while those on the control team placed more emphasis on outcome achievements. Therefore, goal setting training seemed to lead to an increased focus on personal achievement and the process of improved performance rather than on the outcome of competition. In addition, high-accuracy goal setting team members had higher perceived ability, more

accurate performance expectancies, better performance, felt more successful and satisfied, and attributed success more to their own ability than did low-accuracy goal setting team members. These results suggested that the effectiveness of goal setting training depends on the accuracy with which athletes set their goals (Burton).

Weinberg, Stitcher, and Richardson (1994) found that the implementation of a specific goal setting program during a competitive season led to an 80% improvement in two offensive (offensive assists and offensive ground balls) and defensive game statistics (defensive ground balls and defensive clears) for a treatment group of 24 Division I male collegiate lacrosse players. Players' performance was compared to that of a no-goals control group matched based on ability and playing position. The players in the treatment group had higher mean performances per game on all four game statistics compared to the control group. Specifically, the treatment group had 2.93 offensive assists per game compared to the control group's 0.86, 7.0 offensive ground balls per game compared to 3.96 for controls, 9.78 defensive ground balls per game compared to 6.33 for controls, and 4.0 defensive clears per game compared to 2.05 for controls. Similar to the earlier study by Burton (1989), the results of the Weinberg et al. study suggested that a systematic goal setting program can produce improved performance for male collegiate lacrosse players.

Daw and Burton (1994) introduced a MST program for a total of 12 male and female collegiate tennis players that consisted of goal setting, imagery, and arousal regulation. Another 12 players served as a control group and did not receive the MST program. Those players who participated in the MST program had higher state self-

confidence and fewer double faults compared to players who did not participate in the program. In follow-up interviews, the participants who received the MST program reported that they felt that the MST program had helped them perform better. Upon further examination, Daw and Burton observed that the benefits of the MST program depended on a player's personal commitment to MST. The high usage MST players rated all aspects of the MST program as more helpful and felt that the consistency of their overall performance was enhanced to a greater extent than low usage MST players. Overall, the results of this study suggested that the MST program was useful in facilitating athletes' competitive cognitions and performance, especially for those players who used the mental skills to a greater degree.

Savoy and Beitel (1996) compared the game free-throw (FT) percentage statistics of 10 highly skilled female Division I college basketball players who were taught to utilize imagery to a control group who was not. The researchers utilized an A1-B1-A2-B2-A3-B3 reversal design and found that the imagery group showed a 16% average increase in FT shooting percentage compared to the control group over 35 regular and post-season games. Following the first intervention phase there was an 18% improvement in FT shooting percentage over the first baseline phase. When the imagery was withdrawn, there was a 7.7% drop in FT percentage. Following the second intervention phase, there was a 9% increase over initial baseline performance. When imagery was withdrawn the second time FT percentage dropped 11%. Following the third intervention phase, which occurred during post-season play (i.e., regional and national tournament), FT percentage increased by 10% over baseline. These findings suggest that consistency

in the maintenance of MST programs is important, at least initially, because negative effects were evident when the imagery intervention was removed.

Savoy and Beitel (1997) also investigated the effects of group MST (centering, focusing, and imagery) and group/individualized MST (centering, focusing, imagery, positive self-talk, cue words, and energizing) on the state somatic anxiety, state cognitive anxiety, and state self-confidence of the same team of 10 female collegiate basketball players. All 10 players received the group MST and three of the 10 players also received the group/individualized MST. Overall, both group MST and group/individualized MST resulted in a steady decrease in pre-game state cognitive and state somatic anxiety over the last nine games of the regular season, but only group/individualized MST resulted in increased pre-game state self-confidence. These results suggested that a combined group/individualized MST that includes centering, focusing, imagery, positive self-talk, cue words, and energizing statements produces a higher level of state self-confidence than does a group intervention (centering, focusing, and imagery) alone. In addition, both group and group/individualized MST produced decreased state cognitive and somatic anxiety.

Bloom and Stevens (2002) conducted a MST program with a collegiate equestrian team (45 females) that focused on team building and improving group cohesiveness. The team participated in five sessions that included discussions and activities dealing with leadership, team covenant, communication, how to handle being chosen for competition, and preparing for nationals. Although no significant changes in group cohesiveness and team building were found, the mean cohesion subscale scores on the Group Environment

Questionnaire (Carron, Widmeyer, & Brawley, 1985) revealed an overall trend toward improved cohesion, especially with regard to the Individual Attractiveness to Group-Task subscale. In addition, follow-up group interviews revealed a trend toward improved team functioning (team harmony, support, and closeness) for the MST group compared to the control group. These results suggest that it may be important for researchers to collect qualitative as well as quantitative data when assessing the effectiveness of MST programs that focus on team building.

Taken together, the aforementioned research results suggest that implementing a MST program with an intact collegiate team has the potential to increase performance, self-confidence, and team functioning. In addition, MST programs can possibly decrease anxiety when implemented with intact collegiate teams. Although the effectiveness of MST programs has been demonstrated in several studies, more research is needed to examine program effectiveness in terms of improved performance as well as other dependent variables, such as anxiety and confidence. In addition, the level of usage of athletes' mental skills should also be assessed in order to determine the extent to which differences in various performance and behavioral variables are evident for high and low usage mental skills players.

MST and Volleyball Teams

Some researchers have examined the effects of MST programs on the performance of intact volleyball teams. Two of these studies focused on high school volleyball teams. In the first, Lanning and Hisanaga (1983) implemented a relaxation training program designed to reduce competitive anxiety and increase performance for 24

high school female volleyball players. The results revealed that the MST program group reported significantly less anxiety on the Sport Competition Anxiety Test (Martens, 1977) and had significantly greater performance than the control group. More specifically, the MST group showed a 17% increase in serving percentage during games compared to the control group. In the second study, Fulghum (1999) introduced a MST program consisting of imagery and goal setting to a team of 11 female high school players. Six players were assigned to the MST group and five were assigned to the control group. The players in the MST group showed increased confidence in the team's ability from pre-season to post-season whereas the control group's confidence in the team's ability stayed the same. The MST group also showed an increased positive attitude compared to the control group, which actually demonstrated a decrease in positive attitude. Interestingly, the control group demonstrated higher confidence prior to competition than did the MST group and showed increased self-confidence over the season compared to the MST group, whose self-confidence stayed relatively stable. Overall, the results of these two studies with high school volleyball players suggest that MST has the potential to decrease anxiety and increase serving performance, positive attitude, and confidence in the team's ability; however, the effects on player confidence are less clear.

Two studies have examined the effectiveness of MST with elite national-level and collegiate teams. Gipson, McKenzie, and Lowe (1989) supervised the mental training of the USA Women's National Volleyball Team prior to the 1988 Olympics. The work of these consultants involved interventions with both coaches and players and utilized both

educational and organizational services designed to improve team performance. The six basic services provided included measurement of coach and player behavior through behavioral observation, improvement of player skill development activities through video feedback, enhancement of player performance, enhancement of coach performance, planning and management consultation, and fund-raising. The consultants also provided MST services for individual players and coaches. MST topics designed to enhance individual player and coach performance included goal setting, mental preparation for matches, attentional focusing, coach feedback on the use of reward and punishment contingencies, communication, and the development of team leadership. Overall, the consultants observed a decrease in coaches' use of negative comments and an increase in coaches' use of praise, performance feedback, and prompting. In addition, the coaches altered practice structure to make them more like competitions. There was also an increase in the frequency of implementation of goal setting, the usage of videotape feedback during the player training process, and the use of language related to mental preparation techniques. Players reported an increased usage of a variety of concentration, refocusing, and relaxation techniques and improved player-to-player communication and leadership. Although there was no formal evaluation of the MST program, anecdotal and observational evidence suggested that teaching mental skills to elite level volleyball players could produce a variety of successful outcomes.

More recently, Schoenfelt and Usry (2005) implemented a pre-season MST program consisting of relaxation, imagery, and attentional skills with a Division I collegiate volleyball team. The results of this study revealed that players' reported use of

imagery was positively related to serve percentage and season ace-to-error ratio. The reported use of a pre-serve routine was also significantly related to serve percentage and season ace-to-error ratio. Overall, volleyball players who used the MST package consisting of imagery and a pre-serve routine more frequently showed greater improvements in serving performance compared to volleyball players who used it less frequently. In addition, the level of players' competitive anxiety was negatively related to serve percentage. These results suggested that increased usage of the mental skills of imagery and pre-performance routines can lead to more successful serving performance in collegiate volleyball players.

Although there has been relatively little research with MST and volleyball teams, the available results seem to indicate that MST can have a positive influence on players' serving performance, anxiety, and confidence. In the only study that focused on collegiate volleyball players, only one dependent variable related to the MST program, serve performance, was examined. Therefore, additional research examining multiple dependent variables (Anderson, Miles, Mahoney, & Robinson, 2002) appears needed to more effectively evaluate the value of MST programs for intact collegiate volleyball teams.

Conceptual Framework for MST

Poczwardowski, Sherman, and Ravizza (2004) contend that a well-developed conceptual framework is an essential component of effective MST programs. This framework should be based on one or more of the primary theoretical and philosophical paradigms of psychology. The mental training consultant's philosophy should include the

consultant's personal core beliefs and values, a theoretical paradigm for assessing behavioral change, models of practice and the consultant's role, intervention goals, and intervention techniques and methods. These theoretical assumptions guide the consultant in perceiving the underlying causes of an athlete's problems, the process for solving the problems, and the decisions about which intervention techniques to use (Hill, 2001). Overall, five basic assumptions determined the conceptual framework for MST used in this study. First, it was assumed that the individual, the team, and the context of society were important factors to consider when designing and implementing a MST program. Second, it was assumed that a foundational relationship between the consultant and the athletes and team needed to be established prior to implementing a MST program. Third, it was assumed that an effective consultant must be able to demonstrate empathy and unconditional positive regard toward all athletes regardless of their gender, race, class, etc. Fourth, it was assumed that an effective MST program must be both non-directive and teaching-centered. That is, athletes should be the ones who decide the basic order of progression of MST while the consultant should be the one to teach them mental skills they need. Finally, it was assumed that a MST program must be collaborative, ever evolving, and tailored to the needs of the team or individual athlete, depending on the various situations that might arise throughout the season.

Thus, the conceptual framework for the MST program implemented in the present study consisted of a combination of two different schools of psychological thought: humanism (person-centered) and cognitive-behaviorism. It was reasoned that this framework would allow the consultant the flexibility and techniques necessary to

effectively focus on the diverse needs of individual athletes, the team, and the various situations that might be encountered throughout the consulting process (May & Brown, 1989).

Humanistic psychology was developed in the late 1950s by Abraham Maslow in an attempt to create a new approach to psychology that explored the behavioral attributes and emotional dynamics of full and healthy human living (Bühler & Allen, 1972). There are five tenets of humanistic psychology. The first places great importance on the personal and subjective interpretation of human experience. Each person is unique and brings varying backgrounds and interpretations to the counselor-client (consultant-athlete in the current study) relationship. Therefore, the counselor must be aware of the individual differences in people. The second tenet is the holistic view of people and their experiences. Each person is considered to be a total person, not the sum of his or her parts. People experience the world at many levels (i.e., physically, cognitively, and affectively) and none of these parts can be separated from the others. The third tenet states that freedom and autonomy are fundamental to human activity. People have the ability and the need to make decisions about their lives and the counselor's (or consultant's) role is to help them realize that they can control their own lives. The fourth tenet holds that humanism is anti-reductionistic and focuses on the person's interpretation of life events. The person's perception of his or her experiences is respected and not analyzed according to the viewpoints of others. One person's experiences are unique to that individual and cannot be compared and treated the same as everyone else's experiences. The fifth tenet is the notion that human nature can never completely be

defined. In humanism, it is assumed that people should continually strive to know, understand, be aware of, and be conscious of themselves, and not generalize their experience to others.

Carl Rogers introduced a humanistic concept called the person-centered approach into the therapist-patient (or consultant-athlete) relationship (Bühler & Allen, 1972). Kirschenbaum and Henderson (1989) summarized the person-centered approach in the following way: “All individuals have within themselves the ability to guide their own lives in a manner that is both personally satisfying and socially constructive” (p. xiv). Humanistic psychology and the person-centered approach seem to be well-suited to the role of a mental training consultant because both humanists and mental training consultants believe that people have the ability to positively take control of their lives (or sport experience). In addition, both humanistic psychology and sport psychology stress the importance of increasing awareness, fostering growth, and implementing change for people. These goals fit nicely within the framework of an athlete-centered MST program.

Humanistic sport psychology emphasizes trust and relationship-building between the consultant and the athlete (Hill, 2001). The ability of the consultant to build a trusting relationship and rapport with athletes, coaches, and teams has been shown to be an important determinant of an effective MST program (Petitpas, Giges, & Danish, 1999). Humanists emphasize that the athlete is not only an athlete but a whole person who strives for personal growth and increased quality of life. The humanistic theory highlights the significance of mutual and genuine relationships between the consultant and the athlete in order to promote the establishment and maintenance of psychological health

and well-being. Humanists are non-directive and attempt to facilitate conditions whereby the athlete can determine his or her own autonomy and direction. Understanding how an athlete perceives and reacts to events and situations that occur in his or her life (athletic and non-athletic) is an important component of humanistic consulting. Ravizza (2002) contends that a holistic approach, whereby the consultant focuses on the whole person and not only her performance, is especially important when working with female athletes.

In the present study, the consultant included a humanistic component in her conceptual framework because she believed that a collaborative relationship with athletes would encourage them to provide her with the feedback she needed to determine which mental skills might be the most effective in each situation. Lloyd and Trudel (1999) noted seven essential characteristics of an athlete-centered approach to MST. These included following the athlete's lead, being a good listener, respecting input from the athlete, having applied sport psychology knowledge, being responsive and meeting individual needs, having good interpersonal skills, and showing care. In the present study, the consultant attempted to build rapport with coaches and athletes by being available when needed, showing unconditional positive regard, and immersing herself in the environment of the team.

The other component of her conceptual framework was cognitive-behaviorism. This component is common in most MST programs where consultants use a cognitive-behavioral approach in teaching athletes the mental skills they need to enhance their performance. In fact, Murphy (2005) termed cognitive-behavioral psychology *the* theoretical approach that is "the guiding force in sport psychology" (p. xii). Cognitive-

behavioral interventions are designed to teach athletes how to change observable behaviors and modify distorted mental processes (Hill, 2001). Put another way, the primary focus of cognitive-behavioral interventions is the alteration of a person's thinking patterns in order to change his or her behaviors (Poczwardowski, et al., 2004). Typical interventions used in cognitive-behavioral MST programs include goal setting, imagery or mental rehearsal, relaxation, stress management, arousal management, self-monitoring/regulation, self-instruction, cognitive restructuring, and modeling (Meyers, Whelan, & Murphy, 1996). Therefore, the cognitive-behavioral "piece" of the present conceptual framework afforded the consultant with the package of "tools" necessary for teaching various mental skills in this project.

In summary, the consultant's intent in the present study was to incorporate a combination of humanism and cognitive-behaviorism in her conceptual model of MST in an effort to achieve the following goals: personal growth, enhanced performance, and improved life quality of all athletes (Hill, 2001). Humanism provided the "relationship" piece and cognitive-behaviorism provided the "technique" piece of the framework. These two parts of the conceptual framework were meant to work symbiotically in order to provide the athletes a MST program that fit their needs. First, trust is built and athlete needs are assessed. Then, those mental skills are taught. Next, athletes are encouraged to implement the mental skills into practice and competition. Then, the consultant discusses the mental skills with the athletes and asks them what else they want to learn, which leads back to the first step of assessing needs. A diagrammatic representation of this conceptual framework for MST is shown in Figure 1.

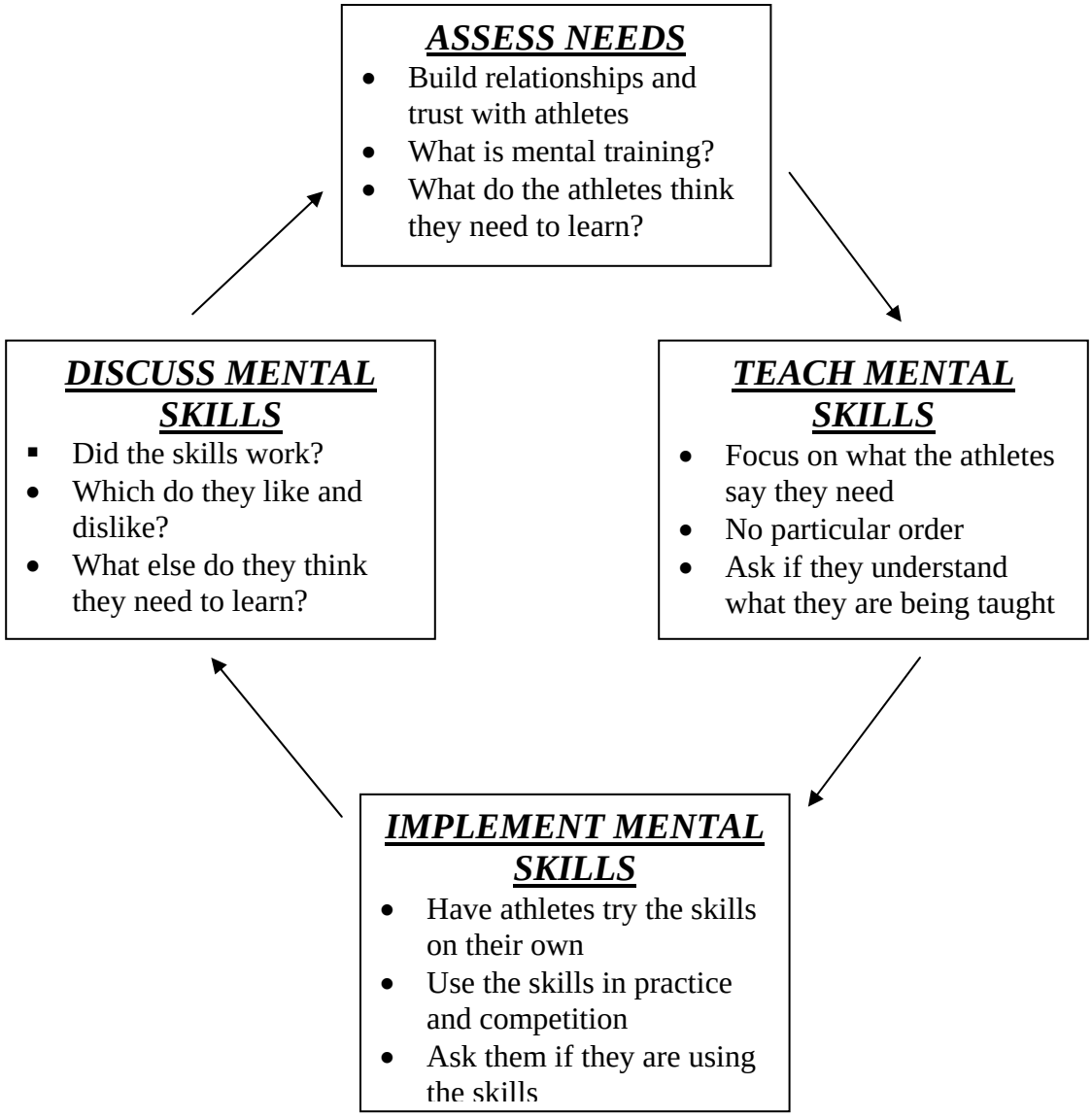

Figure 1. A Humanist and Cognitive-Behavioral Framework for Mental Skills Training.

Statement of the Problem

Most mental training consultants use a cognitive-behavioral approach when teaching athletes the mental skills they need to enhance their performance. Various studies have examined the effects of this type of mental training and sport performance and most have shown that systematic mental training has a positive influence on performance (Driskell, Cooper, & Moran, 1994; Feltz & Landers, 1983; Martin et al, 1999; Martin et al., 2005; Weinberg & Comar, 1994). To date, no effort has been made to examine the impact of a MST program that combines humanism and cognitive-behaviorism on the various aspects of athletes' performance and lives such as skill execution, anxiety, confidence, and life quality. Moreover, limited research exists that has examined the effects of a season-long MST program on the performance and psychological states of an intact team of collegiate volleyball players (Schoenfelt & Usry, 2005).

Purpose of the Study

The purpose of this study was to examine the impact of a season-long MST program, based on a conceptual framework informed by humanism and cognitive-behaviorism, on the performance, anxiety, confidence, and quality of life of an intact team of collegiate female volleyball players. In addition, an attempt was made to develop a comprehensive MST package that could be implemented by other consultants working with collegiate volleyball teams.

Definitions of Terms

The following terms related to volleyball (Dunphy & Wilde, 2000) are used at various times throughout this dissertation:

1. Ace-to-error ratio – Total number of service aces divided by total number of serve errors
2. Assist – When a setter sets the ball to a hitter and the hitter obtains a kill; similar to a basketball assist
3. Assists per game – The average number of assists a setter has per game; calculated by dividing total assists by games played
4. Back row players – Players who only play the back row; primarily used as defensive specialists, diggers, and/or servers
5. Block – When a front row player jumps above the net as the opponent hits the ball and rejects it back onto the opponent's side of the court
6. Blocks per game – The average number of blocks a blocker has per game; calculated by dividing total blocks by games played
7. Dig – When a player successfully keeps an opponent's hit from hitting the floor so her team can play the next ball
8. Digs per game – The average number of digs a player has per game; calculated by dividing total digs by games played
9. Hitter – Usually a front row player who hits or spikes the ball toward the opponent's side of the court; hitters can also hit from the back row

10. Hitting error – When a hitter hits the ball either outside the court boundary or into the net
11. Kill – When a hitter is able to hit a ball so that it is unreturnable by the opponent; the ball can either hit the floor on the opponent's side or be unplayable after the first touch
12. Kills per game – The average number of kills a hitter has per game; calculated by dividing total kills by games played
13. Kill percentage –The percentage of time a hitter obtains a kill; calculated by subtracting total hitting errors from total kills and then dividing by games played
14. Passing – When a player receives a hit or a serve and tries to direct the ball to a teammate or target area
15. Peppering – A warm-up activity involving two players that includes passing, setting, hitting, and digging/passing the ball back and forth
16. Receiving error – When a player is unable to control the opponent's serve and either misses it completely or in such a way that the ball is unplayable by a teammate
17. Serve error – When a server serves the ball into the net or out of bounds
18. Serve percentage – The percentage of time a server successfully serves the ball over the net and inside the boundaries on the opponent's side of the net; calculated by subtracting serve errors from successful serve attempts and dividing by the total number of serve attempts

19. Service ace – When a server serves a ball that is unreturnable by the opponent; the serve can either hit the floor on the opponent's side or be unplayable after the first touch
20. Service aces per game – The average number of times per game a server serves a service ace; calculated by dividing total service aces by total games played
21. Server – A player who attempts to start a point by hitting the ball overhand over the net and into the opponent's court
22. Setter – A player who attempts to play the ball in order to put it into position for a hitter to hit the ball; responsible for telling the hitters the type of sets she will be hitting and for calling plays on the court; tends to function like the point guard in basketball
23. Total service errors – The number of times a server serves the ball into the net or out of bounds

Part II: Method

In this section, an overview of the methods utilized in the current study is provided. The major topics include: (a) a description of the participants, coaches, and the mental training consultant; (b) the approval process, (c) the procedure for administering the questionnaires, (d) a detailed description of each questionnaire, (e) a description of the performance data that was collected, (f) the major mental skills that were expected to be part of the mental skills training program, (g) the statistics used during data analysis, and (h) a description of notes kept by the consultant.

Participants

Participants consisted of a team of 14 female NCAA Division III collegiate volleyball players from a small, private college in the southeastern United States. The majority of the participants were Caucasian (n = 13) and one was Philippino/White. Their ages ranged from 18 to 22 years (M = 18.93). There were seven freshmen, two sophomores, and two seniors on the team. None of the participants had previously worked with a mental training consultant. The team ended the season with an overall record of 28-13, a conference record of 13-1, and they won the conference tournament.

The head coach, who was also the Associate Athletic Director, was beginning her 20th season as head coach. She had collected 453 victories in her career and had an overall winning percentage of over 63%. She had been Region Coach of the Year once and Conference Coach of the Year five times. She was supportive of the MST program and felt that MST could help her team.

There were two assistant coaches who were both first-year assistants. One assistant coach was a 23-year-old female who was an older sister of one of the

sophomore players on the team. She had played NCAA Division II collegiate volleyball. She had coached junior club volleyball previously. The other assistant coach was a 32-year-old male who was the husband of the former assistant coach who was not coaching this season because she was taking care of their children. He was a former professional beach volleyball player who had previously coached high school volleyball. Both assistant coaches accepted the MST program and were friendly with the consultant, but neither of them was very involved with the MST program.

Mental Training Consultant

The mental training consultant who conducted the current MST program was a third-year sport psychology doctoral student completing her dissertation. She had previous volleyball experience both as a player and coach. She had played NCAA Division I collegiate volleyball at a small, private college in the southeastern United States and had coached at the youth and high school levels. She was also currently serving as a graduate assistant mental training consultant within the athletic department of a large NCAA Division I university in the southeastern United States. She had provided MST services to both male and female athletes of varying ages who competed in various sports. She had worked with both individual athletes and groups of athletes previously, but had not worked with an intact collegiate team over an entire season.

Approval

Prior to beginning the season-long MST program, written approval was obtained from the volleyball coach/Associate Athletic Director at the college. Permission was also

obtained from the University of Tennessee Institutional Review Board to conduct the study.

Procedure

After explaining the purpose of the study and telling participants they could withdraw at any time, they signed an informed consent form. A demographic information sheet and five questionnaires were administered to the athletes at a team meeting prior to the beginning of the season (i.e., pre-season) in order to obtain baseline data. The questionnaires were also distributed at mid-season and post-season in order to assess changes in the various measures. The questionnaires were administered in a different order each time to diminish order effects (Huck, 2004). An additional questionnaire, The Mental Training Consultant Evaluation Form (Partington & Orlick, 1987), was administered during the post-season assessment to obtain feedback from the participants regarding the MST consultant and MST program. The Mental Training Consultant Evaluation Form was administered anonymously so the athletes would feel comfortable giving honest and/or critical feedback.

Each participant's pre-season measures served as her own baseline data for subsequent comparisons (Christensen, 2001). The underlying assumption was that the pre-season responses would continue to be stable if no treatment were implemented. Validation of this assumption would require that the MST program be provided to half of the athletes and not to the others. However, it would be impractical and, from a humanistic perspective, unfair to withhold treatment to any member of the team who had volunteered to participate in the study (Anderson et al, 2002). Therefore, each participant

in the present study received the same MST program. While this may have compromised internal validity, it is possible that it enhanced the ecological (external) validity of the study (Thelwell & Greenlees, 2001).

Questionnaires

Sport Anxiety Scale (SAS). The SAS (Appendix A) (Smith, Smoll, & Schutz, 1990) is a measure of multidimensional trait anxiety that distinguishes between cognitive and somatic trait anxiety (Williams, 2001). The cognitive scale is further divided into worry and concentration disruption subscales (LeUnes & Nation, 1996). The cognitive anxiety subscales evaluate a competitor's tendency to experience ruminative thinking and attentional disturbances. The somatic anxiety scale evaluates the tendency for individuals to experience anxiety-related perceptions of autonomic reactivity (Ashford, Karageorghis, & Jackson, 2005). The SAS has 21 items measured on a 4-point Likert scale anchored by *Not at All* (1) and *Very Much So* (4). The SAS has been shown to possess adequate internal consistency, with reliability coefficients ranging from .76 to .89 (Smith et al., 1990; Wilson & Ecklund, 1998), and relatively high test–retest reliability (*r* =.85) (Smith et al.). Adequate convergent, construct, divergent, and predictive validity have also been demonstrated (Giacobbi & Weinberg, 2000; McNair, Lorr, & Dropplemen, 1971; Smith et al.; Smith, Smoll, & Weichman, 1998).

Trait Sport-Confidence Inventory (TSCI). The TSCI (Appendix B) (Vealey, 1986) is a measure of the degree of certainty athletes usually hold about their ability to succeed in sport (LeUnes & Nation, 1996). The TSCI is comprised of 13 items measured on a 9-point Likert scale anchored by *Low* (1) and *High* (9). Adequate internal consistency (*r*

=.93) has been reported (Vealey) and test-retest reliabilities have been shown to be consistently high after one day (.86), one week (.89), and one month (.83). Acceptable levels of concurrent, construct, and predictive validity have also been established (Martin & Gill, 1991; Vealey).

Athletic Coping Skills Inventory-28 (ACSI-28). The ACSI-28 (Appendix C) (Smith, Schutz, Smoll, & Ptacek, 1995) is a measure of sport coping skills and psychological competencies (Vallerand & Rousseau, 2001). The ACSI-28 has 28 items rated on a 4-point scale and is anchored by *Almost Never* (0) and *Almost Always* (3). The ACSI-28 has a seven-factor model that includes coping with adversity, peaking under pressure, goal setting/mental preparation, concentration, freedom from worry, confidence and achievement motivation, and coachability (Sheldon & Eccles, 2005). Cronbach's (1951) alpha for the seven subscales has been shown to be acceptable (.69 to .88), as has internal consistency (.86) and one-week median test-retest reliability (.82) (Sheldon & Eccles, 2005). Adequate convergent, divergent, and predictive validity have also been reported (Ostrow, 1996; Smith & Christensen, 1995).

Test of Performance Strategies (TOPS). The TOPS (Appendix D) (Thomas et al., 1999) is a measure of the usage of psychological skills and strategies in practice and competition. The same seven subscales (activation, automaticity, emotional control, goal setting, imagery, relaxation, and self-talk) are used to assess mental skill usage during practice and competition (Lane, Harwood, Terry, & Karageorghis, 2004). An additional subscale is included when assessing practice usage (i.e., attentional control) and competition usage (i.e., negative thinking) (Frey, Laguna, & Ravizza, 2003). The TOPS

consists of 64 items that are measured on a 5-point Likert scale. The items are anchored by *Never* (1) and *Always* (5). Internal consistencies of the subscales range from .66 to .81. In addition, acceptable discriminant validity of the TOPS based on gender and age has been previously established (Thomas et al.).

Athlete Life Quality Scale (ALQS). The ALQS (Appendix E) (Gentner, 2004) is a measure of how satisfied an athlete is with various aspects of his or her life including health, relationships, and the athletic experience. The ALQS consists of 14 items and can be considered as either a 1-factor or 3-factor model. The three-factor model includes general life satisfaction, physical satisfaction, and social-sport satisfaction. The 14 items are rated on a 7-point Likert scale ranging from *Very Dissatisfied* (1) to *Very Satisfied* (7). Cronbach's (1951) alpha for the ALQS has been shown to be high (.87) and adequate construct validity has been established (Gentner). It should be noted that at the time of the present study, this scale was still under development.

Mental Training Consultant Evaluation Form (MTCEF). Participants were asked to provide anonymous feedback about their experience with the MST program on "The Sport Psychology (Mental Training) Consultant Evaluation Form" (Appendix F) (Partington & Orlick, 1987). The title of the survey was modified because, throughout the study, the consultant was referred to by the coach and herself as a mental training consultant, not a sport psychology consultant. The MTCEF consists of 10 questions that require athletes to rate the consultant on certain characteristics, 2 questions that ask athletes to rate the effect of the consultant on themselves and the team, and 3 open-ended questions that request recommendations from athletes for the consultant. Internal

consistency for the MTCEF has been shown to be high (.94) and the test-retest reliability coefficient is acceptable (.81) (Partington & Orlick). The data obtained from this questionnaire were designed to supplement the quantitative data and provide a more comprehensive assessment of the athlete's experience of the MST program and relationship with the consultant over the course of the season.

Performance

Performance statistics kept over the course of the season on the team's website included kills per game, kill percentage, assists per game, service aces per game, total service errors, digs per game, and blocks per game. It should be noted that each player did not always perform every skill. For example, some players only played the front row, some only played the back row, and some never served.

Mental Skills Training Program Components

The MST program used with this team consisted of several components, most of which are mentioned in the sport psychology literature or based on the consultant's tacit knowledge of the sport of volleyball and the demands of players. The program was designed to be adaptable to the changing needs of the team based on the conceptual framework. In the following sections, a discussion of the rationale for certain components that the consultant felt would become part of the MST program and how these components were implemented is provided. These specific techniques used in the current MST program is also discussed in greater detail in part three.

Relationship building. The ability to build trusting relationships and rapport has been shown to contribute to the effectiveness of a MST program (Petitpas et al., 1999).

Therefore, the approach used for consulting in this study included interactive team meetings, attendance at practices and matches, and casual conversations with the volleyball players. By engaging the athletes in this way prior to introducing the MST program and during it, the consultant attempted to convey the message that she cared about the team and was interested in becoming a part of their sport experience. After the initial interactions, the consultant conducted a more formal team meeting to thoroughly explain what the MST might entail. Here, the consultant emphasized the fact that they (the athletes) were the driving force behind the interventions and that they should view her work with them as collaborative. The consultant also encouraged them to provide her with feedback at any point throughout the duration of the MST program. It was also advantageous for the consultant to have prior collegiate volleyball experience because this gave her immediate credibility with the team.

In the first sessions, the consultant brainstormed with the team about their current experience as athletes, where they were mentally as a volleyball player, where they wanted to be mentally, how they thought they could get there, and what mental characteristics they thought were important for success in volleyball. The consultant indicated that she did not have a predetermined order for implementing the MST package, but would allow the team to guide her teaching of the techniques. She also made it clear that she would allow all of the voices on the team to be heard and would attempt to empower each athlete to take the lead in her own intervention. This approach is different than the one used in traditional cognitive-behavioral MST programs where mental skills are implemented in a certain order, a new skill is taught each session, or all

skills are taught in one session (Daw & Burton, 1994; Thelwell & Greenlees, 2001, 2003). The present consultant anticipated using the following mental training techniques depending on the needs and interests of the team and the athletes' feedback.

Goal setting. Goal setting can influence the performance of athletes varying in age and ability level and can facilitate positive changes in anxiety, confidence, motivation, and performance (Boutcher & Rotella, 1987; Burton, 1989; Gould, 2001; Weinberg et al, 1994). In an earlier review of the literature, Locke, Shaw, Saari, and Latham (1981) concluded that the effect of goal setting on performance is a robust finding in the published research, with 90% of the studies at that time showing a positive effect on task performance. Locke and Latham (1985) and Kyllo and Landers (1995) were among the first to suggest that goal setting was applicable to sport and sport performance. More recently, Burton, Naylor, and Holliday (2001) found that in 44 of the 56 studies they reviewed, a moderate to strong effect of goal setting in sport and exercise settings was demonstrated. Thus, they concluded that goal setting is an effective technique for improving performance in sport and exercise.

Gould (2001) provided the following goal setting guidelines for facilitating performance improvements. First, goals should be expressed in terms of specific measurable behaviors with target dates for attainment. Second, goals should be realistic, but moderately difficult. Third, goals should be both short-term and long-term. Fourth, goals should focus on both performance and process improvements, as well as outcomes. Fifth, goals should be set for both practice and competition. Sixth, goals should be worded positively. Seventh, goal achievement strategies should be identified and

discussed, and a support system should be established to assist athletes in achieving their goals. Eighth, goals should be written down and evaluated regularly. Finally, group and individual goals should be considered.

With the volleyball team in the present study, the consultant began by discussing the purposes of goals and the goal setting guidelines. She emphasized that the team's goals should be specific and measurable, realistic and difficult, short-, mid-, and long-term, process- and outcome-oriented, practice- and competition-specific, positively worded, and regularly evaluated. She then allowed the team to develop a set of team goals based on a goal-mapping technique that included the visual example of a staircase (Weinberg & Gould, 2003). Each player then set four or five individual goals that pertained to academics, volleyball, and other aspects of life each chose to target for improvement. The consultant then made a poster that had the team goals on a staircase from the lower left to the upper right corner that was surrounded by each of the player's individual goals. The poster was placed on a bulletin board in the locker room so they could see the goals each day and evaluate where they were in relation to their goals. Finally, the consultant continually reminded the players to revisit both their team and individual goals and modify them as needed.

Relaxation. Support for integrating relaxation into a MST program has been provided by various researchers (Bull, 1989; Greenspan & Feltz, 1989; Lanning & Hisanaga, 1983; Patrick & Hrycaiko, 1998; Schoenfelt & Usry, 2005; Thelwell & Greenlees, 2001; Williams & Harris, 2001). Relaxation can be used to decrease an athlete's activation in order to help achieve optimal levels of arousal for successful

performance (Williams & Harris). Relaxation can also assist an athlete who is having difficulty falling asleep. Relaxation training includes teaching athletes how to recognize unwanted tension and then assisting them in learning relaxation techniques to regulate tension and nervousness.

Williams and Harris (2001) suggest that athletes be exposed to a variety of relaxation techniques for maximal effectiveness. Relaxation techniques include breathing exercises, progressive muscle relaxation, meditation, autogenic training, and imagery. In this study, athletes were introduced to the techniques of breathing, progressive muscle relaxation, and imagery. It was assumed that, with practice, the athletes should be able to use these techniques to achieve both zero-activation level relaxation and momentary relaxation (Williams & Harris). Zero-activation level relaxation entails completely relaxing, such as before sleeping. Once an athlete is able to achieve a zero-activation level, she can work to accomplish momentary relaxation. Momentary relaxation can be used before (e.g., during stretching/warm-up) or during a practice or competition.

When teaching relaxation to the volleyball team, the consultant had the athletes focus on making their breathing consistent and deep. She told them to think about feeling the breath deep in their stomach and allowing the air to flow throughout their body. She encouraged them to feel the tension release from their body when they exhaled and to feel calmness coming in when they inhaled. Relaxation usually occurred in the gym after a practice. For progressive muscle relaxation, athletes progressed from the bottom of their body (i.e., feet) up to the top of their body (i.e., face) while tensing and relaxing each muscle group (Jacobson, 1930). The consultant had the athletes try to recognize the

difference between the feeling in their muscles when they were tense and when they were relaxed. It was hoped that this would assist them in recognizing tension at other times so they would know how to relax their muscle tension.

Imagery. Imagery entails using all of the senses to create or re-create an experience in the mind (Vealey & Greenleaf, 2001). Imagery can help program the mind and body to respond optimally during practice and competition. The use of imagery has been shown to help athletes control their thoughts and emotions during competition, as well as to enhance their learning and performance (Bull, 1989; Martin et al., 1999; Savoy & Beitel, 1996; Schoenfelt & Usry, 2005). In addition, imagery can enhance motivation and self-confidence while decreasing anxiety (Vealey & Greenleaf). When imaging, athletes should attempt to incorporate as many sense modalities as possible, make the image as vivid as possible, manipulate or control the image, and become maximally aware of what is going on in the image.

When implementing imagery with athletes, certain considerations must be addressed. The first is imagery perspective. Imagery perspective can be either internal or external, depending on the perspective that is most effective for the individual in generating the desired feeling state (Hardy & Callow, 1999). During internal perspective imagery, athletes see themselves from behind their own eyes and feel themselves inside their body. The image looks and feels the way the athlete normally experiences the movement. For external perspective imagery, athletes see themselves from the outside looking in as if they are watching themselves in a movie. Ideally, imagery should be used in combination with physical practice. Whereas athletes who have better imagery ability

generally benefit more from imagery usage initially, all athletes can improve the quality of their imagery through practice (Vealey & Greenleaf, 2001).

With regard to the imagery taught by the consultant in the present study, athletes were instructed to try to see and feel themselves performing their volleyball skills and techniques to the best of their ability from both an internal and external perspective. The consultant had them visualize moments in games and how they wanted to perform during games as well as during practice. Imagery was also incorporated into practice one day as a station during conditioning and was used to prepare for upcoming performances. In addition, the consultant had athletes image their best performance ever, thinking back to a time when they felt automatic and were performing to the best of their ability. Both upcoming performance and best performance imagery were incorporated to help to build athletes' confidence because they would presumably be visualizing how they wanted to play as well as how successful they had been in the past.

Self-talk/confidence. Simply put, self-talk consists of the internal dialogue athletes have with themselves. Positive self-talk can increase confidence through the cognitive control of emotions (Zinsser, Bunker, & Williams, 2001) and enhance performance in endurance events (Rushall, 1984). It is important that self-talk be expressed positively in order to increase the motivation and confidence of athletes. Athletes can use self-talk to acquire skills, correct bad habits, prepare for performance, focus attention, formulate the best mood for performance, and build confidence and competence (Zinsser et al).

When implementing self-talk with athletes, it is important for the MST consultant to remember the following principles. First, self-talk should be kept short and simple.

Second, self-talk should focus on what the athlete is trying to *do*, not what the athlete is trying to avoid doing. Third, self-talk should focus on the present, rather than the past or future. Finally, athletes should be taught to recognize their self-talk habits and, if they are negative, how to turn negative statements into positive ones (Zinsser et al., 2001).

When teaching positive self-talk to the volleyball team in the present study, the consultant focused on changing their negative thoughts to positive thoughts using cognitive restructuring (Zinsser et al, 2001). First, she asked the athletes to identify the negative thoughts they were having and write them down. Once they did that, athletes were instructed to come up with ways to change the negative thoughts into positive statements. The consultant discussed the concept of the "trigger cue" to help athletes realize when they were having negative thoughts to prompt the need to change the negative thought into a positive thought. For example, a word like "stop" may be used to trigger the athlete to cue herself into thinking positively and focusing on the next point. The team also developed a list of positive sayings they could use to encourage each other during practices or matches.

Pre-performance routine. Many of the techniques mentioned previously can be combined to produce a pre-performance routine or mental preparation plan. A pre-performance routine can be used to create consistent thoughts, feelings, and bodily responses that are associated with peak performance at the time of competition (Weinberg & Williams, 2001). A specific pre-performance routine in volleyball is the pre-serve routine. Schoenfelt and Usry (2005) found that usage of a pre-serve routine correlated significantly with serve percentage and season ace-to-error ratio. Developing a

systematic mental preparation plan that entails relaxation, imagery, and self-talk can help build athletes' confidence and enable them to manage their anxiety. Ideally, the pre-competition routine should be incorporated into as many normal competition preparation procedures as possible, including going to bed, waking up, eating, stretching, and warming-up. The goal of the pre-competition routine is to create a match between the athlete's internal world (thoughts, feelings, and mental images) and external world (the environment). Thus, the athlete's challenge is to become familiar with the demands of the competitive environment and then practice the mental techniques necessary to meet those demands.

In the present study, the consultant discussed both a pre-competition routine and a pre-serve routine. For the pre-competition routine, she asked players to go through what they did prior to a match (as a team and individually) and try to make that routine as consistent as possible. She also discussed how the routine serves to regulate emotions and promote team unity. For the pre-serve routine, the consultant discussed how each individual could have her own routine that should be performed the *same* way every time she served, both in practice and in competition. Elements of the pre-serve routine included how many times an athlete bounced the ball, how she held the ball, getting a signal from the coach regarding where to serve, pausing to pick a target on the other side of the court, and executing the service motion. Also, the consultant encouraged the athletes to utilize their breathing and/or focus words within their routine if they were feeling tense or anxious.

Data Analysis

Descriptive statistics (means and standard deviations) for demographic information and scale scores were calculated. Next, reliability of the various questionnaire data was assessed using coefficient alpha (Cronbach, 1951; Thomas & Nelson, 2001). Cronbach's alpha is a generalized reliability coefficient that is used to assess the internal consistency of test items. A criterion of .80 is generally considered acceptable for the entire scale (Nunnally & Bernstein, 1994).

In order to analyze possible changes in the measures from pre-season to post-season, a repeated-measures multivariate analysis of variance (MANOVA) was utilized (Huck, 2004; Thomas & Nelson, 2001). Participants were also partitioned into groups based on being freshmen or non-freshmen and on having scores above or below the 50^{th} percentile on the ACSI and TOPS to assess differences among high and low mental skills usage groups. Repeated measures MANOVA analyses were utilized to assess differences between groups across time and one-way ANOVA analyses were used to examine differences between main effects of groups. Follow-up Tukey post-hoc was used when needed

Consultant Notes

The MST consultant kept detailed notes and recorded them in a journal on her computer after each interaction she had with the team. In all, 25 pages of single spaced, typed notes were recorded and are discussed in the next part. These notes included experiences with athletes and coaches during mental training sessions, practices, casual

observations, competitions, and individual interactions. The notes served as qualitative data to supplement the quantitative data.

Part III: The Mental Skills Training Program or "Time with Taryn"

In this section, a first-person narrative (qualitative) description of the MST program that evolved during the research process is provided. It should be noted that I allowed the team to guide the MST program. Therefore, the current narrative provides the reader an in-depth glimpse into the reasoning behind the teaching of certain mental skills and the emergent development of the overall MST program from my humanistic/cognitive-behavioral framework.

The Mental Skills Training Program

Although it was expected that certain cognitive-behavioral techniques would be utilized in the current study, the humanistic aspect of the conceptual framework allowed athletes' input to guide the development of the MST program. Therefore, I considered the wants and needs of team members when determining the content and timing of MST interventions. Overall, 12 mental training sessions occurred during the course of the season, ranging in duration from 15-90 minutes per session. The head coach called the mental training sessions "Time with Taryn."

Initial meetings. Since developing a relationship and rapport with the team was important for me, I met with the head coach and two players during the summer and then with the rest of the players at a team building ropes course prior to pre-season (August 18, 2005). The latter meeting allowed me an informal opportunity to introduce myself to the players, to tell them about myself, and to observe them interacting with each other prior to beginning the MST program.

During the first meeting with the coach, I learned some interesting facts about the team that I made note of for the upcoming year. First, the team had lost five seniors and

all of their captains from the previous year. One of the seniors who had graduated was the foundation of the team for passing and defense and had even tried out for the Olympic team. Second, the two seniors for the upcoming year had never been captains before and were very worried about stepping into that role because they were unsure of themselves. Third, there was a large group of entering freshmen, a total of seven in all. Fourth, there were no juniors on the team, which meant that, except for the two seniors, the team would be comprised of relatively inexperienced first and second year players. Fifth, the coach was not going to be present for the first two days of pre-season practice because of a mandatory meeting. Sixth, the two assistant coaches for this year were both new to the team. One was the older sister of a player and the other was the husband of a former assistant coach. Needless to say, even though the team had been very successful in the past, this season had the potential to be very interesting because of many of the aforementioned factors.

Talking with the coach allowed me to build a trusting relationship with her before the season started. The coach and I decided that I would be introduced as a “mental trainer” to the team rather than as a sport psychology consultant. This alleviated the stigma associated with the word “psychology” and allowed the coach and players to feel comfortable with my conceptual framework and the concept of a MST program. Numerous times throughout the season, the head and assistant coaches would come to me asking for advice on situations with players or with the other coaches. The head coach especially used me as a “sounding board” when she was concerned about players or was

having trouble with one of the assistant coaches. I really felt that the head coach trusted me and supported the MST program.

During the team building ropes course mentioned previously, I observed how the team interacted together. I noticed that the two seniors were taking a leadership role during most of the activities. It seemed like the senior captains were trying extremely hard to show that they were going to lead the team this year. After the activities, the team sat in a circle with the ropes course leaders and discussed what they had learned and what they had gotten out of the experience. Many of the players said they felt more comfortable as a team, had learned more about the others and what they were going to be like, and felt less nervous. The team also talked about how the seniors had taken a leadership role and how one of the freshmen had led them in one of the activities. Overall, I felt that the team worked well together during the team building activities. I also had a chance to talk with the head coach during this time and learn more details about the players while they were participating in the team building activities.

Session one. The first MST meeting occurred on August 19, 2005. Prior to the session, I observed the team participating in pre-season conditioning with the conditioning coach. This allowed me to get a feel for the dynamics on the team and the players' work ethic. During the first meeting, I gave the players the packet of surveys and asked them to complete them. Once they finished this task, the players were given the "Mental Training for Volleyball" handout (see Appendix G). I then facilitated a discussion with the team to ascertain what they thought a mental trainer does, what mental characteristics they felt made a volleyball player great, where they would rate

themselves on these characteristics, what mental training techniques were available for their use, and which ones they thought they would want to focus on during the season. The characteristics of a great volleyball player the team listed included confidence, focus, dedication, leadership, desire, determination, a strong work ethic, being a scrappy player, coordination, being a team player, being knowledgeable, knowing their role, having a love of the game, enthusiasm, a good attitude, and sportsmanship. After compiling the list, I asked each player to choose the one that was most important to her and tell her teammates which one she chose, why she chose it, and where she rated herself on it now. The consensus of the team was that self-talk, breathing for relaxation, team building/stress management, and goal setting were the most likely candidates for mental training techniques for their team. This session was an important one for both the athletes and for me as the mental trainer. The athletes learned more about what mental training entails and I discovered what techniques the players would like to acquire during the MST program.

Session two. The second MST session occurred later in the day on August 19, 2005. Based on the responses of the players during the first session and the initial meeting with the coach and two players, I first taught the athletes a breathing for relaxation technique to allow them to recover after practice and to serve as a foundational mental skill. Then, I introduced an “icebreaker” activity for team building purposes so they could get to know each other better. Since a concern of the captains and the head coach was the large number of freshmen players, I sought ways to integrate the new players into the team atmosphere. For the icebreaker activity, the players stood in a circle

with one player in the middle of the circle. The player in the middle made a statement that was true about herself. If the statement also applied to any of her teammates they had to switch places in the circle. The player who made the statement found a spot in the circle so that a new person was then in the middle and made a statement about herself. This activity continued for 15 minutes and the team stated that they enjoyed it.

The main focus of the session was building trust between the players. To accomplish this, I introduced a drawing of a volleyball on a posterboard and then posed the question, “What does it mean to be a Lady [mascot] volleyball player?” Returning players were asked to think about their traditions and roles, and what each represented. I then distributed felt-tip markers to the players and asked them to put their answers to the question inside the circumference of the volleyball. I then asked them to put their names, numbers, and something that symbolized them outside the circumference of the volleyball. The players seemed to enjoy this activity and came up with a number of good sayings/words for the middle of the circle. Some of these included “Once a [mascot] always a [mascot],” “good attitude + sportsmanship,” “count on me,” “balance,” and “academics.” At the end of this activity, I suggested that the players display the poster in the locker room so they could add to it if they so desired throughout the season. At later times in the season, I noticed that the players had added new sayings/words to the poster that had become representative of the team throughout the season.

The core time of this session revolved around a discussion of the poster. Specifically, I asked the seniors and sophomores to talk about their experiences of coming to school, playing volleyball, and what they had learned and experienced in their

previous years. This served as a way for the experienced players to mentor the new players. Overall, the returning players made a point of saying that the team was like a family that everyone could count on and that players could go to each other or the head coach whenever they had a problem. It became an emotional moment when a number of the players (especially freshmen) began to cry. From a humanistic perspective, I allowed the players to express and explore their emotions and to continue discussing the topics that were causing an emotional response. It seemed like this was a turning point for the freshmen because they realized that they were truly a part of a new family, the volleyball team. I then let the freshmen talk about their favorite thing so far, what they were experiencing, and anything else they wanted to say. One player mentioned that this session was her favorite part so far because it had allowed her to feel connected to her teammates and to let out some emotions that had been brewing inside of her. I felt that this was a successful team building activity because the players seemed open to it and were willing to talk to each other. It was encouraging to see and hear the support from the sophomores and seniors for the freshmen, and for the freshmen to hear they could go to the head coach with any concerns as well. I interjected periodically to keep the discussions on topic and to reiterate certain things, but for the most part this activity flowed well on its own.

At the end of the second session I introduced the concept of self-talk since the players mentioned this was a skill they would like to improve. I told the team that it was important to keep their self-talk short, simple, and positive. I then had the players give examples of some of the negative things they say to themselves during volleyball. After

hearing some of the negative statements, I discussed how the players could change negative statements like “I suck” into positive statements like “Get the next one” by using the technique of cognitive restructuring. The players then took turns saying some of the things that encouraged them. One player said she liked to say “settle” to herself when she got too anxious. Another said she liked motivational statements. Another said she liked to be more intense and did not mind coaches yelling at her. I reiterated the fact that they could use these positive statements or motivational gestures to replace the negative thoughts they have while playing volleyball. I also talked briefly about the importance of coming together in the middle of the court after every point in order to “release” the previous point and focus on the next point. This symbolic gesture served to help them stay focused as a team rather than getting absorbed in their own individual “cocoons.”

Session three. Session three happened on August 20, 2005. I started with an icebreaker game that required team members to create a story by combining single words contributed by each player to encourage teamwork. For the main focus of the session, the head coach had given the team the movie “The Land Before Time” to watch as a team and asked them to write down what character they identified with in the movie and why. Therefore, this session was guided by the desire of the coach to have the players learn more about themselves, their teammates, and the roles that each of them have on the team. The players discussed their answers, observed how they varied, and discussed the different reasons they chose the characters they did. Looking back, I found that many of the players’ choices were accurate representations of themselves.

I asked the team to talk about the importance of knowing the different roles that people play on a team. I then asked them to brainstorm the various roles each of them played. The team listed “leader” (on- and off-court), “motivator/cheerleader,” “go-to player,” “realist/coach,” “mom,” and “challenger” as roles on their team. Seniors and sophomores talked about what they thought their individual role was on the team and freshmen talked about the roles they had played on their high school teams. I then talked about how it was important for the players to be comfortable with their roles while also still being themselves.

Next, I talked about the concepts of “being in the moment” and “being focused.” It was ironic because while I was talking about being focused, many of the players seemed to not be paying attention. Some of the players were putting on their shoes and ankle braces. When I brought this to the attention of the team, they informed me that their practice time had been changed to 3:00 p.m. instead of 3:30 p.m. This meant that practice was about to begin and they were getting ready for it. I used this opportunity to talk about having a focus cue (word) they could use to keep themselves “in the moment” and use whenever needed during practice or games. Finally, I led the team in a breathing (relaxation) exercise for energy. I started by having the players take deep breaths and think about energy coming in with each breath. The exercise also gave them practice in focusing on one specific thing (i.e., breathing). I then asked the players to think about the focus word that they had chosen and to see themselves using the word during practice or competition to bring them into the moment. After five minutes of breathing and imaging using the focus word, I had them take a few more deep breaths, feel the energy again, and

concentrate one more time on their focus word. Some of the players said it was hard to get energized while relaxing and I told them the goal was to feel the energy in their body, not necessarily to feel energized at that moment. Based on the players' response to this exercise, I decided not to utilize breathing for energy in future sessions. Instead, I determined that the team enjoyed breathing for relaxation more and decided to use this technique during future sessions when relaxation was indicated.

After this session, I watched the team practice and observed that they were doing a good job of focusing during serving. The male assistant coach also noted that the team served really well that day. In two scrimmage games during this practice, I realized that the team that celebrated more after points won both of the games. The team that did not celebrate as much seemed disorganized and confused. Interestingly, each team included one of the senior captains. The consultant realized while watching these scrimmage games that celebrating as a team after points was going to be a key ingredient to their success because it energized the team and kept them focused.

Session four. Session four was on August 22, 2005. This session was supposed to last from 11:00 a.m. to noon but got started late because practice ran over and the mental training session somewhat slipped the head coach's mind. Because of this, I told the team that I had planned on doing goal setting today (which was one of the team's chosen MST techniques) but since time was short I was going to postpone it until the next session. I mentioned that I would like for them to think about their goals between now and then. Because of the shortened session, I needed to be flexible so I asked them to answer the questions, "How do you feel mentally right now?" and "What do you want to improve?"

Following the conceptual framework, these questions served as a way to check in with the players regarding their mental status during an intense pre-season of volleyball. Interestingly, most players said they felt mentally and physically exhausted and frustrated. A couple also said they felt inferior/insecure and lacking confidence, and one player said she felt helpless because she had rolled her ankle and had to sit out most of practice. In response to these comments, I talked to the team about the importance of recovery and using relaxation to let their minds and bodies recover. I reiterated that the players could utilize relaxation whenever they had a free moment, after practice, or prior to going to bed. I also talked about working together to pick each other up and trying to focus on one thing at a time for each practice or drill since the team was feeling mentally and physically drained. I emphasized the importance of focusing on that one thing and letting the rest happen, rather than thinking too much. Also, I talked about trying to forget mistakes and move on because volleyball is such a fast-paced game that there is no time to dwell on mistakes. In addition, once a mistake is made, a player can't go back and change it; if a player focuses on the past, it will only sap her energy. Rather, the emphasis should be on how to overcome the mistakes and move on. Once again, I noticed that a few of the players were crying, chiefly because the one player who rolled her ankle expressed her emotions outwardly, saying she felt like she was letting everyone down and that she really wanted to be out there with them. Another player consoled her and told her that they did not think she wanted to be hurt and they knew she wanted to be on the court with them. This exchange illustrated the support the teammates had for each other.

During the last 10 minutes of this session, I led a relaxation activity for recovery purposes. I wanted them to just take a few deep breaths, focus on getting a good breathing rhythm, and then take a few deeper breaths. I realized that they were exhausted from the hectic schedule and felt that relaxation was the best way to address their needs at that moment. I told them to try to get as much "down time" or relaxing as they could when they were not practicing or involved in academic activities.

Session five. Session five took place on August 24, 2005. The assistant coaches said the team had a really bad practice the night before and the male assistant coach had given them a "motivational talk." He said he had focused on being the "big gorilla" and the saying "count on me." Some players said they thought they needed the pep talk and did better today. The team was continuing to have problems with focusing and going all out when a drill was boring and the directions were vague. They had problems with one drill today because they did not understand what they were supposed to do and no one asked for clarification. One player admitted she was timid and worried about asking questions of her coach. It seemed like they were worrying too much and not enjoying what they were experiencing. I told them to try to think about leaving things off the court when they go to practice and realize that practice was their time to have fun, release stress, and become better players. I talked about the symbolism of walking into the gym and being ready to practice and getting the most out of every drill no matter how boring it might be. I also reminded them that they could use their focus word when they felt like their attention was wandering or that they were not completely focused during practice. At the end of the session, I challenged them to really show the coaches that afternoon

how they could play. I was trying to get them to get out there and enjoy playing by having fun with it, while all along working hard. I felt like the team knew that was what they should do but they may have been nervous or worried about getting yelled at by the coaches.

On this day, the mental training session was mainly focused on goal setting. We went into the classroom and I noticed that it seemed like the players became quieter and less responsive when we were in the classroom. I thought this was because the circle of desks the team was seated in was bigger than when we sat on the floor in the gym, which caused the setting to be less intimate. Therefore, no future sessions occurred in the classroom. I first talked about goals being positively worded and SMART (specific, measurable, action-oriented, realistic but challenging, and timed). First, I challenged the players to come up with team goals. Their first team goal was to celebrate 85% of the time during the scrimmage and then to keep increasing that percentage throughout the season. The other team goals were to go 5-0 the first competition weekend, win matches that go to five games, take their tough matches (five or so) more than three games and win at least three of those matches, give 100% of what they have at each practice, take care of school, win all their home games, go undefeated in the conference, have at least 30 wins, win the conference tournament, get a bid to NCAA's, get past the first round of NCAA's, and be NCAA champs. The players had trouble coming up with process goals and wanted to focus on team outcome goals. Looking back, these goals were too vague and may not have been realistic since this was a rebuilding year for the team. I repeatedly asked the team if they felt the goals were realistic and the team continually said yes. Even

though I attempted to get the team to come up with more specific and realistic process goals, it was a struggle and the team goals ended up being more outcome-oriented. Based on the conceptual framework in the current study, I felt that I needed to let the team guide the process and learn from their mistakes (i.e., setting outcome goals). I felt that the team goal setting was a weak point during the current MST program.

After doing team goals, I had the players focus on individual goals. Each player was given an index card and asked to write her individual goals (both athletic and academic) on them. Once again, they were reminded to try to make their goals SMART. Each player's goals respectively, were:

1. To keep a 3.3 or higher overall GPA, be a more vocal leader on the court by calling out the hitters, get 3 blocks/match, average 10 kills/match, get 2 aces/match.
2. To be a team leader (talking on court, "go to" player), be focused at all practices (leave outside off the court), get a 3.5 GPA, be on task with thesis, get 1000 kills and 80+ aces (average 10 kills/match and 2 aces/match).
3. To become a more vocal leader by cheering, have between 350 and 400 kills for the season, become more dependable on back row by having at least 20 digs/match, have at least a 3.25 GPA, and have no missed serves.
4. To talk on the court more, use focus word, keep 3.0+ GPA, increase blocking % (3-5/match), increase hitting % (10-12/match), increase assist % (3/match).
5. To give 100% in practice, 3.5 GPA for semester, stay vocal/be loud/communicate with team every play, be a leader on the court, gain a solid spot in the rotation, as a setter jump set more than 50% of the time and make sets more consistent.

6. To give everything every practice, learn to read hitters better/pass to target, earn a solid spot on the team/play in at least 50% of the games, be more vocal, keep GPA between 3.3-3.4 or above.
7. To always communicate with passers and hitters, have A's and B's in the classroom, be consistent with sets, have a higher amount of assists, always play defense, have better defense %, stay focused and stay positive, practice 100% all the time (as if in a game).
8. To gain confidence on the court, make better passes, work on blocking transitions, keep a 3.2 GPA, work on arm swing and transition and timing for hitting, motivate our team.
9. To work on footwork and quickness for setting, become more vocal, keep GPA above a 3.0 (closer to 4.0), become a better hitter, be able to play.
10. To give everything at each practice, maintain a 3.0 GPA, read the hitters 4 out of every 5 hits, perfect passing skills/footwork/target, know role and play it consistently.
11. To achieve a 2.7 GPA, serve receive at 2.5, learn from the others while not playing (focus while not playing), serve at 92%.
12. To improve passing skills and footwork quickness, keep arm swing high, don't let GPA go below a 3.0, improve vertical jump, learn to dive.
13. To give 100% every practice (just play), at least a 3.0 GPA, .300 hitting average, 2 blocks/match, 90% on serving.
14. To be a team player (celebrate every play, 90% of time), close the block every time (improve knowing where the setter is going to set the ball), 2-3 blocks/game, be smart

with hitting and improve kill % (5-6 kills/game), stay off the net when hitting without a coach reminder, keep a 3.0 GPA.

Overall, the players did better at following the goal setting guidelines when they set individual goals than when they set team goals. I felt there were still some weaknesses to the goal setting portion of the MST program in the current study and recognized that this was something I need to improve upon when working with teams in the future.

Session six. Session six was on August 26, 2005. Prior to practice, I showed the head coach the goals poster I had made and she really liked it. I put a big staircase in the middle and wrote the team goals on it and then had each player's names surrounding the staircase with their own individual goals written underneath their names. The coach informed me that she had spoken with three of the players who were less skilled and told them they may be asked to step out of some drills. The coach said they had a hard time hearing this but understood and that she would appreciate it if I were positive with them during practice today. Later in the session, one of the sophomores mentioned that even though the coach had started to split up the team based on ability that everyone should keep practicing hard and trying because the line-up could change at the drop of a hat.

Practice started with the team going over their pre-game warm-up. That was actually part of what I had planned to focus on in the session that day so the head coach let me talk to the team during the practice about their pre-performance routine. I talked with the players about them all coming together as a team (as a symbol that they were ready and focused on volleyball) before they started doing their running warm-up and just saying something encouraging, resolving to focus, and having a good warm-

up/match. Then, they practiced their warm-up in two lines and I talked about trying to stay in rhythm with their lines (i.e., starting at the same time). Next, they stretched in a circle and started peppering. I also talked about the team coming together as a unit one more time before the match, which was when they talked strategy, prayed, and got ready to play.

Next, the team moved on to a serving drill. I told the head coach that I was going to emphasize a target serving focus (pre-serve routine) during the mental training session also so we decided to incorporate it into the practice. I talked to the players for a few minutes about how to pick a target (Wulf & Prinz, 2001). I told them to see the target in their mind and to try to let their body relax and serve the ball to that target. I talked about the benefits of having the same pre-serve routine (i.e., number of bounces, body movements, target focus) every time they served, even during warm-ups and practice. The head coach told me that she had really liked incorporating these mental skills into practice and would like to incorporate more mental skills into practice time.

After practice, I gave the team the goals poster I had made and the players really liked it. I told them that they could add to it, draw on it, mark on it, or whatever they wanted to do. It was to be posted in their locker room. Then, I told them that I would like to review a few things before the scrimmage that night. First, I encouraged them to do the pre-game warm-up as a team and get together before the warm-up. Also, I told them to keep trying to use their pre-serve routine and target focus when serving. I also reminded them that their first team goal was to celebrate after points 85% of the time. I also told them to try to use their focus word whenever they needed to or to take deep breaths if

they needed to relax. Lastly, I left them with the encouragement to just play, have fun, and have no fear.

After the team session, one of the players came up to me and asked if she could talk to me alone sometime. So, we decided to go to lunch. During lunch, the player talked about her lack of sleeping and the nightmares she had been having. She felt like the lack of sleep was making her irritable and grumpy during practices and she didn't want to feel that way because she was supposed to be a leader on the team. She said the nightmares had happened before, but never during pre-season. It did not sound like she had been doing anything differently or that anything out of the ordinary had happened. The theme of her dreams revolved around getting injured. She saw herself in the middle of the volleyball court getting hurt badly but no one was able to get to her. She said she had tried doing some relaxation (breathing) and reading before going to bed. We discussed some other things that she could try such as relaxing and visualizing herself at a secure and peaceful place such as the beach. I also talked to the player about trying other activities before she went to bed, such as something social with non-teammates, something mildly active like crunches to create mild fatigue, and even drawing the dream on a piece of paper and then drawing the solution to the problem (art therapy; Naumburg, 1966). I told the player that she may want to talk to someone else in the counseling center also if the dreams continued. Since this type of issue could be outside of my competence, I wanted the player to know there were other options that she could pursue. I followed up with his player several times and within a few days she said the nightmares had ceased.

Session seven. Session seven occurred once again during a practice (August 30, 2005). During a conditioning session where several "stations" were set up, the head coach let me set up a station focused on mental skills. I had the players do a number of visualizations (e.g., seeing 10 perfect passes to the target, seeing 10 perfect serves to the target, and doing one complete point visualization where they served, came in and dug a ball, and hit a back row hit for a kill to win the match). Following the conditioning, the players did a serving and passing drill where they incorporated their pre-serve routine/target focus into the practice.

At the end of practice, the head coach wanted me to do some relaxation with the team because they had had a rough day with semester registration and many other things happening. I had the team do some relaxed breathing for about 10 minutes and then three full-body tense and relax repetitions to conclude the activity. It was becoming clear to me that from this day on I would have less time to work with the players. This was because pre-season was over, the season was about to begin, and classes were starting. From this point on, there was a longer period of time between sessions.

Between sessions seven and eight. Because a long period of time passed between sessions seven and eight, I wanted to provide a summary of my observations during this time. The time passed because the season had started and the team was traveling quite a bit. I continued to attend practices and home matches to show the team that I wanted to be involved and that I was there to provide support for them. I also traveled with the team to some away matches. The team had their first match on September 1, 2005 and I sat on the bench to be there in case the players had any questions for me. The team won the

match fairly easily but I felt that the team could still be more excited on the court when good things occurred and could come together in the middle more after both good and bad points.

The team had a home tournament on September 2-3, 2005. They won both games on September 2nd. I observed that one player needed to be reminded to relax because she gets too intense and is too hard on herself, one needed to have more confidence in what she was doing instead of worrying about making mistakes, and one needed to work on her serving confidence. The two matches on September 3rd were against more skilled teams who seemed more cohesive than our team. The male assistant coach gave the players a motivational talk before the first game but it did not seem like the team responded to it because it appeared that they were just going through the motions of warming-up and playing. One player did not play well as a defensive specialist so another player, who seemed to never want to let a ball hit the floor, replaced her. Throughout the tournament it seemed like the team was not playing cohesively but instead were playing tentatively. The coach summed up the tournament by saying that it was "like a roller coaster, up and down, peak and valley."

The next practice I attended was on September 7, 2005. I had been out of town but had talked to the coach via telephone. I found out that two of the freshmen had been caught drinking and were in trouble. The coach punished them by saying they were not a part of the team until future notice. This meant that they had to dress in a separate locker room, do their own laundry, run, and wear their practice shirts inside out because they could not wear the college name until the coach said they could. Interestingly, the rest of

the team showed an immense sign of support by turning all of their practice shirts inside out as well and running with the two players who were in trouble. During this practice, I tried to be motivational, positive, and talkative to set an example for the players. The male assistant tended to become frustrated and challenged the players in a negative manner. Some of them responded well to this whereas others did not. The team had a tournament coming up that weekend but I was not traveling with them. At this point, I felt like I needed to have a session to catch up with the players and ask what they needed now, what mental skills they had been using, and how they could motivate themselves. But, there was no time for this to occur. Therefore, I sent the players an electronic card via email that said, “I’m pulling for you” just to let the players know that I was thinking of them and wanted them to play well. I also reminded them that they could call or email me if they had any questions or wanted to discuss any of the mental skills they had learned.

The coach called me on the way home from the weekend of matches and told me that they won all four of their games. I attended practice on September 12, 2005 and noticed that there had been another line-up change, this time at the setter position. The coach said the team responded better to the other setter and she decided to make the switch. Today’s practice seemed somewhat unorganized. During the middle of the practice, the coach asked if I wanted to talk with the team at the end of practice and I said yes. Unfortunately, the drills took longer than expected and the coach forgot about the session so she let the team leave. After the team left, the coach realized the mental training session had slipped her mind and apologized to me. She promised to allow me

have a session two days later on September 14, 2005. I told the coach I understood and that since practice had run late I did not want to keep them even later because they may have resented me if I forced them to stay for a session.

Session eight. Session eight was on September 14, 2005. The players seemed frustrated because they felt like the practice had been boring and did not seem to be putting forth much effort. I talked for a few minutes about what had been going on and how everyone was feeling. The team basically said they were tired and felt like they never had a break. They said they did not understand why all the practices were lasting so long. I encouraged them to continue to use the relaxation techniques they had learned in order to relieve their stress. I reiterated that they should try to come to the middle more on the court in order to promote team unity and to increase the amount of fun they have during practice. The players said they thought they had been doing better with that, but from what I had observed, this was not apparent.

For the session today, I wanted to check in with the players and receive some feedback regarding the MST program thus far. Therefore, I gave each player a note card and asked her to respond to the following items:

1. Write 1-2 things you want to work on, mental and/or physical.
2. What is one thing you like so far about MST?
3. What is one thing you dislike so far about MST?
4. What mental techniques have you used if any? Do you think that they've helped you? (Put a + for yes or a – for no).
5. Rate your level of confidence from 1 (low) -10 (high) and fun from 1-10.

6. Are you scared/worried about making mistakes?

These questions stemmed from observations I had made during practices and competitions and served as a checkpoint for me to be sure I was addressing the needs of the players. The majority of the players said they were scared of making mistakes. Quite a few said they were very scared. I encouraged them to try to work on their play during practice time because there was less pressure on them during practice. Trying new techniques or becoming more confident during practice would hopefully transfer to competition situations. Most of them said they had been trying to use some of the mental skills I had taught them and they were either working, working and not working, or not working. The skills the players had tried included relaxation, a deep breath before serving, a pre-serve routine, knowing how to pick people up, a focus word, and visualization. It seemed like the focus word was the skill that received the most positive and the most negative ratings. Therefore, based on the conceptual framework, I reminded the players that they should utilize the skills that worked for them and to try a variety of different skills in order to figure out their personal preferences.

Between sessions eight and nine. I traveled with the team for the first time for games on September 15-16, 2005. I thought that the bus ride might have been a good time to talk with some of the players if they needed to discuss any issues. However, the bus was smaller than I expected and I ended up sitting with the male assistant coach. Therefore, I was unable to talk with players privately although I did not get the feeling that any of the players wanted to talk on the bus ride. On this trip, I noticed that the two assistant coaches seemed to disagree with some of the things the head coach was doing

and felt like this could cause problems in the future. In the first game of the weekend, the team lost a close five game match. One of the senior captains seemed to fall apart during the fifth game and it affected the rest of the team's play. The coach seemed to get upset with the players fairly quickly and challenged them in the huddle when she thought they were playing badly. The second game of the day was directly after the first and it was a positive game because the team was able to win a close five game match. The next day the team had to play a nationally ranked team. The male assistant coach tried to get the players ready with a pep talk. However, to me it seemed like he lost them because he talked for too long and tried to be too specific with advice that the players would not be able to remember during the match. The team played fairly well but lost the match. I did not feel like I did much during the weekend, but I thought the trip was a good experience that allowed me to build rapport, show the team that I supported them, and observe them competing.

On September 19, 2005, the assistant coaches ran practice because the head coach was unable to attend. The male assistant talked at the beginning and told the players that they were going to work hard today and that they needed to work hard if they expected to play well. The practice was more intense and seemed well-organized. It was beneficial that I was in attendance because one of the players became very upset and frustrated while learning new plays and I was able to talk to her and keep her positive and focused. After the practice, I gave each player a personal note card that provided them specific feedback based on what they had said during the last session so they could try some individualized MST recommendations. I was hoping that individualized

recommendations would encourage them to utilize the mental skills I was teaching more often.

I went to practice early on September 21, 2005 because one of the players had called and asked to meet with me. The player was dealing with family issues (i.e., being adopted) that were causing her to be unable to focus during volleyball. I talked with the player about how to focus and trying to use volleyball as a stress reliever. I recommended thinking of turning on and off a focus switch when the player entered the gym, scheduling her time to help her cope with stress, and letting her stress out on the ball. At the end of our meeting, I also told the player that she could go to the counseling center to talk to someone more qualified to deal with family issues if she continued to have problems.

The assistant coaches informed me that practice the day before had been horrible. The head coach was back today and I noticed that it seemed like she was left out of the practice because the assistant coaches were taking over. I was trying to be positive with the players and encouraged the coaches to put in a “come to the middle” play to encourage them to build cohesiveness. One of the senior captains was upset after practice today and was talking with the head coach while the male assistant talked with the rest of the team about giving 100% and talking more on the court. They had a tournament coming up that weekend and since I was not traveling I wished them good luck. I later sent the players an email wishing them good luck and encouraging them to have fun while playing.

Session nine. Session nine took place on September 26, 2005. The team had won four conference matches over the weekend and everyone had played at some point over the weekend. Practice was short and easy today and I noticed that this upset the assistant coaches since the upcoming weekend was going to include some very tough matches. I agreed with the head coach that an easy day was needed to recover from a long weekend of traveling and competing. Once again it seemed like there was a discrepancy between the head coach and the assistant coaches.

For this session, I first asked the team about the past weekend of competitive matches and what they had learned from it. They all said that one of the matches was great and it really seemed like they were playing together and having a ton of energy. I told them that would be a good match to try to remember and to use to get ready for future matches or as a successful imagery script. Next, I talked about the quote "Pressure is a thing you put on yourself" and how this was important to remember when they were playing. The fact that many of them said they were afraid of making mistakes in the previous session led me to address this issue. I talked about how the players could use the mental techniques of breathing, imagery, and focus cues to help them alleviate pressure and change their perception of the pressure. In addition, I encouraged them to use their positive self-talk to motivate themselves and diminish the pressure that they were feeling.

I also engaged the team in a communication activity where each player picked a partner and talked about ways to avoid frustration, since many of them had said that was what they wanted to work on. Also, the partners discussed how they needed to be accepting of mistakes and how they could encourage each other. I then brought them

back together as a group and had each pair shared the three things that they wrote down. I also talked about changing negatives into positives, and had each player write down some of the negative things they said to themselves and how they could change those into positive statements. Finally, I asked them to write down one goal for the next two days of practice and one goal for the competition the following weekend. I took these responses and put them on a handout to represent the "VB (Volleyball) POSITIVE TOOLBOX" (see Appendix H). The handout portrayed all of the positive statements the group had come up with, their personal negative comments changed into positive comments, and their personal practice and competition goals. The VB POSITIVE TOOLBOX served as an instrument to encourage positive team self-talk and to provide the players with positive statements they may not have thought of in the past. The coaches also received a copy of the VB POSITIVE TOOLBOX. I wanted to try to share as much information as possible with the coaches and thought that this handout was a good way to allow both the coaches and players to focus on being more positive during practices and games.

One player approached me after practice to talk about problems she was having with others' expectations. More specifically, she said she really worried about what others thought of her and about their expectations of her. She thought that the male assistant coach had expectations for her that she wasn't able to meet and she was really upset by some of his comments. She said it felt like she could not focus when she was passing because she was too worried that she would mess up and he would think that she was not trying. I talked to her about trying to just go back to basics and have fun with volleyball. I tried to boost her self-confidence and tell her that she was a good player. I

told her to try to let her passing come natural and just focus on getting behind the ball and passing it. I also talked about letting the weight fall off her shoulders and feeling lighter when she was playing. I also stressed the importance of having fun and enjoying volleyball because it was her last year. Finally, I suggested she do some imagery to see herself passing well and believe she was a capable passer.

Between sessions nine and ten. Practice on September 27th seemed slow, especially considering the upcoming weekend tournament. I noticed that the male assistant seemed to be getting more negative (both verbally and non-verbally) and the female assistant seemed to be quieter. Interestingly, after practice the head coach asked me how I felt the players were responding to the assistant coaches. I mentioned that it seemed like the two assistants have a constant negative banter back and forth about what was happening on the court and I felt like this was affecting the players, whether the coaches realized it or not. I said I did not think this team was motivated by negativity and told the head coach that I thought that she needed to outline the boundaries and duties she wanted each assistant to perform.

The last practice before the upcoming tournament (September 28, 2005) also seemed slow. The coach had let the freshman who was dealing with family issues go home early and miss practice today, which I thought was a good choice. One of the other freshmen mentioned that she was miserable here, did not like anything, and hated being so far away from home. These feelings seemed to be affecting her performance as well as her attitude. It seemed like this was the mid-point of the season and many of the players were struggling to stay motivated. I traveled with the team the next day and tried to

maintain a positive attitude in hopes that it would carry over to the players. The travel itinerary included a long drive to the airport, a flight, and another drive to the hotel so we were all exhausted from traveling.

Session ten. Session 10 occurred on September 30, 2005 after two very bad road matches during the tournament. The team had allowed the first match to affect their play in the second match. When I spoke with the head coach, I could tell the coach was at a loss as to what to do and was very frustrated. When the team returned to the hotel, the head coach asked me to have a meeting with them. I met with the team in the coach's hotel room and I asked them to talk about what they thought was going on. One player said that someone told her that another player said something between games that made her so mad she could not play. The other player immediately started crying and said she had never said that. I said it was not important who said what but that it was good that the first player shared it openly because if things like that are not dealt with they can pull a team apart. We worked through these emotions as a group and realized that the team needed to be more supportive of each other on the court. Because the team seemed to be playing as individuals rather than as a team, I talked about the team coming together and helping each other, slapping hands with everyone when a player comes off the court, having everyone participating in cheers, having fun, practicing like they wanted to play, just playing, starting over, playing as "we," and being engaged in the process of playing good volleyball. I talked with the team about coming to the middle and taking any bad plays and symbolically "throwing them in the trash can" in the middle of the court. This session was a time when I was not prepared and had to be flexible to adapt to the context

of the situation. Therefore, I had them all go around and make an "I…" statement and then a "We…" statement concerning the events of that day. One of the captains said she had been taken out of the match and that they needed to be a team. The other captain said they just needed to play and stop worrying about everything else. A few players said off-court issues were affecting them on the court. One player was confused because different coaches were telling her different things to do. I also asked the players what they would want me to recommend to the coaches that could help them as a team. The players said they wanted the head coach to focus on more technical talk and less on emotional talk. They said they needed to hear the female assistant's voice be louder because she is positive and fun. Finally, they said they hear and notice the body language of the male assistant coach more than he thinks (e.g., saying negative things, cursing, throwing hands in the air in disgust) and would rather him instruct them and try to not show his negative feelings so much. The session went well but may have been too long because each athlete talked quite a bit during the "I, We" activity. Looking back, I thought that this might have been one of the better sessions because the team was very engaged and open during the activity and then utilized what they had learned the night before in the games the next day. I was impressed by the camaraderie the team showed the next day, even hearing one player tell the others to "throw it in the trash can" after a mistake. In addition, the level of play was elevated and the coach was appreciative of this.

Between sessions ten and eleven. A long time passed between sessions ten and eleven. The team was in the heart of the season and was traveling quite a bit. I still attended many practices and matches but was unable to have MST sessions because of

time constraints. I recorded six pages of typed notes between sessions ten and eleven, and this section highlights the important events I observed during this time. I traveled with the team to another tournament on October 6-8, 2005. On this trip (October 7, 2005), the team completed the mid-season questionnaires. The first night, the male assistant said the captains talked to him about how there was not enough trust on the team and that everyone did not trust each other to make a play. After one of the games during this tournament, the team was talking in the locker room after a loss and the senior captain, who seemed like she was in a funk on the court, was very upset. She said that she did not like the sport anymore, it was not any fun, and that she wished everyone would leave her alone and stop picking on her. The other senior captain said she did not know what to say or do to motivate her teammates in the huddle and that she felt like the team just stared at her with blank looks. The seniors' perception was that they had all the pressure on them and had to do everything; they felt that they were not receiving any help from the rest of the team. The coach finally said they needed to stop "acting like girls" and just play the game. One of the setters summed it up by saying they needed to stop talking about it and just step out on the court and do it. In addition, more line-up changes occurred over this weekend, which caused added stress for many of the players.

The male assistant ran practice on October 10, 2005. He had been trying to be more positive since the consultant had told him the team's recommendation after session 10. The practice was very energized and focused and the team seemed to enjoy working hard. The assistant coach asked if the trust issues from the past weekend were resolved

and the players said that they were and that they did not need to talk about it anymore. I was skeptical, but knew I had to trust the players.

The team lost a match on October 12, 2005 to a nationally ranked team. The coach decided to start the freshman setter, which was a surprise to the team. I noticed that the team just did not have the all out desire to get every ball no matter what. At the next day's practice, I mentioned to the coach that she might want to have a consequence when players did not show effort or desire to get the ball. This idea stemmed from the fact that the players repeatedly said they disliked boring or slow practices or drills. The coach implemented this idea and the energy of the practice increased and the players seemed like they were working much harder. The team won two home conference matches on October 14, 2005. The team played well and seemed to be confident. One of the injured players mentioned to me that she saw what she needed to do while she was sitting out and felt like she was learning quite a bit while watching. I commented on how well the team played when they were confident and relaxed. One of the player's fathers (the one who had talked to me about being adopted) came up to me after the game and said he was glad that I was with the team and that it was nice that I was there for the players. I noted that I felt like the team was on an upswing at that point, had gotten past the drama, and that MST could really have an impact now.

Unfortunately, the team had three home conference matches on October 15, 2005 and during the first it seemed like the players were not ready to play and that the other team was very prepared. The team started off slow and then when the game got close I noticed the players tighten up and start playing as individuals rather than as a team. I

recall thinking, “Oh no, this can’t happen again.” One of the senior captains just seemed to be yelling at her teammates from across the court and I realized that this was not helping at all. I said something to the player on the sideline about trying to be positive and bringing the team together, but by this time it was too late. The team self-destructed during this match and this ended up being the only conference match they lost the entire season. The team won the other two games but it seemed like the drama on the team had reappeared and that the coaches seemed to be having communication problems. Needless to say, a few days earlier I had felt like the team was ready to learn new mental skills or reintegrate the ones they already knew, but after these games I was not sure.

I again noticed that the players looked like they were not having fun. I tried to be available, remained positive, and helped the freshman setter work on being more outspoken on the court. The team was traveling again the next weekend and I was not going. So, I made a handout that was a review of the mental skills they had already learned (see Appendix I). I hoped that some of the players who wanted to would be able to refocus on using mental skills. I talked to the coach after the tournament and found out that the team won three matches and lost one. The coach was excited because the players seemed like they were having fun playing, had stepped it up during a close match, and had focused well. The coach had told them to focus on three points at a time and not worry about anything else, which had helped them focus on the process. I was out of town for a conference so I missed some practices, but I sent the team an email reminding them to focus on making the last two weeks of the season fun and to work on utilizing the mental skills they had learned.

The next practice I attended was on October 31, 2005. Since it was a holiday (Halloween), I brought flowers for the head coach and female assistant coach and candy for the team and male assistant coach. When I got to practice, the head coach confided that she was very frustrated with the female assistant because she was not taking her position seriously and was not respecting the head coach. The head coach then allowed the assistant coaches to run practice today but they were not prepared for this and seemed frustrated. In the huddle after practice, I encouraged the players to try some imagery that night to visualize themselves being successful and performing well. Since a long period of time had passed since the last MST session, I asked the coach if I could have a short session with the team before the conference tournament and the coach agreed to this.

Session eleven. Session 11 was on November 3, 2005. In the middle of practice, coach asked the team sit in the bleachers and invited me to take some time with them. First, I talked about focus and focusing intently on the ball for just 30 seconds. I talked to them about keeping their focus, thinking only of the ball, not letting anything distract them, and staying in the moment. After that I talked about how long they needed to focus during a match and really how short of a time that was. In essence, they had to focus in short bursts during each point and then relax between points. Next, I had one of the players volunteer to help me demonstrate the problem of holding on to bad points, which they had done in the past. I had the player catch one ball, then two, then three, then four, until she finally dropped them. I told them this was what happened when they were unable to let things go. I reminded them to use the symbolic trash can to deposit their bad plays and then compensate, adjust, and move on to the next point and react to the next

ball. Finally, I talked about the saying, “Think how good it’s gonna feel,” which was a theme sport psychology consultant Ken Ravizza utilized with the Cal-State Fullerton baseball team that won the 2004 NCAA Championships (Ravizza, 2005). This phrase was designed to help them picture themselves actually winning the upcoming conference tournament and holding the trophy. I encouraged them to focus on how everything they had been through, all the hard work, and all the team issues were not going to matter when they experienced the feeling of being on top in the end.

Between sessions eleven and twelve. The team won the conference tournament and played a very good final match, coming back from a game down. I even heard one of the players use the phrase, “Think how good it’s gonna feel” in the middle of the match. The head coach was very emotional when they won and everyone was excited. I was impressed that the team had pulled it out because, based on everything that had happened previously in the season, the team could have fallen apart but they stayed strong and fought back well as a team. On the way back to campus, the team stopped for dinner and I learned that two of the freshmen felt left out from the rest of the team and that one was considering transferring. Unfortunately, their conference championship did not earn the team an automatic bid to the NCAA tournament and they learned that they had not received an at-large bid either.

Session twelve. Session 12 occurred on November 10, 2005. This was a wrap-up session for the purpose of discussing the season and having the players complete the post-season questionnaires. It appeared to me that some of the players were relieved to bring their roller coaster season to an end. They were unusually quiet during this meeting.

During the session, I asked them to talk about things they liked and disliked about the MST program, and how it might be improved in order to help them better. In addition, the players had the opportunity to provide honest feedback on the Mental Training Consultant Evaluation Form (Partington & Orlick, 1987) since this questionnaire was anonymous.

It was sad for me to see my experience with this team come to an end because I felt I had established close relationships with most members of the team. Many of them hugged me as they left the gym after completing the surveys. However, I had mixed emotions about how successful I had been in implementing the MST program. Some sessions felt successful (e.g., team building, releasing mistakes) whereas others did not feel successful (e.g., goal setting, energy breathing). The current study was definitely a learning experience for me and made me realize what a challenge it is to consult with an intact team for an entire season.

Post-season banquet. The head coach invited me to the team banquet on January 22, 2006. It was a nice affair and emotionally touching. One of the player's fathers had put together a slide show of moments that occurred throughout the season. The head coach and the team thanked me for my help throughout the season and presented me with gift certificates to two restaurants. I told the team and the coach that I sincerely appreciated the opportunity to work with them and to feel free to contact me at any time in the future.

Part IV: Results

In this section, both quantitative and qualitative results are presented. The topics include: (a) questionnaire descriptive statistics, (b) questionnaire reliability alphas, (c) MANOVA results, (d) performance results, (e) consultant effectiveness, (f) qualitative results, and (g) personal observations. Anderson et al. (2002) contended that evaluating applied sport psychology research from a case study perspective could provide evidence as to whether an intervention was associated with improvements in real-world settings. Results from a case study are strengthened if multiple dependent variables are evaluated and both quantitative and qualitative data are collected. Assessing the intervention from a holistic framework allows the researcher to document program effectiveness and provide substantive feedback about possible program improvements. In the current intervention study multiple dependent variables were assessed, both quantitative and qualitative data were included, and a combined humanistic/cognitive-behavioral framework was used to document the impact of a season-long MST program on a variety of performance and process measures.

Descriptive Statistics and Reliability

Table 1 contains the means and standard deviations for the pre-season, mid-season, post-season, and overall ratings of players on each of the questionnaires they completed. Inspection of these descriptive statistics indicated that overall anxiety (SAS) increased, overall confidence (TSCI) increased, mental skills usage (ACSI and TOPS) decreased from pre-season at mid-season but then increased from mid-season to post-season, and overall life quality (ALQS) decreased slightly.

Table 1. Pre-Season, Mid-Season, and Post-Season Questionnaire Descriptive Statistics

	Pre-Season	Mid-Season	Post-Season	Overall
	Mean (SD)	*Mean (SD)*	*Mean (SD)*	*Mean (SD)*
SAS	2.03 (.39)	2.05 (.56)	2.11 (.50)	2.06 (.45)
TSCI	5.81 (1.04)	6.12 (.99)	6.47 (1.35)	6.14 (1.00)
ACSI	1.70 (.32)	1.56 (.48)	1.67 (.40)	1.65 (.37)
TOPS	3.17 (.34)	2.99 (.28)	3.05 (.30)	3.07 (.36)
ALQS	5.50 (.54)	5.42 (.62)	5.40 (.63)	5.44 (.53)

Table 2 shows the Cronbach's (1951) alpha coefficients for the pre-season, mid-season, post-season, and overall ratings on each questionnaire. The overall alpha values ranged from 0.80 to 0.96, indicating that scale reliability was acceptable (Nunnally & Bernstein, 1994).

MANOVA Results

A repeated measures MANOVA revealed no significant differences over time for players' responses on any of the five questionnaires (F [4,10] = 2.25, $p > .05$). The only difference that approached significance was for confidence, which showed a marginal increase ($p = .05$).

In order to determine whether players' ratings differed based on the extent to which they practiced and used their mental skills, ACSI and TOPS scores were used to assign players to high and low usage groups. This was based on whether or not their ratings fell above or below the 50th percentile for the ACSI and TOPS. Six of the players overlapped and were in both the high ACSI and TOPS mental skills usage groups. The last player in the high ACSI and TOPS mental skills usage groups was a different player for the two questionnaires. Five non-freshmen (including both seniors) and two freshmen were in the high usage group. Table 3 shows the mean scores for high and low mental skills usage groups (for both the ACSI and TOPS groupings) on the SAS and TSCI measures at pre-season, mid-season, and post-season. Subsequent analyses revealed a significant difference between the high ($n = 7$) and low ($n = 7$) ACSI mental skills usage groups for both anxiety (F [1,12] = 5.93, $p < .05$) and confidence (F [1,12] = 11.02, $p < .05$). There was also a marginally significant effect for anxiety (F [1,12] = 4.64, $p = .05$)

Table 2. Pre-Season, Mid-Season, and Post-Season Questionnaire Reliability

	Pre-Season	Mid-Season	Post-Season	Overall
SAS	.86	.93	.90	.90
TSCI	.94	.96	.98	.96
ACSI	.84	.84	.84	.84
TOPS	.83	.74	.89	.82
ALQS	.79	.83	.79	.80

Table 3. Descriptive Statistics for High and Low Usage Players on the SAS and TSCI

	Usage	Pre-Season *Mean (SD)*	Mid-Season *Mean (SD)*	Post-Season *Mean (SD)*
SAS	Low ACSI	2.20 (.36)	2.36 (.46)	2.37 (.48)
	High ACSI	1.85 (.35)	1.73 (.48)	1.85 (.40)
	Low TOPS	2.22 (.36)	2.32 (.48)	2.34 (.47)
	High TOPS	1.84 (.34)	1.78 (.52)	1.88 (.45)
TSCI	Low ACSI	5.29 (.60)	5.45 (.43)	5.67 (1.39)
	High ACSI	6.34 (1.16)	6.79 (.95)	7.27 (.74)
	Low TOPS	5.18 (.65)	5.46 (.42)	5.77 (1.38)
	High TOPS	6.45 (1.00)	6.78 (.97)	7.18 (.96)

and a significant difference for confidence (F [1,12] = 11.02, $p < .05$) between high (n = 7) and low (n = 7) TOPS mental skills usage groups. Athletes who reported high mental skills usage had significantly lower anxiety and significantly higher confidence than athletes who reported low mental skills usage. Figure 2 shows the anxiety levels (SAS scores) of the high and low mental skills usage groups over the season. Figure 3 shows the confidence levels (TSCI scores) of the high and low mental skills usage groups over the season. Athletes who used mental skills to a greater extent from the pre-season and continued to use mental skills throughout the season had less anxiety and more confidence than athletes who did not use mental skills as often.

In order to determine whether differences existed between returning players and first year players, analyses of the scores for freshmen (n = 7) and non-freshmen (n = 7) were conducted. There was a significant interaction between class and time for anxiety scores (F [2,11] = 7.78, $p < .05$). While no difference in anxiety was found at pre-season, over the course of the season the anxiety of freshmen increased and the anxiety of non-freshmen decreased (see Figure 4). A post-hoc analysis revealed that there was a significant difference between the anxiety of freshmen and non-freshmen at the post-season. There was also a significant difference between groups for confidence (F [1,12] = 7.10, $p < .05$) at the pre-season and post-season, with non-freshmen having higher confidence (see Figure 5). There was also a significant difference between groups for life quality throughout the season (F [1, 12] = 11.12, $p < .05$). Non-freshmen had significantly higher life quality than freshmen (see Figure 6).

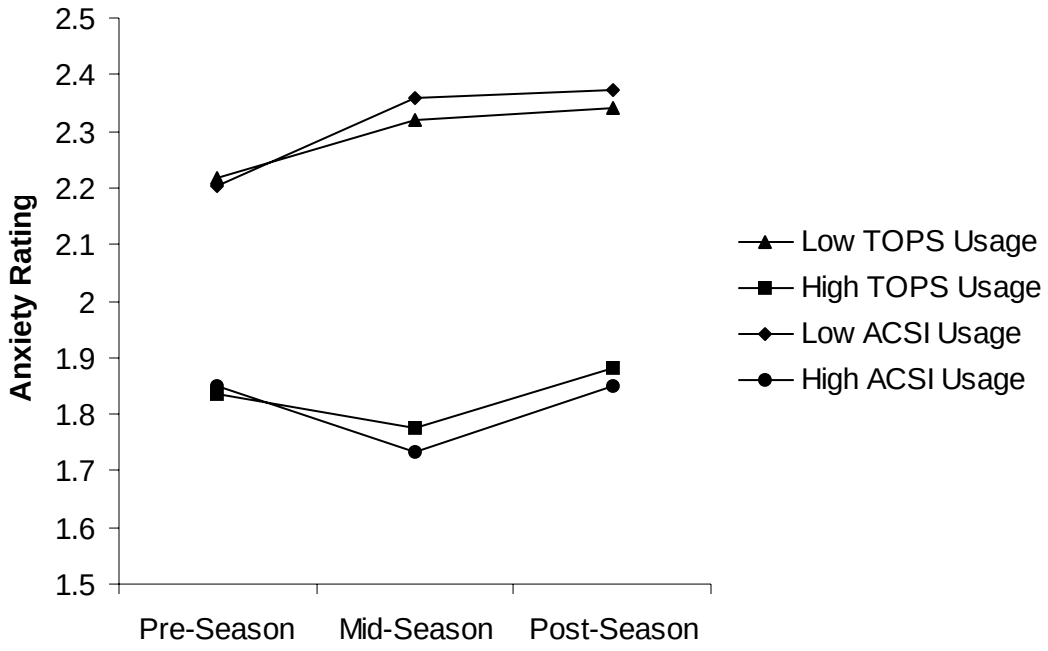

Figure 2. Anxiety (SAS) Scores for High and Low Mental Skills Usage Groups.

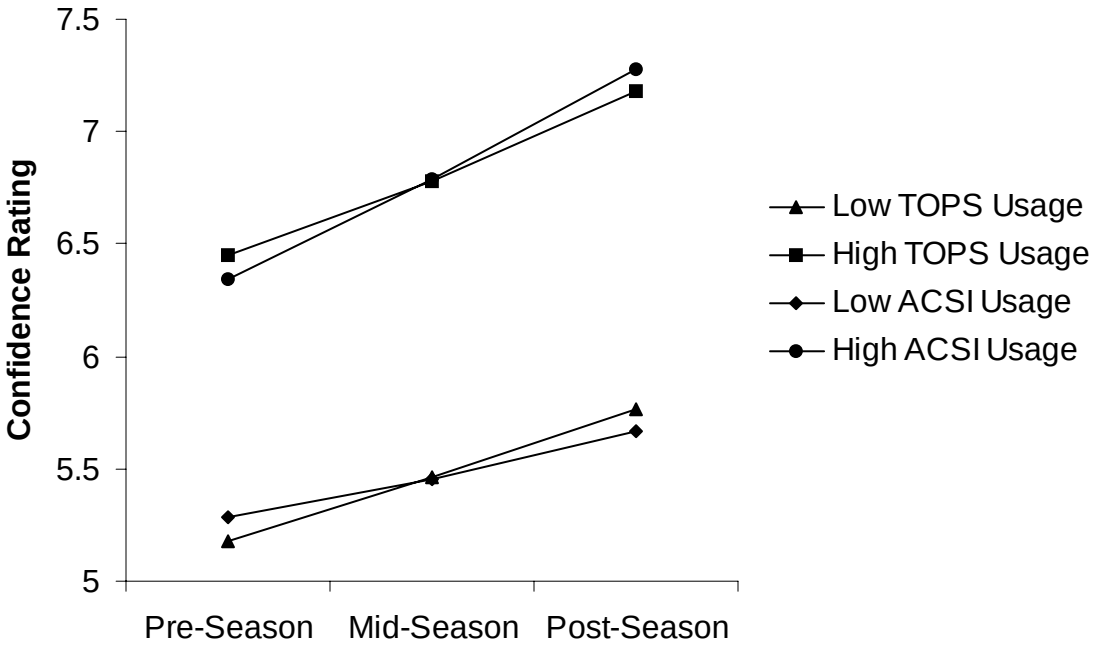

Figure 3. Confidence (TSCI) Scores for High and Low Mental Skills Usage Groups.

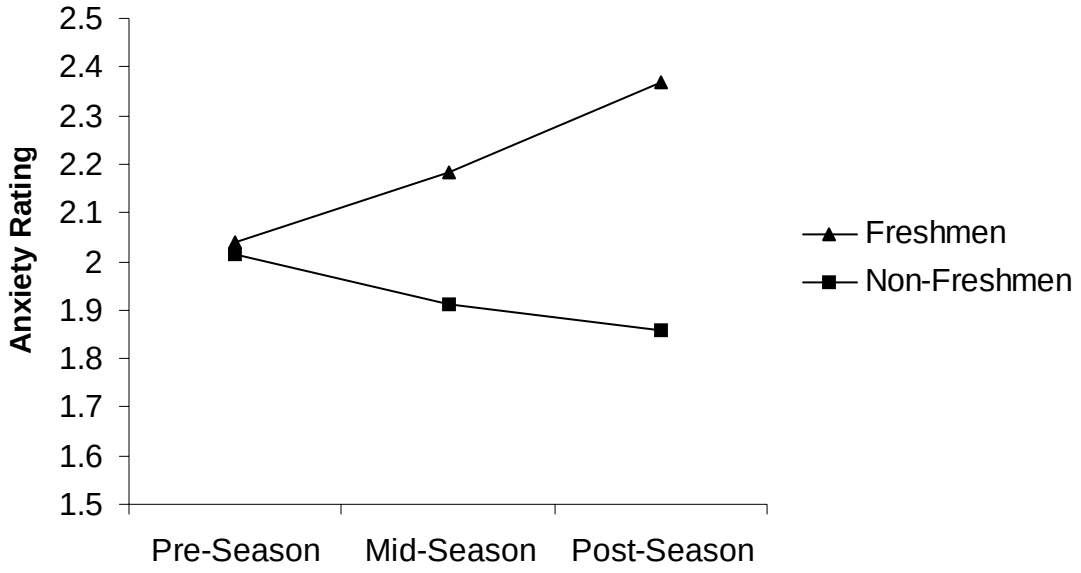

Figure 4. Anxiety (SAS) Scores for Freshmen and Non-Freshmen.

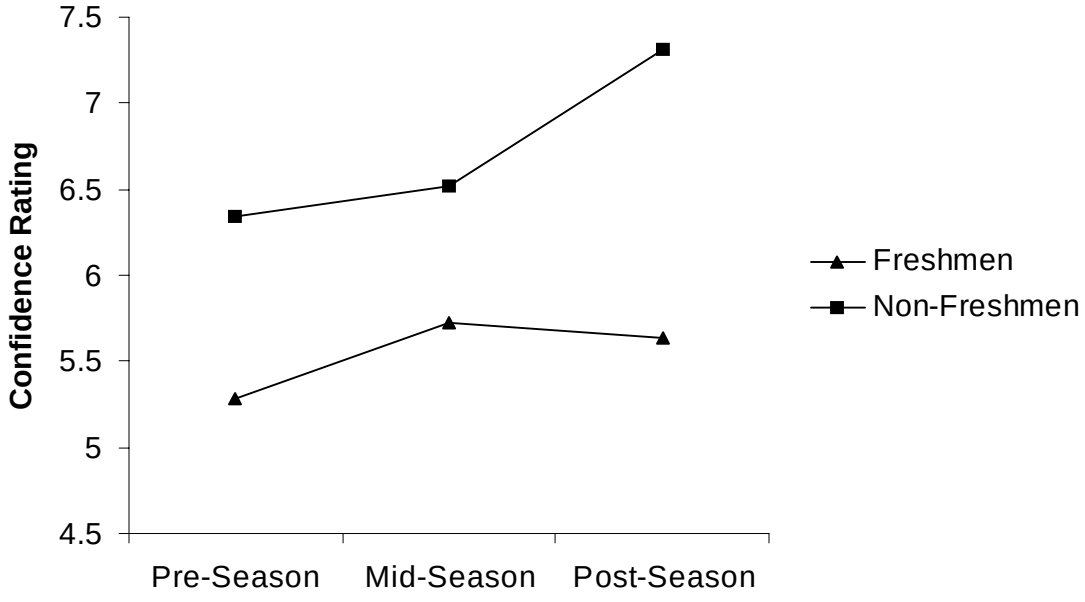

Figure 5. Confidence (TSCI) Scores for Freshmen and Non-Freshmen.

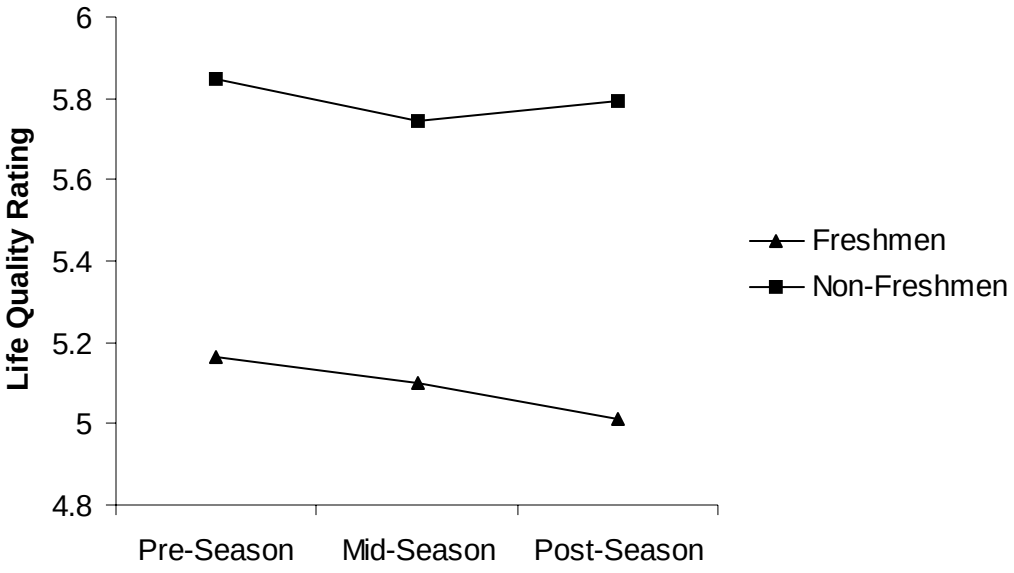

Figure 6. Life quality (ALQS) Scores for Freshmen and Non-Freshmen.

Performance Results

Inspection of players' performance revealed that the two setters in the high mental skills usage group had a higher assists/game average (M = 5.76) than the setter in the low mental skills usage group (M = 5.03). The setters in the high mental skills usage group also had a higher kill percentage (M = .23) than the setter in the low mental skills usage group (M = .17). The two setters in the high usage group were both sophomores, whereas the setter in the low usage group was a freshman. The hitters in the high mental skills usage group (n = 3) had a higher kills/game average (M = 2.8 compared to M = 1.48) and average kill percentage (M = .23 compared to M = .10) than the hitters in the low mental skills usage group (n = 3). The servers in the high mental skills usage group (n = 4) had a higher ace/game average (M = .54) than the players who served in the low mental skills usage group (n = 4; M = .36). The back row players in the high (n = 4) mental skills usage group had a slightly higher digs/game average (M = 3.29) than back row players in the low mental skills usage group (n = 4; M = 3.01). The blockers in the low mental skills usage group (n = 3) had higher blocks/game average (M = .67) than the blockers in the high mental skills usage group (n = 3; M = .39). Taken together then, these results suggest that players in the high mental skills usage group had better overall performance, aside from blocking, than players in the low mental skills usage group. Interestingly, a one-way ANOVA examining the amount of playing time for the high and low mental skills usage groups and for the non-freshmen and freshmen groups revealed no significant differences (p > .05) for either usage or class.

Consultant Effectiveness

Players' ratings of how effective the mental training consultant was on them averaged +2.7 while their ratings of consultant effectiveness on the team averaged +2.3 (on a scale from -5 to +5). The consultant received an average overall rating of 9.1 (out of a possible 10) on ten questions relating to consultant characteristics. The head coach rated the consultant's effectiveness on her as a +2 and on the team as a +4. The head coach's average overall rating of consultant characteristics was a 9.4.

Qualitative Results

The Mental Training Consultant Evaluation Form (Partington & Orlick, 1987) included open-ended items that asked players to describe what they liked the most and least about the MST program and to provide any recommendations they might have. Overall, the participants reported that the techniques they liked the most were relaxation (n = 9), visualization (n = 5), goal setting (n = 2), focus word (n = 2), pre-serve routine (n = 1), self-talk (n = 1), and the symbolic trash can (n = 1). The techniques they liked the least were self-talk (n = 2), visualization (n = 1), energy breathing (n = 1), and the pre-serve routine (n = 1). This feedback was somewhat conflicting because some skills were reported as both liked and disliked.

Player recommendations to improve the MST program included incorporating MST on a more consistent basis throughout the season, keeping a steady rate of MST because it did not help after a long break, having one-on-one sessions and/or talking, having more team building, and using MST only during the pre-season and/or for one week long session and not all throughout the season. Criticisms included the consultant

being too connected with volleyball (i.e., having played and coached previously), not wanting to change things, and the feeling that there was not a sufficient connection between talking and executing the mental skills. General comments included: “MST helped me become a better leader and more positive court presence,” “Preseason MST was the most effective,” “I liked the relaxation sessions after practice,” “It helped in the beginning because I was unsure of myself,” “The consultant effectively applied MST to the game of volleyball,” “I liked the consultant’s enthusiasm,” and “MST helped me get to know my team better.”

The head coach said she tried not to involve herself with the team MST sessions even though the consultant told her she could be involved. The coach said she liked the tangible results she saw (e.g., illustrated goals, improved team communication and play after the hotel room session), how she and the consultant worked together, having the consultant available to refer the players to, and emphasizing the importance of mental training. The coach said she disliked the lack of time the consultant and she had to work together and wished that she and the consultant had more time to talk and prepare before practices. Overall, the coach was very supportive of the MST consultant throughout the entire process and relied on her for advice and feedback.

As previously mentioned, the mental training consultant kept detailed notes after each session, observation, practice, match, and interaction with the coach or team. In total, 25 pages of single-spaced typed notes were accumulated. The notes served as a reference point for shaping the MST program, allowing the consultant to become more familiar with the team. In summary, the consultant felt that the MST program was loaded

more heavily toward the pre-season and early in the season than later in the season. Once games began and the team was traveling quite a bit, MST sessions were very sporadic or nonexistent. While one brief session was conducted near the end of the season (just before the conference tournament), the majority of the sessions occurred early in the season.

Because of the lack of sessions in the middle of the season, the consultant tried to stay involved by being around at practices, traveling with the team, and providing handouts or emails as reminders of the mental skills that she had discussed with the team. For example, before one road trip, the consultant talked briefly with the team at the end of practice and gave each player a sheet that reiterated certain mental skills (i.e., relaxation, imagery/visualization, goals, and confidence). Some other challenges noted by the consultant included the lack of consistency with the MST session scheduling throughout the season, the fact that team dynamics emerged as a need and were addressed based on the conceptual framework, the inability to do more one-on-one work with players, and an ability to address the numerous team issues that arose and caused stress on the team (playing time, coaches, boring practices, lack of a consistent line-up, wins and losses).

The qualitative data allowed the consultant to recognize issues that may not have been exposed via quantitative questionnaires. Examples included team dynamics issues, coach-player communication issues, numerous changes in the match line-ups, the loss of many seniors and team captains the previous year, the lack of leadership during the current year, and the feeling of some players that they were being left out of the core

group on the team. Some players voiced disagreement with some of the line-up changes and did not understand the coach's reasoning for some of the variations. In addition, the assistant coach was the older sister of a player and seemed to have an insider relationship with the team and knew many of the team dynamic problems that were occurring. The head coach also mentioned that she felt like the two assistant coaches seemed to work against her at times and she was having trouble keeping them in line. The consultant had a good relationship with both assistant coaches but could also tell that they had bonded and seemed to leave the head coach and the consultant out of some "insider" conversations. On occasion, both assistants asked the consultant for advice on certain issues or the consultant was able to pass along advice she had learned from the players that could help the assistants become better communicators. All in all, the players were fairly close and supportive of each other, but there were a few who felt left out or had trouble accepting their role on the team. A lack of leadership seemed to affect the team and trying to become leaders caused distress for the two senior captains. Finally, the head coach was very open to the knowledge and suggestions of the mental training consultant, which allowed the consultant to have an in-depth knowledge of the workings of the team and to address the concerns of both the coaches and the players.

Personal Observations

It should be noted that I had an extensive background in volleyball, both having played collegiately and coached at summer camps and at the high school level. Thus, to promote rapport, I spent a good deal of time actually assisting during practice (tossing balls during drills, encouraging the players) throughout the season. I was also

occasionally asked to fill in as a player (approximately four times) during a practice game so the “second team” would have enough players. I used this opportunity to work on mental skills with the team that I was playing with by encouraging them to come to the middle and cheer and by using positive statements to keep the players motivated. While my purpose for doing this was to build relationships with the players, it may be that I came to be perceived more like an assistant coach than a mental trainer. I was able to sit on the bench during games and travel with the team when my schedule permitted, which allowed the development of a closer relationship with players, but this also may have caused the team to view me as an assistant coach. Many times throughout the season (i.e., during practices or matches) the players asked me questions about their mental game. Thus, being available at those times was beneficial. I also offered to meet with any of the players for individual sessions but this occurred three times and the sessions were focused more on life issues than performance issues. Since the college was 30 minutes away from my home, this may have contributed to the low number of individual sessions. However, the players were given my cell phone number and email address and told that they could call or email me at any time. One player sent several emails to me with questions/ concerns about her play.

Overall, immersing myself within the team was very rewarding and allowed me to utilize the humanistic component of my conceptual framework. This would not have been possible without the support of the coach and the acceptance of the players. Although there were various challenges, there were also successes throughout the season. This

made me realize that the time and energy was worth it in the end, especially with such a young team.

Part V: Discussion, Recommendations, and Conclusions

The purpose of this study was to examine the impact of a season-long MST program informed by humanism and comprised of cognitive-behavioral methods on the anxiety, confidence, mental skills usage, quality of life, and performance of a team of collegiate volleyball players. In addition, an attempt was made to develop a comprehensive MST package that could be implemented with other volleyball teams.

Overall, the MST program incorporated components of humanism and cognitive-behaviorism. Forming a collaborative and trusting relationship between the MST consultant and the players served as a basis for implementing mental training techniques. Building a collaborative relationship and working alliance prior to and while implementing MST programs is advised for any MST consultant working with athletes (Tod & Andersen, 2005). The team was involved in deciding what MST techniques were taught and the way the MST program was shaped. As Orlick (1989) has noted, it is important to listen to what the athletes say their needs are in order to create a MST program that is relevant to them. The consultant should resist preconceived notions about athletes' needs and avoid the adoption of a rehearsed or ordered approach to delivering mental skills (Taylor, 1995). Each situation is different and situations change over time, so the consultant must be willing to adapt and be flexible when working with a team. Based on the athletes' choices and the situations that evolved throughout the season, the mental skills the consultant in the present study addressed included relaxation, team building, imagery/visualization, goal setting, pre-serve routine, pre-performance routine, anxiety management, focus words, confidence building, cognitive restructuring (positive

self-talk), refocusing after mistakes, and defining and accepting roles on the team. The players reported that they enjoyed the relaxation and visualization the most.

The overall results from the questionnaires revealed no changes in any of the measures over the season, although a marginally significant increase in confidence was obtained. Contradictory to Savoy and Beitel's (1997) findings that only basketball players in a group/individualized MST program showed increased confidence, the players in the current group MST program showed increased confidence. This concurs with Daw and Burton (1994) who found an increase in self-confidence for tennis players who received a MST program compared to tennis players who did not receive the program. The small sample size in the current study could have contributed to the lack of significant findings. Another explanation for the possible lack of change across time may be the lack of consistency relating to when the sessions occurred during the MST program. Most of the sessions took place during the pre-season and early season and only a few sessions occurred in the middle or latter parts of the season. The time the consultant is able to spend, with both the team and individuals, is an issue that must be considered when conducting a team MST program (McCann, 2005; Weinberg & Williams, 2001). A more consistent schedule and greater visibility of the MST program throughout the season may have been more beneficial for this group of volleyball players (i.e., led to greater usage of mental skills), a point that many of them mentioned on the post-season evaluation form.

Usage of mental skills emerged as an important factor related to the anxiety, confidence, and performance of athletes in the present study. A mental training consultant can teach athletes mental skills but if the athletes do not choose to utilize and practice the

skills, then the skills are not going to be very helpful (Weinberg & Williams, 2001). Savoy and Beitel (1996) recommend encouraging athletes to use the mental skills they were taught outside of practice and mental training sessions. Although this notion can be encouraged, it cannot be enforced. The consultant continually reminded the players to use their mental skills, but it is obvious based on the questionnaire results that some players chose not to follow this advice.

In the current study, the volleyball players who reported a high usage of mental skills at pre-season, mid-season, and post-season had significantly lower anxiety and significantly higher confidence than those reporting low usage. This is consistent with previous research that showed decreased anxiety (Lanning & Hisanaga, 1983; Savoy & Beitel, 1997) and increased confidence (Daw & Burton, 1994) after the implementation of a MST program. High usage players also performed better on various performance measures (i.e., serving, setting, defense, hitting) than low usage players in the current study. This finding is consistent with previous studies that showed improved performance after the implementation of a MST program (Daw & Burton, 1994; Lanning & Hisanaga, 1983; Savoy & Beitel, 1996; Schoenfelt & Usry, 2005; Weinberg et al., 1994). Overall, these findings were consistent with previous research in applied sport psychology showing that the systematic practice of mental skills was associated with decreased anxiety, increased confidence, and improved performance (Behncke, 2004; Vealey, 1994; Weinberg & Comar, 1994; Weinberg & Williams, 2001). It should be noted that no difference was found between playing time for high and low mental skills usage players

in the current study so these differences were not due to discrepancies in the opportunity to play.

The results of the current study are consistent with Schoenfelt and Usry (2005) who found that volleyball players who reported greater usage of imagery and a pre-serve routine had better service performance and decreased competitive anxiety than volleyball players who reported low usage of imagery and a pre-serve routine. Previous research has also found that swimmers in a high mental skills usage group that emphasized relaxation training interpreted pre-competition anxiety symptoms as more facilitative and had higher self-confidence than swimmers in the low mental skills usage group (Fletcher & Hanton, 2001). Additionally, swimmers in the high mental skills usage group that emphasized self-talk and imagery training had higher self-confidence than those swimmers in the low usage group. Daw and Burton (1994) also noted that the benefits of a MST program depended on each player's personal commitment to mental skills training. In addition, Burton (1989) observed that goal setting skill was a mediator for successful goal setting. Frey et al. (2003) discovered strong relationships between the usage of mental skills and perception of success in both practice and competitive environments in college baseball and softball players. Thus, it seems that much of a mental training consultant's success depends on the commitment of coaches and athletes to using the skills they are taught and acting upon those skills successfully (Orlick, 1989).

Academic class also emerged as an important factor related to anxiety, confidence, and life quality in the present study. The transition to college has been shown to be a stressful time for student-athletes (Giacobbi, Lynn, Wetherington, Jenkins,

Bodendorf, & Langley, 2004) and this can influence their anxiety, confidence, and life quality. In the present study, there was a significant class by time interaction for anxiety. Although the anxiety of freshmen and non-freshmen was similar during the pre-season assessment, the anxiety of freshmen increased over the season whereas the anxiety of the non-freshmen (sophomores and seniors) decreased. It should be noted that only two of the seven high mental skills usage players were freshmen, while both seniors were in the high mental skills usage group. Overall, the confidence of all players increased throughout the season, but the confidence of the non-freshmen was significantly higher than the confidence of the freshmen for the duration of the season. In addition, the life quality of the non-freshmen was significantly greater than the life quality of the freshmen over the entire season. Again, there was no significant difference in playing time between the freshmen and non-freshmen. Therefore, it may be even more important to focus on teaching mental skills to decrease anxiety for freshmen athletes than for those who are more experienced with collegiate competition.

As mentioned previously, the biggest challenge to the consultant in implementing the current MST program was keeping a consistent schedule of mental training, particularly once the season began. That this happened even though the coach supported the use of mental skills and was whole-heartedly behind the program suggests that a season-long MST program would be even more of a challenge if the coach did not support the MST program (Weinberg & Williams, 2001). Daw and Burton (1994) noted that even though a coach may have the best of intentions and fully support the MST program, actual commitment sometimes does not live up to desired commitment because

of extraneous demands such as time, travel, and competition. One way the consultant attempted to stay in touch with the athletes was via handouts (for an example see Appendix I) and emails reminding players of topics that had been discussed in previous sessions. The consultant also gave the athletes her cell phone number, but few athletes ever phoned her. A mental training consultant must remain flexible in deciding the timing and content of intervention techniques based on the requests and needs of coaches and players, especially when the MST schedule becomes inconsistent. When working in applied settings, it is imperative that mental training consultants, coaches, and athletes work together to create the best possible program and outcome for the team (Savoy & Beitel, 1996).

A second challenge was gaining access to individual athletes for one-on-one sessions. Although the consultant offered one-on-one sessions, only three athletes ever requested one and two of these sessions focused more on life-related topics than performance enhancement. Interestingly, a few athletes reported that they would have liked to have had more one-on-one time. It may be that such time needed to be scheduled into the program rather than only offered on a discretionary basis. Savoy and Beitel (1997) found that both group and group/individualized MST resulted in a steady decrease in basketball pre-game cognitive and somatic state anxiety, but only group/individualized MST resulted in increased pre-game state self-confidence. Ideally, a consultant should be on the athletic staff at a college in order to be completely available to athletes both on a team and individual level.

A third challenge ironically may have been the consultant's prior experience as a volleyball player and coach. The consultant's desire was to spend a great deal of time around the athletes by attending and participating in practice and traveling to competitions in order to build relationships and trust. However, this may have caused players to view her more as an assistant coach than as a mental training consultant. The sport psychology literature indicates that prior sport experience can serve as both a benefit and detriment to a MST consultant (Weinberg & Williams, 2001). In this study, it proved to be a benefit when utilizing volleyball terminology and formulating relationships, but it was a disadvantage because of the blurring of roles it created for the consultant. Taylor (1995) noted that in-depth knowledge of the sport and the ability to take general information about mental skills and apply them to specific sporting demands and needs enhances the effectiveness of consultants. Therefore, sport knowledge is important when consulting with an individual or team of athletes.

Team dynamics and a lack of perceived leadership turned out to be a salient aspect of the collegiate volleyball team in this study. This was also found to be the case for the USA Volleyball Team that Gipson and colleagues (1989) consulted with in their case study. Therefore, based on the conceptual framework used by the consultant in the present study, team building became a major focus. Team building took the form of activities and discussions relating to trust, leadership, and support. Gipson et al. observed a problem with inconsistency of play from game to game and match to match and this was also the case for the current team. Numerous times the coach described each match or the season as a "roller coaster ride" with many "peaks and valleys." Thus, the MST

program mirrored this trend throughout the course of the season. The consultant tried to be as available as possible and attended many practices and games, but had relatively few opportunities to discuss and practice mental training. Because of this, the effectiveness of the overall MST program may have been compromised.

Developing a conceptual framework to work from is essential for any MST consultant. The humanist/cognitive-behavioral conceptual framework adopted by the consultant in the current study served as a guide that allowed the MST program to take shape. In the beginning, the main concern was establishing a trusting relationship and teaching players what mental skills training entailed. Based on the notion that a trusting relationship and rapport is important when working with any athlete (Holt & Strean, 2001; Petitpas, et al., 1999; Ravizza, 2002), the consultant encouraged players to provide input and feedback, ask questions, and help in molding the MST program. The key was to not have a set schedule and specific mental skills to teach but rather to implement MST based on what the athletes, coaches, and consultant felt was most needed at each point. The conceptual framework for this study can be used by other consultants in its current form, but be modified to fit the needs and interests of different individuals and teams.

Some limitations of the current study included the small sample size, lack of a control group, and lack of consistent performance data for all of the players. Interestingly, 14 participants were a greater number than has been examined in many previous MST programs (Martin et al., 2005). Lack of a control group decreased the internal validity of the study but likely increased the external validity of the research (Thelwell & Greenlees, 2001). The effectiveness of any mental training consultant can only be examined in the

field setting in order to determine whether or not MST techniques work for *real* teams in *real* situations. Therefore, the present case study design provided evidence regarding the extent to which the intervention had an impact on the athletes in a real world setting (Anderson et al., 2002).

In the current study, high mental skills usage players had lower anxiety, higher confidence, and better performance than low mental skills usage players. Although no players reported working with a mental training consultant in the past, it may be that the high usage players had previous exposure to mental skills. Since more high usage players were non-freshmen, collegiate playing experience may have played a role in mental skills usage. In addition, academic class moderated differences in anxiety, confidence, and life quality. Although the usage of trait questionnaires to measure anxiety (SAS) and confidence (TSCI) could be considered a limitation of the current study, it should be noted that confidence almost increased significantly over time for all athletes regardless of usage or class ($p = .05$). The relationship between anxiety and class over time also supports the use of a trait measure because the two groups started with the same level of anxiety, but freshmen increased over the season and non-freshmen decreased over the season and reached a significant difference in anxiety ($p < .05$).

Future Recommendations and Applied Implications

Based on the experience of the consultant in the present study, it is recommended that MST consultants who work with teams utilize a conceptual framework that focuses both on the relationship between the consultant and the athletes, and the teaching of mental skills. Keeping a consistent schedule of MST would likely increase the possibility

that athletes would practice and utilize the mental skills the consultant teaches them. Spreading sessions out during the season could also be advantageous if time permits. Shorter sessions during the season may facilitate continuation of the MST program throughout the season. Indeed, getting athletes (and coaches) to use the mental skills may be the biggest challenge facing MST consultants. Therefore, usage of mental skills should be recorded when evaluating the effectiveness of any MST program. In addition, MST consultants may need to consider previous exposure to mental skills prior to beginning a MST program. It may not be safe to assume that even though an athlete has not worked with a mental training consultant that they have not had exposure to mental skills through experience, coaches, or teammates.

Because of the struggles the new captains faced and the fact that the majority of the low mental skills usage players were freshmen, it may be especially important for the consultant to hold sessions with captains and freshmen because these two groups are likely experiencing an important time of transition (Giacobbi et al, 2004). Incorporating both one-on-one sessions and team sessions in a season-long MST program may be an ideal mix of consulting time and may lead to greater usage of mental skills by all of the athletes. This would also allow the program to become more individualized based on each athlete's needs, rather than on the needs of the entire team.

A MST consultant should also be prepared to deal with issues of team dynamics when working with an intact team, especially over the duration of a season. If the consultant does not have prior knowledge of the sport, it is recommended that s/he ask questions, learn about the language and demands of the sport, and immerse him/herself in

the sporting culture. It is also recommended that the consultant be aware of the dynamics between him/herself and the team so that expectations, roles, and boundaries do not become clouded. Therefore, the role of the consultant should be clarified from the beginning to avoid confusion. In addition, it is recommended that consultants include coaches in the MST program or at least debrief them as to what occurred during sessions (without breaching confidentiality).

Overall, consulting with a team for an entire season is a very challenging, yet rewarding experience and a MST consultant must be ready to deal with the many high and low moments that may occur throughout the season. The MST consultant should remain prepared for MST sessions, yet also flexible with regard to the many contingencies that may occur within collegiate sport (e.g., scheduling demands, lack of time, change of topics). It may be advantageous to implement MST into practice time so the players can focus on both the physical and mental aspects of performance simultaneously. It may also be beneficial to have assistant coaches fill out the MTCEF and to have both the players and coaches fill out the MTCEF during the middle of the season as well as during the post-season to provide feedback to the consultant prior to the conclusion of the program. Because of the lack of performance data due to the varying demands of different playing positions in volleyball, a standardized measure of subjective performance might be useful in future situations where not all the players on a team perform the same skill sets.

Relaxation and visualization were the skills the players enjoyed learning the most in the present study. Therefore, MST consultants may want to implement these skills

when consulting with teams if they are indicated by the needs of the athletes. Moreover, since the players who showed better overall performance were primarily in the high usage group that had lower anxiety and higher confidence, it appears as though confidence building and anxiety management are two techniques future consultants might include in a season-long MST program. Nevertheless, additional research is needed to address the impact of a season-long MST program on intact teams in order to add to the existing knowledge base in the field of applied sport psychology.

Conclusions

Based on the findings of the study, the following conclusions are offered. First, consultants need to remain flexible with respect to frequency and content of mental training sessions they offer when implementing a season-long MST program with a team. Second, implementing a season-long MST program with an intact team is a time consuming, challenging, and rewarding experience. Third, the effectiveness of a season-long MST program seems to depend on the extent to which athletes practice and utilize the mental skills they are taught by the MST consultant.

List of References

Anderson, A. G., Miles, A., Mahoney, C., & Robinson, P. (2002). Evaluating the effectiveness of applied sport psychology practice: Making the case for a case study approach. *The Sport Psychologist, 16,* 432-453.

Ashford, K. J., Karageorghis, C. I., & Jackson, R. C. (2005). Modeling the relationship between self-consciousness and competition anxiety. *Personality and Individual Differences, 38,* 903-918.

Behncke, L. (2004). Mental skills training for sports: A brief review. *Athletic Insight: The Online Journal of Sport Psychology, 6.* Retrieved July 7, 2005, from http://www.athleticinsight.com/Vol6Iss1/MentalSkillsReview.htm

Bloom, G. A., & Stevens, D. E. (2002). Case study: A team-building mental skills training program with an intercollegiate equestrian team. *Athletic Insight: Online Journal of Sport Psychology, 4.* Retrieved July 7, 2005 from http://www. athleticinsight.com/Vol4Iss1/EquestrianTeamBuilding.htm

Boutcher, S. H., & Rotella, R. J. (1987). A psychological skills education program for closed-skill performance enhancement. *The Sport Psychologist, 1,* 127-137.

Bühler, C., & Allen, M. (1972). *Introduction to humanistic psychology.* Monterey, CA: Brooks/Cole Publishing Company.

Bull, S. J. (1989). The role of the sport psychology consultant: A case study of ultra distance running. *The Sport Psychologist, 3,* 254-264.

Burton, D. (1989). Winning isn't everything: Examining the impact of performance goals on collegiate swimmers' cognitions and performance. *The Sport Psychologist, 3,* 105-132.

Burton, D., Naylor, S., & Holliday, B. (2001). Goal setting in sport: Investigating the goal effectiveness paradox. In R. N. Singer, H. A. Hausenblas, & C. M. Janelle (Eds.), *Handbook of sport psychology* (2nd ed., pp. 497-528). New York: John Wiley & Sons.

Carron, A. V., Widmeyer, W. N., & Brawley, L. R. (1985). The development of an instrument to assess cohesion in sport teams: The Group Environment Questionnaire. *Journal of Sport Psychology, 7,* 244-266.

Christensen, L. B. (2001). *Experimental methodology* (8th ed.). Boston: Allyn and Bacon.

Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika, 16,* 297-334.

Daw, J., & Burton, D. (1994). Evaluation of a comprehensive psychological skills training program for collegiate tennis players. *The Sport Psychologist, 8,* 37-57.

Driskell, J. E., Cooper, C., & Moran, A. (1994). Does mental practice enhance performance? *Journal of Applied Psychology, 79,* 481-492.

Dunphy, M., & Wilde, R. (2000). *Volleyball today* (2nd ed.). Belmont, CA: Wadsworth.

Feltz, D. L., & Landers, D. M. (1983). The effects of mental practice on motor skills, learning and performance: A meta-analysis. *Journal of Sport Psychology, 5,* 25-57.

Fletcher, D. & Hanton, S. (2001). The relationship between psychological skills usage and competitive anxiety responses. *Psychology of Sport and Exercise, 2,* 89-101.

Frey, M., Laguna, P. L., & Ravizza, K. (2003). Collegiate athletes' mental skill use and

perceptions of success: An exploration of the practice and competition settings. *Journal of Applied Sport Psychology, 15,* 115-128.

Fulghum, A. (1999). Implementing a psychological skills training program in high school volleyball athletes. Retrieved August 9, 2005 from http://clearinghouse. missouriwestern.edu/manuscripts/78.asp

Gentner, N. B. (2004). The Athlete Life Quality Scale: Development and psychometric analysis. *Dissertation Abstracts International: Section B: The Sciences and Engineering, 65,* 1547.

Giacobbi, P. R., Lynn, T. K., Wetherington, J., Jenkins, J., Bodendorf, M., & Langley, B. (2004). Stress and coping during the transition to university for first-year female athletes. *The Sport Psychologist, 18,* 1-20.

Giacobbi, P. R., & Weinberg, R. S. (2000). An examination of coping in sport: Individual trait anxiety differences and situational consistency. *The Sport Psychologist, 14,* 42-62.

Gipson, M., McKenzie, T., & Lowe, S. (1989). The sport psychology program of the USA Women's National Volleyball Team. *The Sport Psychologist, 3,* 330-339.

Gould, D. (2001). Goal setting for peak performance. In J. M. Williams (Ed.), *Applied sport psychology: Personal growth to peak performance* (4th ed., pp. 190-205). Mountain View, CA: Mayfield Publishing Company.

Gould, D., & Pick, S. (1995). Sport psychology: The Griffith era, 1920-1940. *The Sport Psychologist, 9,* 391-405.

Greenspan, M. J., & Feltz, D. L. (1989). Psychological interventions with athletes in

competitive situations: A review. *The Sport Psychologist, 3,* 219-236.

Griffith, C. R. (1926). *Psychology of coaching.* New York: Scribner.

Griffith, C. R. (1928). *Psychology of athletics.* New York: Scribner.

Hall, E. G., & Erffmeyer, E. S. (1983). The effect of visuo-motor behavior rehearsal with videotaped modeling on free throw accuracy of intercollegiate female basketball players. *Journal of Sport Psychology, 5,* 343-346.

Hardy, L., & Callow, N. (1999). Efficacy of external and internal visual imagery perspectives for the enhancement of performance on tasks in which form is important. *Journal of Sport and Exercise Psychology, 21,* 95-112.

Hill, K. L. (2001). *Frameworks for sport psychologists: Enhancing sport performance.* Champaign, IL: Human Kinetics.

Holt, N. L., & Strean, W. B. (2001). Reflecting on initiating sport psychology consultation: A self-narrative neophyte practice. *The Sport Psychologist, 15,* 188-204.

Huck, S. W. (2004). *Reading statistics and research* (4th ed.). Boston: Pearson.

Jacobson, E. (1930). *Progressive relaxation.* Chicago: University of Chicago Press.

Kirschenbaum, H., & Henderson, V. L. (Eds.). (1989). *Carl Rogers: Dialogues: Conversations with Martin Buber, Paul Tillich, B. F. Skinner, Gregory Bateson, Michael Polanyi, Rollo May, and others.* Boston, MA: Houghton Mifflin Co.

Kyllo, L. B., & Landers, D. M. (1995). Goal setting in sport and exercise: A research synthesis to resolve the controversy. *Journal of Sport and Exercise Psychology, 17,* 117-137.

Lane, A. M., Harwood, C., Terry, P. C., Karageorghis, C. I. (2004). Confirmatory factor analysis of the Test of Performance Strategies (TOPS) among adolescent athletes. *Journal of Sport Sciences, 22,* 803-812.

Lanning, W., & Hisanaga, B. (1983). A study of the relation between the reduction of cognitive anxiety and an increase in athletic performance. *International Journal of Sport Psychology, 14,* 219-227.

LeUnes, A., & Nation, J. (1996). *Sport psychology* (2nd ed.). Chicago: Nelson-Hall Publishers.

Lloyd, R. J., & Trudel, P. (1999). Verbal interactions between an eminent mental training consultant and elite level athletes: A case study. *The Sport Psychologist, 13,* 418-443.

Locke, E. A., & Latham, G. P. (1985). The application of goal setting to sports. *Journal of Sport Psychology, 7,* 205-222.

Locke, E. A., Shaw, K. N., Saari, L. M., & Latham, G. P. (1981). Goal setting and task performance. *Psychological Bulletin, 90,* 125-152.

Martens, R. (1977). *Sport competition anxiety test.* Champaign, IL: Human Kinetics.

Martin, J. J., & Gill, D. L. (1991). The relationships among cognitive orientation, sport-confidence, self-efficacy, anxiety, and performance. *Journal of Sport and Exercise Psychology, 13,* 149-159.

Martin, K. A., Moritz, S. E., & Hall, C. R. (1999). Imagery use in sport: A literature review and applied model. *The Sport Psychologist, 13,* 245-268.

Martin, G. L., Vause, T., & Schwartzman, L. (2005). Experimental studies of

psychological interventions with athletes in competitions: Why so few? *Behavior Modification, 29,* 616-641.

May, J. R., & Brown, L. (1989). Delivery of psychological services to the U.S. alpine ski team prior to and during the Olympics in Calgary. *The Sport Psychologist, 3,* 320-329.

McCann, S. (2005). Roles: The sport psychologist. In S. Murphy (Ed.), *The sport psych handbook* (pp. 279-292). Champaign, IL: Human Kinetics.

McNair, D. M., Lorr, M., & Droppleman, L. E. (1971). *Profile of mood states manual.* San Diego: Educational and Industrial Testing Service.

Meyers, A. W., Whelan, J. P., & Murphy, S. M. (1996). Cognitive behavioral strategies in athletic performance enhancement. In M. Hershen, R. M. Eisler, & P. M. Miller (Eds.), *Progress in behavior modification* (Vol. 30, pp. 137-164). Pacific Grove, CA: Brooks/Cole Publishing Company.

Miller, J. T., & McAuley, E. (1987). Effects of a goal-setting training program on basketball free-throw self-efficacy and performance. *The Sport Psychologist, 1,* 103-113.

Murphy, S. (Ed). (2005). *The sport psych handbook.* Champaign, IL: Human Kinetics.

Naumburg, M. (1966). *Dynamically oriented art therapy: Its principles and practice.* New York: Grune and Stratton.

Nunnally, J. & Bernstein, I. (1994). *Psychometric theory* (3rd ed.). New York: McGraw-Hill.

Ogilvie, B., & Tutko, T. (1966). *Problem athletes and how to handle them.* London:

Pelham.

Orlick, T. (1989). Reflections on sportpsych consulting with individual and team sport athletes at Summer and Winter Olympic Games. *The Sport Psychologist, 3*, 358-365.

Ostrow, A. C. (Ed.) (1996*). Directory of psychological tests in the sport and exercise sciences* (2nd ed.). Morgantown, WV: Fitness Information Technology.

Partington, J., & Orlick, T. (1987). The sport psychology consultant evaluation form. *The Sport Psychologist, 1*, 309-317.

Patrick, T. D., & Hrycaiko, D. W. (1998). Effects of a mental training package on an endurance performance. *The Sport Psychologist, 12*, 283-299.

Petitpas, A. J., Giges, B., & Danish, S. J. (1999). The sport psychologist-athlete relationship: Implications for training. *The Sport Psychologist, 13*, 344-357.

Poczwardowski, A., Sherman, C. P., and Ravizza, K. (2004). Professional philosophy in the sport psychology service delivery: Building on theory and practice. *The Sport Psychologist, 18,* 445-463.

Ravizza, K. H. (2002). A philosophical construct: A framework for performance enhancement. *International Journal of Sport Psychology, 33*, 4-18.

Ravizza, K. H. (2005, October). "*Think how good it's going to feel:" Lessons learned on a journey in performance excellence.* Keynote address at the annual meeting of the Association for the Advancement of Applied Sport Psychology, Vancouver, BC, Canada.

Rushall, B. S. (1984). The content of competition thinking. In W. F. Straub & J. M.

Williams (Eds.), *Cognitive sport psychology* (pp. 51-62). Lansing, NY: Sport Sciences Associates.

Savoy, C., & Beitel, P. (1996). Mental imagery for basketball. *International Journal of Sport Psychology, 27,* 454-462.

Savoy, C., & Beitel, P. (1997). The relative effect of a group and group/individualized program on state anxiety and state self-confidence. *Journal of Sport Behavior, 20,* 364-376.

Schoenfelt, E. L., & Usry, A. N. (2005, October). *Evaluation of a mental skills for serving intervention for an intercollegiate volleyball team.* Poster presented at the annual meeting of the Association for the Advancement of Applied Sport Psychology, Vancouver, BC, Canada.

Sheldon, J. P., & Eccles, J. S. (2005). Physical and psychological predictors of perceived ability in adult male and female tennis players. *Journal of Applied Sport Psychology, 17,* 48-63

Smith, R. E., & Christensen, D. S. (1995). Psychological skills as predictors of performance and survival in professional baseball. *Journal of Sport and Exercise Psychology, 17,* 399-415.

Smith, R. E., Schutz, R. W., Smoll, F. L., & Ptacek, J. T. (1995). Development and validation of a multidimensional measure of sport-specific psychological skills: The Athletic Coping Skills Inventory-28. *Journal of Sport and Exercise Psychology, 17,* 379-398.

Smith, R. E., Smoll, F. L., & Schutz, R. W. (1990). Measurement and correlates of sport-

specific cognitive and somatic trait anxiety: The Sport Anxiety Scale. *Anxiety Research, 2,* 263-280.

Smith, R. E., Smoll, F. L., & Weichman, S. A. (1998). In J. L. Duda (Ed.), *Advances in sport and exercise psychology measurement* (pp. 105-127). Morgantown, WV: Fitness Information Technology.

Taylor, J. (1995). A conceptual model for integrating athletes' needs and sport demands in the development of competitive mental preparation strategies. *The Sport Psychologist, 9,* 339-357.

Thelwell, R. C., & Greenlees, I. A. (2001). The effects of a mental skills training package on gymnasium triathlon performance. *The Sport Psychologist, 15,* 127-141.

Thelwell, R. C., & Greenlees, I. A. (2003). Developing competitive endurance performance using mental skills training. *The Sport Psychologist, 17,* 318-337.

Thomas, J. R., & Nelson, J. K. (2001). *Research methods in physical activity* (4th ed.). Champaign, IL: Human Kinetics.

Thomas, P. R., Murphy, S., & Hardy, L. (1999). Test of Performance Strategies: Development and preliminary validation of a comprehensive measure of athletes' psychological skills. *Journal of Sport Sciences, 17,* 697-711.

Tod, D., & Andersen, M. (2005). Success in sport psych: Effective sport psychologists. In S. Murphy (Ed.), *The sport psych handbook* (pp. 305-314). Champaign, IL: Human Kinetics.

Vallerand, R. J., & Rousseau, F. L. (2001). Intrinsic and extrinsic motivation in sport and

exercise: A review using the hierarchical model of intrinsic and extrinsic motivation. In R. N. Singer, H. A. Hausenblas, & C. M. Janelle (Eds.), *Handbook of sport psychology* (2nd ed., pp. 389-416). New York: John Wiley & Sons.

Vealey, R. S. (1986). Conceptualization of sport-confidence and competitive orientation: Preliminary investigation and instrument development. *Journal of Sport Psychology, 8,* 221-246.

Vealey, R. S. (1994). Current status and prominent issues in sport psychology interventions. *Medicine & Science in Sports and Exercise, 26,* 495-502.

Vealey, R. S., & Greenleaf, C. A. (2001). Seeing is believing: Understanding and using imagery in sport. In J. M. Williams (Ed.), *Applied sport psychology: Personal growth to peak performance* (4th ed., pp. 247-283). Mountain View, CA: Mayfield Publishing Company.

Weinberg, R. S., & Comar, W. (1994). The effectiveness of psychological interventions in competitive sport. *Sports Medicine, 18,* 406-418.

Weinberg, R. S., & Gould, D. (2003). *Foundations of sport & exercise psychology* (3rd ed.). Champaign, IL: Human Kinetics.

Weinberg, R., Stitcher, T., & Richardson P. (1994). Effects of a seasonal goal-setting program on lacrosse performance. *The Sport Psychologist, 8,* 166-175.

Weinberg, R. S., & Williams, J. W. (2001). Integrating and implementing a psychological skills training program. In J. M. Williams (Ed.), *Applied sport psychology: Personal growth to peak performance* (4th ed., pp. 347-377). Mountain View, CA: Mayfield Publishing Company.

Williams, J. M. (2001). Psychology of injury risk and prevention. In R. N. Singer, H. A. Hausenblas, & C. M. Janelle (Eds.), *Handbook of sport psychology* (2nd ed., pp. 766-786). New York: John Wiley & Sons.

Williams, J. M., & Harris, D. V. (2001). Relaxation and energizing techniques for regulation of arousal. In J. M. Williams (Ed.), *Applied sport psychology: Personal growth to peak performance* (4th ed., pp. 229-246). Mountain View, CA: Mayfield Publishing Company.

Williams, J. M., & Straub, W. F. (2001). Sport psychology: Past, present, and future. In J. M. Williams (Ed.), *Applied sport psychology: Personal growth to peak performance* (4th ed., pp. 1-12). Mountain View, CA: Mayfield Publishing Company.

Wilson, P., & Ecklund, R. C. (1998). The relationship between competitive anxiety and self-presentational concerns. *Journal of Sport and Exercise Psychology, 20,* 81-97.

Woodman, T., & Hardy, L. (2003). The relative impact of cognitive anxiety and self-confidence upon sport performance: A meta-analysis. *Journal of Sport Sciences, 21,* 443-457.

Wulf, G., & Prinz, W. (2001). Directing attention to movement effects enhances learning: A review. *Psychonomic Bulletin and Review, 8,* 648-660.

Zinsser, N., Bunker, L., & Williams, J. M. (2001). Cognitive techniques for building

confidence and enhancing performance. In J. M. Williams (Ed.), *Applied sport psychology: Personal growth to peak performance* (4th ed., pp. 284-311). Mountain View, CA: Mayfield Publishing Company.

Appendices

Appendix A: The Sport Anxiety Scale

SPORT ANXIETY SCALE
(REACTIONS TO COMPETITION)
(Smith, Smoll, & Schutz, 1990)

A number of statements that athletes have used to describe their thoughts and feelings before or during competition are listed below. Read each statement and then circle the number to the right of the statement that indicates how you usually feel prior to or during competition. Some athletes feel they should not admit to feelings of nervousness or worry, but such reactions are actually quite common, even among professional athletes. To help us better understand reactions to competition, we ask you to share your true reactions with us. There are, therefore, no right or wrong answers. Do not spend too much time on any one statement.

	Statement	Not At All	Some-what	Moder ately So	Very Much So
1	I feel nervous.	1	2	3	4
2	During competition, I find myself thinking about unrelated things.	1	2	3	4
3.	I have self-doubts.	1	2	3	4
4.	My body feels tense.	1	2	3	4
5.	I am concerned that I may not do as well in competition as I could.	1	2	3	4
6.	My mind wanders during sport competition.	1	2	3	4
7.	While performing, I often do not pay attention to what's going on.	1	2	3	4
8.	I feel tense in my stomach.	1	2	3	4
9.	Thoughts of doing poorly interfere with my concentration during competition.	1	2	3	4
10.	I am concerned about choking under pressure.	1	2	3	4
11.	My heart races.	1	2	3	4
12.	I feel my stomach sinking.	1	2	3	4
13.	I'm concerned about performing poorly.	1	2	3	4
14.	I have lapses in concentration during competition because of nervousness.	1	2	3	4
15.	I sometimes find myself trembling before or during a competitive event.	1	2	3	4
16.	I'm worried about reaching my goal.	1	2	3	4
17.	My body feels tight.	1	2	3	4
18.	I'm concerned that others will be disappointed with my performance.	1	2	3	4
19.	My stomach gets upset before or during competition.	1	2	3	4
20.	I'm concerned I won't be able to concentrate.	1	2	3	4
21.	My heart pounds before competition.	1	2	3	4

Appendix B: Trait Sport-Confidence Inventory

TRAIT SPORT-CONFIDENCE INVENTORY
(Vealey, 1986)

Think about how self-confident you are when you compete in sport.
Answer the questions below based on how confident you *generally feel* when you compete in your sport. Compare your self-confidence to the *most self-confident athlete* you know.
Please answer as you *really* feel, not how you would like to feel. Your answers will be kept completely confidential.

When you compete, how confident do you *generally feel?*

1.	Compare your confidence in *your ability to execute the skills necessary to be successful* to the most confident athlete you know.	Low			Medium				High
		1	2	3	4	5	6	7	8	9
2.	Compare your confidence in *your ability to make critical decisions during competition* to the most confident athlete you know.	Low			Medium				High
		1	2	3	4	5	6	7	8	9
3.	Compare your confidence in *your ability to perform under pressure* to the most confident athlete you know.	Low			Medium				High
		1	2	3	4	5	6	7	8	9
4.	Compare your confidence in *your ability to execute successful strategy* to the most confident athlete you know.	Low			Medium				High
		1	2	3	4	5	6	7	8	9
5.	Compare your confidence in *your ability to concentrate well enough to be successful* to the most confident athlete you know.	Low			Medium				High
		1	2	3	4	5	6	7	8	9
6.	Compare your confidence in *your ability to adapt to different game situations and still be successful* to the most confident athlete you know.	Low			Medium				High
		1	2	3	4	5	6	7	8	9
7.	Compare your confidence in *your ability to achieve your competitive goals* to the most confident athlete you know.	Low			Medium				High
		1	2	3	4	5	6	7	8	9
8.	Compare your confidence in *your ability to be successful* to the most confident	Low			Medium				High

athlete you know. 1 2 3 4 5 6 7 8 9

9. Compare your confidence in *your ability to consistently be successful* to the most confident athlete you know.
   Low Medium High
   1 2 3 4 5 6 7 8 9

10. Compare your confidence in *your ability to think and respond successfully during competition* to the most confident athlete you know.
    Low Medium High
    1 2 3 4 5 6 7 8 9

11. Compare your confidence in *your ability to meet the challenge of competition* to the most confident athlete you know.
    Low Medium High
    1 2 3 4 5 6 7 8 9

12. Compare your confidence in *your ability to be successful even when the odds are against you* to the most confident athlete you know.
    Low Medium High
    1 2 3 4 5 6 7 8 9

13. Compare your confidence in *your ability to bounce back from performing poorly and be successful* to the most confident athlete you know.
    Low Medium High
    1 2 3 4 5 6 7 8 9

Appendix C: Athletic Coping Skills Inventory-28

ATHLETIC COPING SKILLS INVENTORY-28
(SURVEY OF ATHLETIC EXPERIENCES)
(Smith, Schutz, Smoll, & Ptacek, 1995)

DIRECTIONS. A number of statements that athletes have used to describe their experiences are given below. Please read each statement carefully and then recall as accurately as possible how often you experience the same thing. There are no right or wrong answers. Do not spend too much time on any one statement. Please put an X in the circle that indicates how often you have these experiences when playing sports.

		Almost Never	Sometimes	Often	Almost Always
1.	On a daily or weekly basis, I set very specific goals for myself that guide what I do.	o	o	o	o
2.	I get the most out of my talent and skills.	o	o	o	o
3.	When a coach tells me how to correct a mistake I've made, I tend to take it personally and get upset.	o	o	o	o
4.	When I'm playing sports, I can focus my attention and block out distractions.	o	o	o	o
5.	I remain positive and enthusiastic during competition, no matter how badly things are going.	o	o	o	o
6.	I tend to play better under pressure because I think more clearly.	o	o	o	o
7.	I worry quite a bit about what others think of my performance.	o	o	o	o
8.	I tend to do lots of planning about how to reach my goals.	o	o	o	o
9.	I feel confident that I will play well.	o	o	o	o
10.	When a coach or manager criticizes me, I become upset rather than helped.	o	o	o	o
11.	It is easy for me to keep distracting thoughts from interfering with something I am watching or listening to.	o	o	o	o
12.	I put a lot of pressure on myself by worrying about how I will perform.	o	o	o	o
13.	I set my own performance goals for each practice.	o	o	o	o
14.	I don't have to be pushed to practice or play hard; I give 100%.	o	o	o	o
15.	If a coach criticizes or yells at me, I correct the mistake without getting upset about it.	o	o	o	o
16.	I handle unexpected situations in my sport very well.	o	o	o	o
17.	When things are going badly, I tell myself to keep calm, and this works for me.	o	o	o	o
18.	The more pressure there is during a game, the more I enjoy it.	o	o	o	o
19.	While competing, I worry about making mistakes or failing to come through.	o	o	o	o
20.	I have my game plan worked out in my head long before the game begins.	o	o	o	o
21.	When I feel myself getting too tense, I can quickly relax my body and calm myself.	o	o	o	o
22.	To me, pressure situations are challenges that I welcome.	o	o	o	o
23.	I think about and imagine what will happen if I fail or screw up.	o	o	o	o

24.	I maintain emotional control regardless of how things are going for me.	o	o	o	o
25.	It is easy for me to direct my attention and focus on a single object or person.	o	o	o	o
26.	When I fail to reach my goals, it makes me try even harder.	o	o	o	o
27.	I improve my skills by listening carefully to advice and instruction from coaches.	o	o	o	o
28.	I make fewer mistakes when the pressure is on because I concentrate better.	o	o	o	o

Appendix D: Test of Performance Strategies

TEST OF PERFORMANCE STRATEGIES
(Thomas, Murphy, & Hardy, 1999)

This questionnaire measures performance strategies used by athletes in various sport situations. Because individual athletes are very different in their approach to their sport, we expect the responses to be different. We want to stress, therefore, that there are no right or wrong answers. All that is required is for you to be open and honest in your responses.

Each of the following items describes a specific situation that you may encounter in your training and competition. Please rate how frequently these situations apply to you on the following scale:

1 = Never
2 = Rarely
3 = Sometimes
4 = Often
5 = Always

Please put a circle around your answer

1.	I set realistic but challenging goals for practice.	1	2	3	4	5
2.	I say things to myself to help my practice performance.	1	2	3	4	5
3.	During practice I visualize successful past performances.	1	2	3	4	5
4.	My attention wanders while I am training.	1	2	3	4	5
5.	I practice using relaxation techniques at workouts.	1	2	3	4	5
6.	I practice a way to relax.	1	2	3	4	5
7.	During competition I set specific result goals for myself.	1	2	3	4	5
8.	When the pressure is on at competitions, I know how to relax.	1	2	3	4	5
9.	My self-talk during competition is negative.	1	2	3	4	5
10.	During practice, I don't think about performing much - I just let it happen.	1	2	3	4	5
11.	I perform at competitions without consciously thinking about it.	1	2	3	4	5
12.	I rehearse my performance in my mind before practice.	1	2	3	4	5

13.	I can raise my energy level at competitions when necessary.	1	2	3	4	5
14.	During competition I have thoughts of failure.	1	2	3	4	5
15.	I use practice time to work on my relaxation technique.	1	2	3	4	5
16.	I manage my self-talk effectively during practice.	1	2	3	4	5
17.	I am able to relax if I get too nervous at a competition.	1	2	3	4	5
18.	I visualize my competition going exactly the way I want it to go.	1	2	3	4	5
19.	I am able to control distracting thoughts when I am training.	1	2	3	4	5
20.	I get frustrated and emotionally upset when practice does not go well.	1	2	3	4	5
21.	I have specific cue words or phrases that I say to myself to help my performance during competition.	1	2	3	4	5
22.	I evaluate whether I achieve my competition goals.	1	2	3	4	5
23.	During practice, my movements and skills just seem to flow naturally from one to another.	1	2	3	4	5
24.	When I make a mistake in competition, I have trouble getting my concentration back on track.	1	2	3	4	5
25.	When I need to, I can relax myself at competitions to get ready to perform.	1	2	3	4	5
26.	I set very specific goals for competition.	1	2	3	4	5
27.	I relax myself at practice to get ready.	1	2	3	4	5
28.	I psych myself up at competitions to get ready to perform.	1	2	3	4	5
29.	At practice, I can allow the whole skill or movement to happen naturally without concentrating on each part of the skill.	1	2	3	4	5
30.	During competition I perform on 'automatic pilot'.	1	2	3	4	5
31.	When something upsets me during a competition, my performance suffers.	1	2	3	4	5
32.	I keep my thoughts positive during competitions.	1	2	3	4	5
33.	I say things to myself to help my competitive performance.	1	2	3	4	5

34.	At competitions, I rehearse the feel of my performance my imagination.	1	2	3	4	5
35.	I practice a way to energize myself.	1	2	3	4	5
36.	I manage my self-talk effectively during competition.	1	2	3	4	5
37.	I set goals to help me use practice time effectively.	1	2	3	4	5
38.	I have trouble energizing myself if I feel sluggish during practice.	1	2	3	4	5
39.	When things are going poorly in practice, I stay in control of myself emotionally.	1	2	3	4	5
40.	I do what needs to be done to get psyched up for competitions.	1	2	3	4	5
41.	During competition, I don't think about performing much - I just let it happen.	1	2	3	4	5
42.	At practice, when I visualize my performance, I imagine what it will feel like.	1	2	3	4	5
43.	I find it difficult to relax when I am too tense at competitions.	1	2	3	4	5
44.	I have difficulty increasing my energy level during workouts.	1	2	3	4	5
45.	During practice I focus my attention effectively.	1	2	3	4	5
46.	I set personal performance goals for a competition.	1	2	3	4	5
47.	I motivate myself to train through positive self-talk.	1	2	3	4	5
48.	During practice sessions I just seem to be in a flow.	1	2	3	4	5
49.	I practice energizing myself during training sessions.	1	2	3	4	5
50.	I have trouble maintaining my concentration during long practices.	1	2	3	4	5
51.	I talk positively to myself to get the most out of practice.	1	2	3	4	5
52.	I can increase my energy to just the right level for competitions.	1	2	3	4	5
53.	I have very specific goals for practice.	1	2	3	4	5

54.	During competition, I play/perform instinctively with little conscious effort.	1	2	3	4	5
55.	I imagine my competitive routine before I do it at a competition.	1	2	3	4	5
56.	I imagine screwing up during a competition.	1	2	3	4	5
57.	I talk positively to myself to get the most out of competitions.	1	2	3	4	5
58.	I don't set goals for practices, I just go out and do it.	1	2	3	4	5
59.	I rehearse my performance in my mind at competitions.	1	2	3	4	5
60.	I have trouble controlling my emotions when things are not going well at practice.	1	2	3	4	5
61.	When I perform poorly in practice I lose my focus.	1	2	3	4	5
62.	My emotions keep me from performing my best at competitions.	1	2	3	4	5
63.	My emotions get out of control under the pressure of competition.	1	2	3	4	5
64.	At practice, when I visualize my performance, I imagine watching myself as if on a video replay.	1	2	3	4	5

Appendix E: Athlete Life Quality Scale

ATHLETE LIFE QUALITY SCALE
(Gentner, 2004)

Using the scale below, indicate how satisfied you are with the various aspects of your life listed.

VD=Very Dissatisfied D=Dissatisfied SD=Slightly Dissatisfied N=Neutral/Undecided SS=Slightly Satisfied S=Satisfied VS=Very Satisfied

1. Your own physical health	VD	D	SD	N	SS	S	VS
2. The amount of free/recovery time you have away from your sport	VD	D	SD	N	SS	S	VS
3. Your relationships with family members	VD	D	SD	N	SS	S	VS
4. Your relationships with friends	VD	D	SD	N	SS	S	VS
5. Your social life	VD	D	SD	N	SS	S	VS
6. Your relationships with your coaches	VD	D	SD	N	SS	S	VS
7. Your relationships with your teammates	VD	D	SD	N	SS	S	VS
8. Your level of physical condition	VD	D	SD	N	SS	S	VS
9. Your athletic performance	VD	D	SD	N	SS	S	VS
10. Your role on your team	VD	D	SD	N	SS	S	VS
11. Your spiritual health	VD	D	SD	N	SS	S	VS
12. Your mental health	VD	D	SD	N	SS	S	VS
13. Your relationship with boyfriend/ girlfriend, spouse, etc.	VD	D	SD	N	SS	S	VS
14. Your life as a whole	VD	D	SD	N	SS	S	VS

15. Are there any other things that affect your quality of life that were not listed? If so, please list them here.

Appendix F: The Sport Psychology (Mental Training) Consultant Evaluation Form

THE MENTAL TRAINING CONSULTANT EVALUATION FORM
(Partington & Orlick, 1987)

Please rate your mental training consultant on each of the following characteristics by using a number from 0 to 10 as seen on the scale below.

Not at all Yes, definitely

0 1 2 3 4 5 6 7 8 9 10

1. Consultant Characteristics Ratings

   Had useful knowledge about mental training that seemed to apply directly to my sport . _____

   Seemed willing to provide an individual mental training program based on my input and needs. _____

   Seemed open, flexible, and ready to collaborate/cooperate with me. _____

   Had a positive, constructive attitude. _____

   Proved to be trustworthy. _____

   Was easy for me to relate to (e.g., I felt comfortable that she understood me). _____

   Fit in with others connected with the team. _____

   Tried to help me draw upon my strengths (e.g., the things that already worked for me) in order to make my best performance more consistent. _____

   Tried to help me overcome possible problems, or weaknesses, in order to make my best performance even better and more consistent. _____

   Provided clear, practical, concrete strategies for me to try out in an attempt to solve problems, or improve the level and consistency of my performance. _____

2. How effective was this consultant? (circle one)

Hindered/Interfered Helped a Lot

Effect on you:

-5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5

Effect on team:

-5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5

3. Do you have any recommendations to improve the quality or effectiveness of the mental training consultation services being offered? (write suggestions on back of this sheet)

4. What mental skills did you enjoy learning the most? The least? (write on back of sheet)

5. Did you enjoy learning mental skills? What did you like the most and the least about the mental skills training program? (write on back of sheet)

Appendix G: Mental Training for Volleyball

Handout

Mental Training for Volleyball

1. What does a mental trainer do?
    a. Works with athletes in any sport to improve their mental game.
    b. Mental practice can help just like physical practice, but mental skills must be practiced just like your physical skills.

2. What characteristics make a volleyball player great?

_____

_____

_____

3. What are the mental characteristics you think are most important to volleyball? List 3 and rate yourself with a circle (1 is lowest, 10 is highest).

a. _____
1 2 3 4 5 6 7 8 9 10

b. _____
1 2 3 4 5 6 7 8 9 10

c. _____
1 2 3 4 5 6 7 8 9 10

Now put a square around where you'd like to be for each skill by mid-season. Put a triangle around where you'd like to be by the end of the season.

4. Some mental training techniques include:
    a. Breathing for Relaxation
    b. Progressive Muscle Relaxation
    c. Visualization/Imagery
    d. Pre-Performance Routines
    e. Focus Cues/Concentration Training
    f. Self-talk
    g. Goal Setting
    h. Team Building/Team Dynamics

i. Confidence Building
j. Anxiety/Arousal Management
k. Stress Management
l. Injury Recovery
m. Other: _____

Which of these techniques seem interesting to you? Which other ones do you think the team would benefit from the most?

Appendix H: VB Positive Toolbox

VB POSITIVE TOOLBOX

Let mistakes go right away…don't dwell on them.
Focus on correcting the mistake on the next opportunity.
Come to the middle!
Touch another teammate.
Think ahead positively.
Let it go.
Say, "Come on, you got it!"
Take a deep breath or two.
Remember it's "just a game."
Use positive correction or criticism.
Feed off the energy of others.
Use key words or phrases.
Attempt to use positive talk.
Focus on the good stuff.
Shake it off and focus on the next point.
Hear others cheering for you.
Smile!
Imagine yourself doing it right.
Remember why you play the game…fun.
Help others forget mistakes, tell them to get it next time.
Use self-talk to mentally focus on the game and the task at hand.

CHANGING NEGATIVE TO POSITIVE

Negative Becomes Positive

Negative Comment ---------- Positive Comment

PRACTICE GOAL:
COMPETITION GOAL:

Appendix I: Example Handout

I just wanted to wish you good luck this weekend and send along with you a review of the mental skills we've talked about so far. Best wishes and feel free to call if you have any questions. Have fun!!!

1. Relaxation

- Focus on your breathing, inhale and exhale deeply, feel the breath deep in your stomach.
- Imagine any stress or nervousness you feel evaporate with each exhale and feel confidence and toughness come in when you inhale.
- Tighten and relax your muscles…moving from head to toes or toes to head. Notice the tension when you tighten and then feel it leave when you relax.

2. Imagery/Visualization

- Use all your senses to put yourself in a practice or competition setting and notice what's around you and how you feel. Then see and feel yourself performing to the best of your ability. If you see yourself make a mistake, then see yourself correct it and move on.
- Remember your best performance…both in practice and in competition. Notice how confident you felt and believe that you can do that again.

3. Goals

- Remember the goals you set…or set new ones and think about and evaluate them each day at practice or after each match. Make them SMART (specific, measureable, action oriented, realistic but challenging, and timed). For example, today at practice you may want to make 9 out of every 10 serves by keeping your toss high and reaching for the ball. To evaluate, you would count whether or not you were able to do this and then if so, make the goal harder and if not, make it easier.
- Goals give you something to focus on and work toward. You just have to challenge yourself to attain them…not so much the wins, but the process of getting the wins.

4. Confidence

- Know you're going to give your all each and every play, whether it's on the court or not. Stay focused by using your breathing, focus words, and positive self-talk.
- There's no reason to be nervous, but if you are, see it as a good thing and use it to know that it means you're ready to play. Breathe, tighten and relax your body, see yourself performing well, and get focused.
- If there's a bad play throw it in the trash can and then use the positive toolbox to help you and your teammates get over a mistake. Everyone will make them…it's how we react to them that will determine our success.
- Focus on your pre-performance and pre-serve routine. Be consistent and let the routines make you feel confident, prepared, and ready to do your best.

5. Most important…ENJOY THE GAME AND HAVE FUN!!!

VITA

Taryn Kelly Morgan (maiden name: Lynn) was born in Leesburg, FL on February 11, 1979. She graduated from Eustis High School in 1996. She earned her Bachelor of Science degree in exercise science from Stetson University in Deland, FL in 2000. She then earned a post-baccalaureate Bachelor of Arts degree in Psychology from Stetson University in 2001.

In 2003, Taryn earned her Master of Science degree in exercise and sport sciences with a specialization in sport and exercise psychology from the University of Florida in Gainesville, FL. Her thesis was entitled, “Multiple Perspectives and Influences on Talent Development.”

Upon earning her master’s degree, Taryn entered the doctoral program in the exercise, sport, and leisure studies department at the University of Tennessee, Knoxville. She taught activity classes and stress management within the Physical Education and Activity Program during her first year. She also co-taught an introduction to sport and exercise psychology class during her third year. Taryn was also a graduate assistant in sport psychology within the women’s athletic department at the University of Tennessee for two years. Taryn received her Doctor of Philosophy degree from the College of Education, Health, and Human Sciences, with an emphasis in sport psychology in May, 2006.